

**DONALD C. COOK NUCLEAR PLANT  
SEISMIC EVALUATION REPORT**

**ATTACHMENT NO. 2 TO AEP:NRC:1040C**

**RESPONSE TO NRC G.L. 87-02  
UNRESOLVED SAFETY ISSUE A-46**

**BY  
STEVENSON & ASSOCIATES  
CLEVELAND, OH  
DECEMBER 1995**

89C1570a/ Disk4  
Wlkdown11.9a

Seismic Evaluation and Walkdown Summary Report of the  
Donald C. Cook Nuclear Plant Units 1 and 2  
To Resolve Unresolved Safety Issue  
(USI) A-46 and Generic Letter (GL) 87-02

December 16, 1995

Performed for:

American Electric Power Service Corp.  
1 Riverside Plaza  
Columbus, OH 43216-6631

Performed by:

Stevenson & Associates  
9217 Midwest Ave.  
Cleveland, OH 44125  
(216)587-3805  
Fax (216)587-2205

## TABLE OF CONTENTS

|       |  |      |
|-------|--|------|
| 1.0   | EXECUTIVE SUMMARY .....  | 1-1  |
| 1.1   | Background and Objectives .....                                | 1-1  |
| 1.2   | General Plant Description .....                                | 1-2  |
| 1.2.1 | Site Location .....  | 1-2  |
| 1.2.2 | Primary Plant System .....                                     | 1-2  |
| 1.3   | Report Organization .....                                      | 1-3  |
| 2.0   | SEISMIC DESIGN BASIS .....                                     | 2-1  |
| 2.1   | Safe Shutdown Earthquake Ground Response Spectra .....         | 2-1  |
| 2.2   | In-Structure Response Spectra .....                            | 2-1  |
| 2.3   | Definition of Seismic Design Classification .....              | 2-3  |
| 3.0   | PROJECT TEAM .....   | 3-1  |
| 3.1   | Integrated Team Approach .....                                 | 3-1  |
| 3.2   | Seismic Review Team .....                                      | 3-1  |
| 3.3   | Peer Reviewers .....   | 3-2  |
| 4.0   | USI A-46 EVALUATION FOR CLASS OF TWENTY-ONE<br>EQUIPMENT ..... | 4-1  |
| 4.1   | Overall Approach Taken .....                                   | 4-1  |
| 4.2   | Seismic Screening Guidelines .....                             | 4-2  |
| 4.2.1 | Seismic Capacity Vs. Demand .....                              | 4-3  |
| 4.2.2 | Caveat Compliance .....  | 4-4  |
| 4.2.3 | Anchorage Adequacy .....                                       | 4-5  |
| 4.2.4 | Seismic Interaction Checks .....                               | 4-11 |

|       |   |      |
|-------|---|------|
| 4.3   | Outlier Resolution .....  | 4-11 |
| 4.4   | Other Types of Seismic Evaluations and Interfaces .....               | 4-11 |
| 4.5   | Documentation .....   | 4-12 |
| 4.6   | Class of Twenty-One Evaluation Results .....                          | 4-13 |
| 4.6.1 | Equipment Characteristics .....                                       | 4-16 |
| 4.6.2 | Seismic Capacity Vs. Demand Results .....                             | 4-19 |
| 4.6.3 | Equipment Class Description/Caveat Results .....                      | 4-20 |
| 4.6.4 | Equipment Anchorage Results .....                                     | 4-21 |
| 4.6.5 | Seismic Interaction and Other Issues .....                            | 4-22 |
| 4.6.6 | Deviations and Commentary on Meeting the Intent of Caveats .....      | 4-23 |
| 4.6.7 | SQUG Action Items .....   | 4-23 |
| 4.7   | Resolution of Identified Seismic Concerns and SQUG Action Items ..... | 4-24 |
| 5.0   | TANK AND HEAT EXCHANGER REVIEW .....                                  | 5-1  |
| 5.1   | Summary of Review .....   | 5-1  |
| 5.1.1 | Vertical Tanks .....  | 5-1  |
| 5.1.2 | Method of Solution for Vertical Tanks .....                           | 5-3  |
| 5.1.3 | Determine Tank Seismic Demand .....                                   | 5-3  |
| 5.1.4 | Determine Tank Seismic Capacity .....                                 | 5-4  |
| 5.1.5 | Horizontal Tanks and Heat Exchangers .....                            | 5-4  |
| 5.2   | Summary of Results .....  | 5-6  |
| 5.2.1 | Results - Vertical Tanks .....  | 5-6  |
| 5.2.2 | Results - Horizontal Tanks and Heat Exchangers .....                  | 5-7  |



|     |  |     |
|-----|--|-----|
| 6.0 | CABLE TRAY AND CONDUIT RACEWAY REVIEW .....                      | 6-1 |
| 6.1 | Scope of the Raceway Review .....                                | 6-1 |
| 6.2 | Seismic Review Team .....  | 6-1 |
| 6.3 | Summary of the Plant Area Summary Sheets (PASS) .....            | 6-2 |
| 6.4 | Summary of the Limited Analytical Reviews (LARs) .....           | 6-2 |
| 6.5 | Summary of Raceway Outliers .....                                | 6-3 |
| 7.0 | PLAN FOR ADDRESSING UNRESOLVED OUTLIERS AND OPEN<br>ISSUES ..... | 7-1 |
| 8.0 | CONCLUSIONS AND RESULTS .....                                    | 8-1 |
| 9.0 | REFERENCES .....   | 9-1 |

## APPENDICES

APPENDIX A – Resumes of SCE's

APPENDIX B – Cook Nuclear Plant Floor Response Spectra

APPENDIX C – SVDS Forms



## LIST OF FIGURES

|            |  |      |
|------------|--|------|
| Figure 2-1 | Cook Nuclear Plant Ground OBE, 5% Damping .....  | 2-6  |
| Figure 2-2 | Cook Nuclear Plant Ground DBE, 5% Damping .....  | 2-7  |
| Figure 4-1 | Comparison Between 5% Damped Ground Response Spectra<br>of Database Earthquakes and Cook Nuclear Plant DBE ..... | 4-25 |
| Figure 4-2 | Comparison of 5% Damped Bounding Spectrum to the<br>Cook Nuclear Plant DBE .....                                 | 4-26 |

## LIST OF TABLES

|           |  |      |
|-----------|--|------|
| Table 2-1 | Damping Ratios Used for Design at Cook Nuclear Plant . . . . .   | 2-8  |
| Table 4-1 | Cook Nuclear Plant Unit 1 Equipment Items Containing Essential Relays . . . . .  | 4-27 |
| Table 4-2 | Cook Nuclear Plant Unit 2 Equipment Items Containing Essential Relays . . . . .  | 4-31 |
| Table 4-3 | Cook Nuclear Plant Unit 1 Breakdown of Class of 21 Equipment Items Requiring a Seismic Walkdown . . . . .              | 4-34 |
| Table 4-4 | Cook Nuclear Plant Unit 2 Breakdown of Class of 21 Equipment Items Requiring a Seismic Walkdown . . . . .              | 4-35 |
| Table 4-5 | Cook Nuclear Plant Unit 1 Outliers - for Class of 21 Equipment, Reasons, Proposed Resolution, Current Status . . . . . | 4-36 |
| Table 4-6 | Cook Nuclear Plant Unit 2 Outliers - for Class of 21 Equipment, Reasons, Proposed Resolution, Current Status . . . . . | 4-44 |
| Table 4-7 | Commentary on Equipment Items Meeting the Intent of GIP Caveats  | 4-50 |
| Table 4-8 | Issues Tracked Using the SQUG Action Item Report Not Included as an Outlier . . . . .                                  | 4-56 |
| Table 5-1 | Vertical Flat Bottom Tanks Reviewed for Cook Nuclear Plant . . . .   | 5-2  |
| Table 5-2 | Horizontal Heat Exchangers on at Least Two Saddles Reviewed for Cook Nuclear Plant . . . . .                           | 5-7  |
| Table 6-1 | Summary of the Plant Area Summary Sheets (PASS) . . . . .  | 6-4  |
| Table 6-2 | Summary of the Limited Analytical Review . . . . .   | 6-6  |

## 1.0 EXECUTIVE SUMMARY

### 1.1 Background and Objectives

In December 1980, the Nuclear Regulatory Commission (NRC) designated "Seismic Qualification of Equipment in Operating Plants" as an unresolved safety issue (USI). The safety issue of concern was that equipment in nuclear plants for which construction permit applications had been docketed before about 1972 had not been reviewed according to the then-current (1980-81) licensing criteria for seismic qualification of equipment [i.e., Regulatory Guide (RG) 1.100<sup>(1)</sup>; Institute of Electrical and Electronics Engineers (IEEE) Standard 344-1975<sup>(2)</sup> Standard Review Plan (SRP) Section 3.10 (NUREG-0800, July 1981)<sup>(3)</sup>]. Therefore, the seismic adequacy of the equipment in these older plants may be questionable regarding their ability to survive and function in the event of a safe-shutdown earthquake (SSE). All operating plants for which equipment seismic qualification could not be verified to meet the intent of current licensing criteria were subject to the implementation provisions outlined in Generic Letter (GL) 87-02, "Verification of Seismic Adequacy of Mechanical and Electrical Equipment in Operating Reactors, Unresolved Safety Issue (USI) A-46." <sup>(4)</sup>

In response to USI A-46, affected utilities formed an owners group known as the Seismic Qualification Utility Group (SQUG) in the early 1980's to formulate a unified and reasonable approach to this issue. Industry seismic experts and firms were retained to assist SQUG in the formulation of an approach using past earthquake experience as a means to verify equipment seismic integrity.

Based on a wealth of actual earthquake data as well as data obtained from full-scale shake table tests of equipment, the seismic ruggedness of certain classes of mechanical and electrical equipment has been established. This data has been assembled and a ground motion "Bounding Spectrum" has been established below which the integrity of certain equipment can be assured upon meeting caveats developed for each equipment group. The Donald C. Cook Nuclear Plant, henceforth referred to as Cook Nuclear Plant, site ground motion, as well as those of all other Eastern US power plants (east of the Rocky Mountains), has a design basis ground motion below the Bounding Spectrum. The seismic review of the plant for USI A-46 was performed to the Cook Nuclear Plant Safe Shutdown Earthquake.

Although no explicit provisions within the USNRC regulations permitted the use of experience data as a means for seismic qualification, the USNRC determined that requiring older operating plants to comply with current licensing requirements was not practical because a literal application of those criteria to older operating plants could require extensive modifications of those facilities that could not be justified from the cost-benefit standpoint. Therefore, the NRC concluded that the use of earthquake experience data, with appropriate inclusion rules and caveats, is appropriate for resolving USI A-46.

The approach used for seismic verification of equipment at Cook Nuclear Plant for resolution of USI A-46 is contained in the Generic Implementation Procedure (GIP) Revision 2 as corrected<sup>(5)</sup> which defines the requirements for the conduct of the effort. The approach involved selecting equipment that is required to safely shut down the plant and monitor the necessary functions to insure safe shutdown. The selected equipment is documented on the Safe Shutdown Equipment List (SSEL). Experienced seismic practitioners then conducted in-plant walkdowns (Seismic Screening and Verification Walkdown) to evaluate the adequacy of the equipment selected.

The USNRC reviewed the GIP, Revision 2 as corrected and issued Supplemental Safety Evaluation Report No. 2 <sup>(6)</sup> (SSER No. 2). The USNRC endorsed the GIP Rev. 2, as corrected with some additional precautions. The USI A-46 effort at Cook Nuclear Plant Unit 1 was performed in accordance with the GIP, Rev. 2 as corrected and SSER No.2.

## **1.2 General Plant Description**

### **1.2.1 Site Location**

Cook Nuclear Plant Units 1 and 2 employ a Pressurized Water Reactor (PWR) Nuclear Steam Supply System (NSSS) furnished by Westinghouse Electric Corporation (W). The Reactor Coolant System (RCS) for each unit consists of four loops. The reactor containment is an ice condenser containment. The current licensed Rated Thermal Power (RTP) for Unit 1 is 3250 Mwt, and for Unit 2 is 3411 Mwt. The site is located along the eastern shore of Lake Michigan in Lake Township, Berrien County, Michigan, about 11 miles south-southwest of Benton Harbor, Michigan.

### **1.2.2 Primary Plant System**

For each unit, the primary plant system consists of a PWR, RCS, and associated auxiliary fluid systems. The RCS consists of four closed reactor coolant loops connected in parallel

to the reactor vessel, each loop containing a Reactor Coolant Pump (RCP) and a Steam Generator (SG), with an electrically Heated Pressurizer (PZR) connected to the hot leg of reactor coolant loop #3. The electrical heaters and spray nozzles in the PZR provide RCS pressure control. The SG's are vertical U-tube type heat exchangers utilizing Inconel tubes. Auxiliary systems are provided to charge the RCS, add makeup water, purify the RCS, provide chemicals for corrosion inhibition and reactor control, cool system components, remove residual heat when the reactor is shutdown, sample reactor coolant water, provide for emergency safety injection, and vent and drain the RCS.

### **1.3 Report Organization**

The sections of this report are organized in accordance with Part II, Section 9.4 of the GIP. These sections include the following:

- Section 1, "Executive Summary and Background Information".
- Section 2, "Seismic Design Basis" (SDB) - The Cook Nuclear Plant Ground Response Spectra (GRS) and In-Structure Response Spectra (ISRS) are described. The initial seismic design of the plant equipment is described. The bases for determining how seismic demand is determined for each equipment class for the USI A-46 evaluations are provided in Section 4, and documented on Screening Verification Data Sheet (SVDS) forms in Appendix C of this report.
- Section 3, "Project Team" - The Cook Nuclear Plant project team is discussed. Resumes for the Seismic Capability Engineers (SCEs) are included in Appendix A of this report.
- Section 4, "USI A-46 Evaluation for Class of Twenty-One Equipment" - Screening Verification and Walkdown results for mechanical and electrical equipment are discussed, in addition to the SVDS forms provided in Appendix C. Instances, when the intent of a caveat rule are satisfied but not the exact wording of the caveat, are identified in Table 4-7. A summary of outliers and their resolution is provided.
- Section 5, "Tanks and Heat Exchanger Review" -Results of the tanks and heat exchangers reviews are discussed, including instances in which the intent, but not the letter, of a caveat is met. A summary of outliers and their resolution is provided.





- Section 6, "Cable Tray and Conduit Raceway Review" -Results of the raceway review, including bounding samples and outliers, are summarized.
- Section 7, "Plan for Addressing Unresolved Outliers" -The plan and schedule for addressing remaining unresolved outliers are discussed.
- Section 8, "Conclusions and Results" -A brief summary of the conclusions and results of the overall USI A-46 project is included.
- Section 9, "References" -References made in the report are listed.

In addition to this report there are two other reports included in the USI A-46 submittal that form the basis of the USI A-46 evaluation at Cook Nuclear Plant. Attachment 1 of the submittal is the "Donald C. Cook Nuclear Plant SSEL Report," that documents the selection of Cook Nuclear Plant Units 1 and 2 safe shutdown paths and associated equipment needed to achieve and maintain a safe shutdown condition for resolution of USI A-46. Attachment 3 of the submittal is the "Donald C. Cook Nuclear Plant USI A-46 Relay Evaluation Report," that documents the relay seismic evaluations for the Cook Nuclear Plant Unit 1 and 2 USI A-46 resolution.

## 2.0 SEISMIC DESIGN BASIS

### 2.1 Safe Shutdown Earthquake Ground Response Spectra

The Cook Nuclear Plant is located in Berrien County Michigan along the shore of Lake Michigan. Historically this is a low seismicity area. The plant is conservatively designed for an operating basis earthquake (OBE) level of 0.10 g ground acceleration and a design basis earthquake (DBE) level of 0.2 g ground acceleration. The DBE at Cook Nuclear Plant was used as the Safe Shutdown Earthquake, SSE, for the SQUG GIP evaluations. Vertical ground response is two-thirds of the horizontal value. This was based on the seismicity evaluation in which a judgment was made estimating the maximum intensity (Modified Mercalli Intensity VII-VIII) that would occur at the site. All seismic Class I systems and equipments are designed to withstand the effect of a design basis earthquake and seismic Class II systems and equipment are designed to withstand the loads due to an OBE. The seismic design was based on the ground acceleration response spectrum curves shown in Figure 2-1 for the operational basis earthquake, OBE, and Figure 2-2 for the Design Basis Earthquake, DBE. The DBE becomes the Safe Shutdown Earthquake by definition using the GIP<sup>(5)</sup> guidance. The spectra were derived from the "Housner Spectrum" normalized to 0.10g for the OBE and 0.20g for the DBE.

### 2.2 In-Structure Response Spectra

The in-structure response spectra (ISRS) used for the USI A-46 project are the Cook Nuclear Plant design basis ISRS. A detailed description of the design basis ISRS derivation is contained in the Cook Nuclear Plant 120-day response to Supplement No. 1 to GL 87-02 (AEP:NRC1040A and AEP:NRC:1040B). The applicable floor response spectra (where the equipment is located) are included as part of Appendix B.

The USNRC reviewed the design basis ISRS for Cook Nuclear Plant and the method used for their development prior to the USI A-46 evaluation. The USNRC review concluded that the USNRC staff considers the Cook Nuclear Plant spectra to be "median centered". The Cook Nuclear Plant USI A-46 evaluation treated the spectras as "median centered" as a

result of this review.

The GIP defines "median centered" in-structure response spectra as spectra that would result in using realistic damping and realistic calculational methods while based on a somewhat conservative Ground Response Spectra (i.e. Reg. Guide 1.60, etc.). Conservative In-Structure Spectra are response spectra that have been computed generally in accordance with the conservatism of current NRC Regulatory Guidelines (such as Reg. Guide 1.60 for Ground Spectrum Shape and 1.61 for Damping).

In the case of Cook Nuclear Plant as described in Section 2.1, the SSE Ground Response Spectrum Shape was based upon the recommendation of Housner. This shape is less conservative than Reg. Guide 1.60, however retains an acceptable overall design margin by using lower damping levels than permitted by Reg. Guide 1.61. In review of the plant's "in-structure" response spectra, the NRC took the conservative approach by classifying the in-structure response spectra for all plants included in the SQUG program with Housner Spectra as "median centered".

The ISRS are not available at some of the floor elevations where the safe shutdown equipment is located. When this is the case, either the ISRS for a higher elevation or the ISRS developed by a linear interpolation between existing ISRS may be used in the evaluation. In the case of the Auxiliary Building at Elevation 609 feet, since the interpolated ISRS are very close to the corresponding ISRS for the Diesel Generator Building, the ISRS for the Diesel Generator Building were used.

The designation of the in-structure response spectra as "median centered" had the following impacts on the project: 1) Anchorage calculations were performed using an additional 1.25 factor for computing the seismic demand and 2) an additional 1.50 factor was used for the seismic demand spectra when comparing to Generic Equipment Ruggedness Spectra (GERS) (this had the most impact on the capacity vs. demand evaluations for relays) which are the subject of a separate report included in Attachment 3.

## 2.3 Definition of Seismic Design Classification

All equipment and structures at Cook Nuclear Plant are classified as Class I, Class II, or Class III as recommended in:

- a. TID-7024, "Nuclear Reactors and Earthquakes" August, 1963<sup>(9)</sup> and
- b. G.W. Housner, "Design of Nuclear Power Reactors Against Earthquakes,"<sup>(10)</sup> Proceedings of the Second World Conference on earthquake Engineering Vol. I, Japan 1960, pg. 133, 134 and 137.

Those structures and components including instruments and controls whose failure might cause or increase the severity of a loss-of-coolant accident or result in an uncontrolled release of excessive amounts of radioactivity are classified Class I. Class I structures and components also include those vital to safe shutdown and isolation of the reactor.

Those structures and components which are important to reactor operation but not essential to safe shutdown and isolation of the reactor and whose failure could not result in the release of substantial amounts of radioactivity are classified Class II.

Those structures and components which are not related to reactor operation or containment are classified as Class III.

The original equipment seismic qualification at Cook Nuclear Plant was per the requirements of Specification DCC-NE-101-QCN, which was based on the draft IEEE-344-1971<sup>(11)</sup> standard. Subsequently, some replacement components have been installed per the requirements of the IEEE 344-1975<sup>(2)</sup> standard.

At the time of the Unit 2 operating license, Cook Nuclear Plant was one of the plants audited by the NRC as part of the Seismic Qualification Review Team (SQRT). As a result, the following items were requalified under the requirements of IEEE-344-1975.

### Analysis

1. Diesel Engine Foundation
2. Diesel Engine Lube Oil Sump Tank
3. Diesel Generator Control Panels (DG-AB, DG-CD)
4. Battery Room Exhaust Fans
5. Control Room Air Handling Isolation Dampers
6. Motor Driven Auxiliary Feed Pumps
7. Turbine Driven Auxiliary Feed Pumps
8. Essential Service Water Pumps
9. CCW Heat Exchangers
10. Refueling Water Storage Tanks
11. Main Steam Safety Valves
12. Main Steam Isolation Valves
13. Safety Injection System Front Panel
14. Hot Shutdown Panel
15. Auxiliary Relay Panels

### Testing

1. GE Relays
2. Power Relays
3. Control Relays

4. Differential Pressure Indicators (Model 227), Switches (Model 288A) and Transmitters (Model 368)
5. Battery Rack
6. Battery Chargers
7. Switchgears (4KV and 600V)
8. Critical Solenoid Valve Panels
9. Inverters
10. Transfer Switch

The equipment items for Unit 1 are essentially identical to the requalified IEEE-344-75 equipment for the Unit 2 operating license.

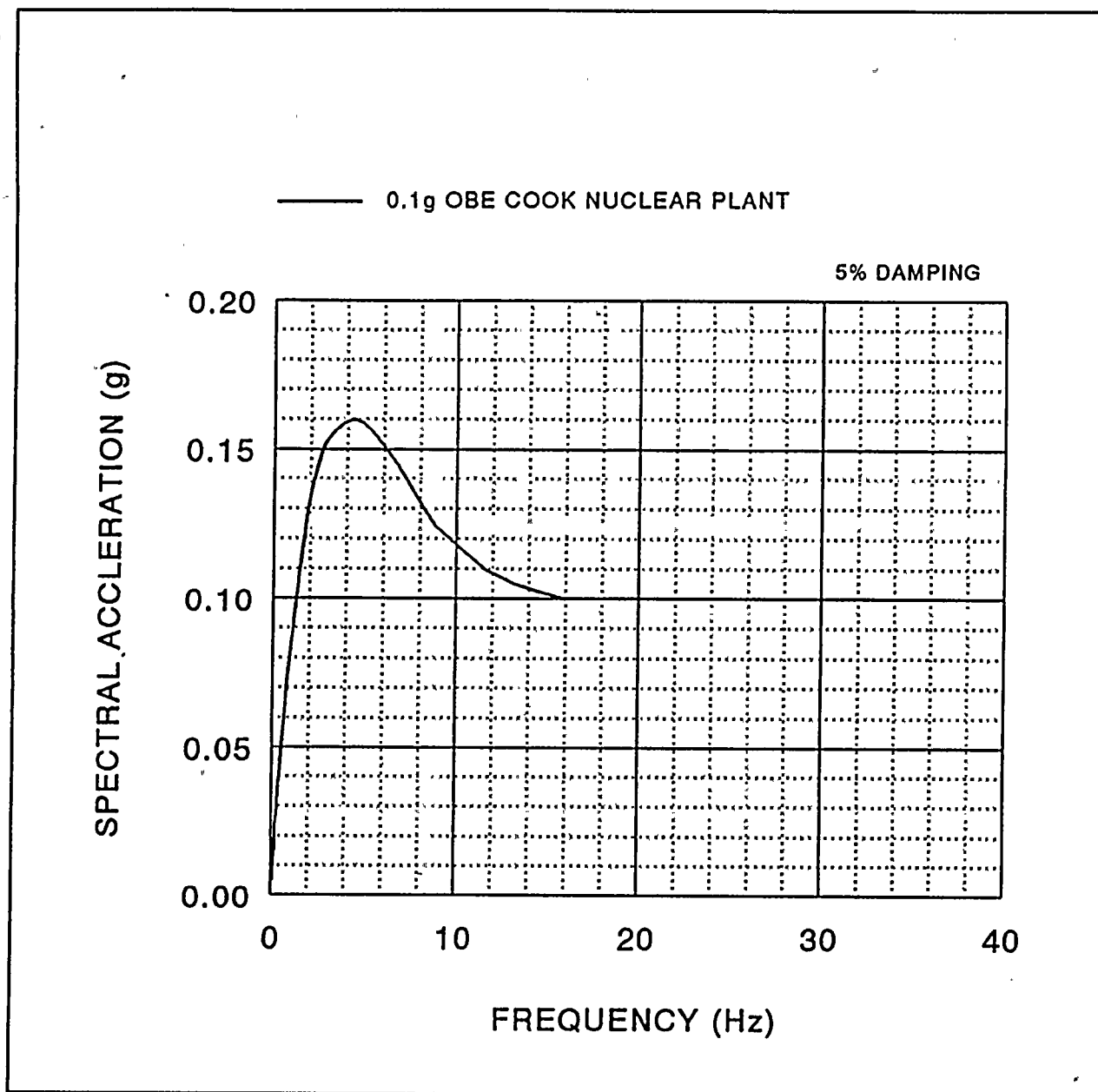


Figure 2-1 Donald C. Cook Nuclear Plant OBE Ground Response Spectrum  
5% Damping

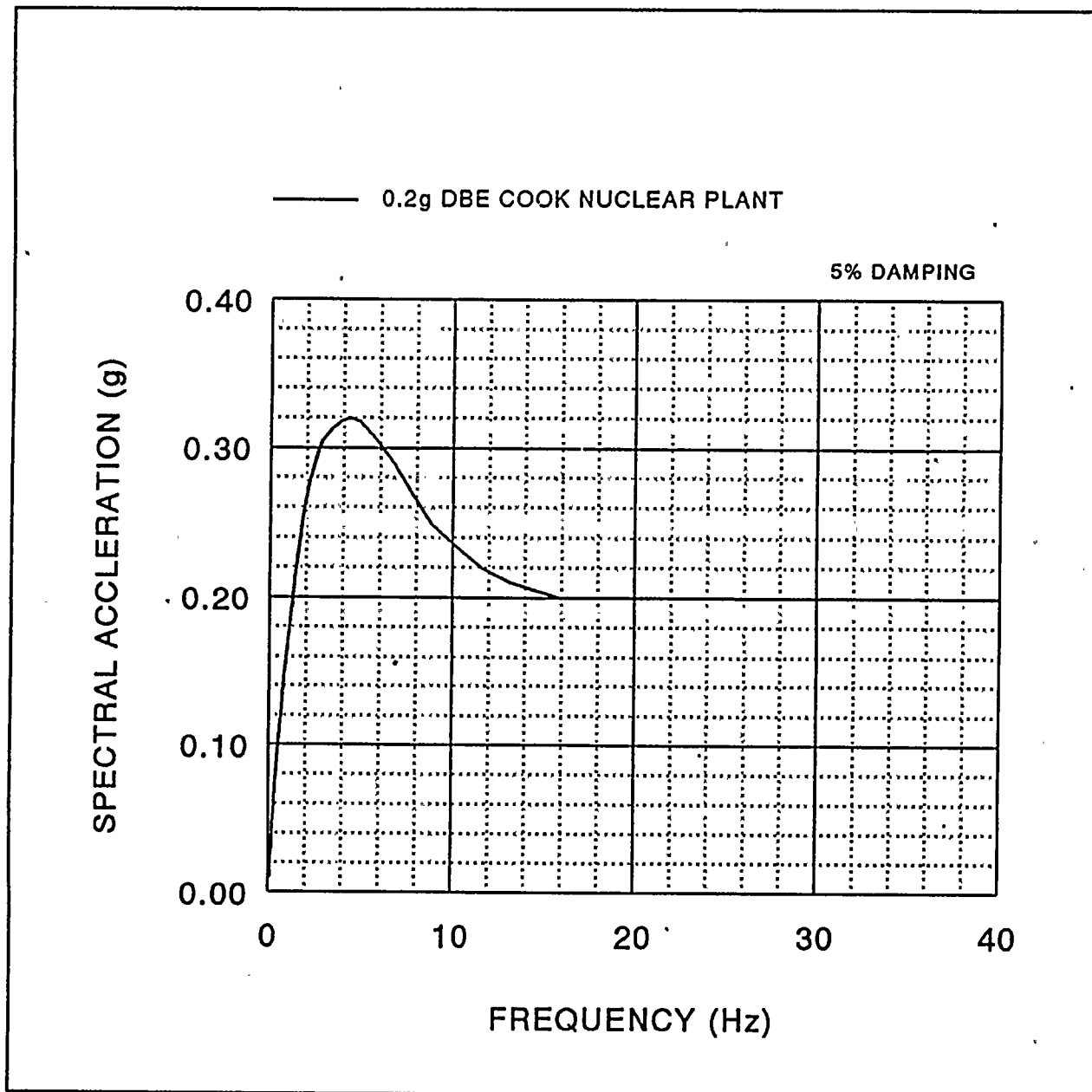


Figure 2-2 Donald C. Cook Nuclear Plant DBE Ground Response Spectrum  
5% Damping



Table 2-1  
Damping Ratios Used for Design at Cook Nuclear Plant (Table 5.2-4 of the UFSAR)

| <u>Type of Structure</u>   | <u>Percent of Critical Damping</u> |                                |
|--|------------------------------------|--------------------------------|
|  | <u>Operating Basis Earthquake</u>  | <u>Design Basis Earthquake</u> |
| Containment Structure and all internal concrete structures   | 4% *<br>2% **                      | 7% *<br>5% **                  |
| Other conventionally reinforced concrete structures above grade, such as shear walls or rigid frames | 2%                                 | 5%                             |
| Welded structural steel assemblies   | 1%                                 | 1%                             |
| Bolted or riveted steel assemblies   | 2%                                 | 2%                             |
| Piping   | 0.5%                               | 0.5%                           |

(\* Analyzed with accident conditions)

(\*\* Analyzed without accident conditions)

Note:

AEC Reg. Guide 1.61 (Oct. 1973) permits the use of higher damping values than those values indicated in this Table.

The damping ratios for the USI A-46 effort are defined in the GIP<sup>(5)</sup>. For the majority of the equipment classes this is defined as 5% damping.

### **3.0 PROJECT TEAM**

#### **3.1 Integrated Team Approach**

The Cook Nuclear Plant SQUG project was a joint engineering effort between the AEPSC Engineering Staff and the Consultant Project Staff (Stevenson and Associates). In addition to the project management and contract management work associated with the use of consultant resources, AEPSC Engineers were integrated with the consultant team in all aspects of the work. AEPSC SQUG task group provided dedicated support for the development of the SSEL, SSEL Reports, Anchorage Inspection Data Sheets, Relay List and Relay List Report and the review of all engineering packages completed for the project (Seismic Evaluation Work Sheets, Cable Tray and Raceway Report, and the Seismic Evaluation Report) and participation as Seismic Walkdown Team Members during the Screening Walkdowns.

#### **3.2 Seismic Review Team**

The Walkdown Teams were composed of at least two Seismic Capability Engineers per the GIP. At least one of the Seismic Capability Engineers was a Registered Professional Engineer. With a few exceptions each walkdown team was composed of one Consultant Engineer, one AEPSC Engineer and Systems/Operations Personnel from AEPSC or the Cook Nuclear Plant site staff and one engineer from site design to provide details of the anchor inspection. Seismic Capability Engineers were as follows:

From Stevenson and Associates:

J. D. Stevenson (PE)

W. Djordjevic (PE)

G. G. Thomas

S. Anagnostis

P. R. Wilson (PE)

G. Harstead (PE)

From AEPSC:

|                          |  |
|--------------------------|--|
| T. R. Satyan Sharma (PE) | Project Manager  |
| I.C. Huang (PE)          | Structural Engineer  |
| P. Krugh                 | Structural Engineer  |
| B. A. Svensson           | Executive Staff Assistant; Former Assistant Plant Manager,<br>Operations (SRO) |
| R. P. Leonard            | Plant Systems Engineer, (PE)   |
| J. Dunlop                | Systems Engineer   |
| R. Steele                | Electrical Engineering; Lead Relay Engineer                                    |
| H. W. Young              | Mechanical Engineering, (PE)   |
| J. M. Nieto              | Nuclear Engineering/ Safety & Licensing  |
| K. Mahajan               | Electrical Engineering, (PE)   |
| T. Jeyasekaran           | Site Design  |
| M. Baskerville           | Electrical Design  |

Resumes for the walkdown team members are included in Appendix A.

### 3.3 Peer Reviewers

Dr. Robert P. Kennedy of RPK-Structural Mechanics Consulting performed the peer review for the USI A-46 project at Cook Nuclear Plant. Dr. Kennedy's review covered all seismic evaluation areas of the project and included a review of the draft report, two visits to the plant site during the Screening Walkdowns for a sample walkdown and a review of the documentation.

## 4.0 USI A-46 EVALUATION FOR CLASS OF TWENTY-ONE EQUIPMENT

### 4.1 Overall Approach Taken

SQUG developed the GIP to provide an experience data base, technical approach, generic procedure, and documentation requirements which can be used by owners of currently operating nuclear power plants to address the requirements of GL 87-02<sup>(4)</sup>. SQUG has worked closely with EPRI since 1982 to provide information to the NRC staff to assist in the resolution of USI A-46. The GIP was used to address the NRC's Unresolved Safety Issue (USI) A-46, "Seismic Qualification of Equipment in Operating Plants," as required by NRC Generic Letter 87-02 and supporting documents.

Final project data was recorded using Stevenson & Associates proprietary program called the GIPPER<sup>(12)</sup>. The Objective of the GIPPER Software Package (of which ANCHOR4 is a part) is to create and maintain the set of USI A-46 data bases for plant specific seismic verification data and to provide the tools to implement the analytical procedures specified in GIP.

The GIPPER is a Windows-based expert system, designed to simplify and fully digitize the GIP and provides the necessary documentation for seismic verification of nuclear plant equipment, as well as serve as a SQUG configuration control tool.

The GIPPER contains GIP caveats, procedures, and reporting data necessary to perform seismic evaluations. Through the GIPPER, the following information is stored and maintained in electronic databases:

- Safe Shutdown Equipment Lists (SSEL)
- Seismic Evaluation Work Sheets (SEWS)
- Outlier Seismic Verification Sheets (OSVS)
- Raceway Plant Area Summaries
- Spectra Comparisons
- Anchorage Evaluations

- Tank Evaluations
- Relay Evaluations
- Photos
- Drawing/ Sketches
- Documents

The evaluation of an item of equipment or relay can be revised, and all revised states of each item are documented and retrievable. Complete evaluation reports are generated through the GIPPER's printing options.

Hard copies of the required forms including the Screening Verification Data Sheets (SVDS), and Screening Evaluation Work Sheets (SEWS), were developed and signed by the Seismic Capability Engineers. The references which document the criteria and procedures used for this walkdown, are the SSRAP report<sup>(13)</sup>, URS anchorage report<sup>(14)</sup>, and the USNRC SSER No. 2 on the GIP.<sup>(6)</sup>

#### 4.2 Seismic Screening Guidelines

The procedure for performing the Screening Verification and Walkdown is based on the following four seismic screening guidelines:

1. Seismic Capacity vs. Seismic Demand - The seismic capacity of the equipment, based on earthquake experience data, generic seismic testing data, or equipment-specific seismic qualification data, should be greater than the seismic demand imposed on the equipment by the safe shutdown earthquake (SSE).
2. Caveat Compliance - In order to use the seismic capacity defined by the earthquake experience Bounding Spectrum, the equipment should be similar to the equipment in the earthquake experience equipment class and also meet the intent of the specific caveats for that class of equipment. If equipment-specific seismic qualification data is used, then any specific restrictions or

caveats for that qualification data apply instead.

3. Anchorage Adequacy - The equipment anchorage capacity, installation, and stiffness should be adequate to withstand the seismic demand from the SSE at the equipment location.
4. Seismic Interaction Checks - The effect of possible seismic spatial interactions with nearby equipment, systems, and structures should not cause the equipment to fail to perform its intended safe shutdown function.

The evaluation of equipment against each of these four screening guidelines at Cook Nuclear Plant is based upon walkdown evaluations, calculations, and other supporting data.

#### 4.2.1 Seismic Capacity Vs. Demand

Cook Nuclear Plant determined the seismic capacity of safe shutdown equipment using:

- Earthquake experience data with capacity defined by the Bounding Spectrum;
- Equipment-specific seismic qualification data, or data on similar equipment.

The seismic demand imposed on an item of equipment depends on whether or not the ground spectrum or amplified floor response spectra were used, and how it is compared to the capacity data.

As described in the SSRAP report<sup>(13)</sup>, well anchored industrial grade equipment have performed well in earthquakes with a magnitude much greater than the SSE defined earthquake at Cook Nuclear Plant. Figure 4-1 shows a comparison of the 5% damped SSE design basis response spectrum and the 5% damped response spectra for the earthquakes used to develop the SSRAP Bounding Spectrum. As demonstrated by this figure, equipment in these facilities were subjected to much greater vibration than expected at the Cook Nuclear Plant site.

The SSRAP Bounding Spectrum recommended for use during GL 87-02/USI A-46 evaluations in Reference 13 and adopted by the SQUG GIP envelopes the Cook Nuclear Plant SSE ground response spectra over the entire frequency range as shown in Figure 4-2.

Generally, conservative floor spectra were compared to 1.5 times the bounding spectrum. To a lesser extent, the ground spectrum was compared to the bounding spectrum for equipment within about 40 feet of grade with an estimated fundamental frequency greater than 8 Hz. Newer, upgraded equipment that had been seismically qualified in accordance with the IEEE 344 Standard, 1975 Edition or later, was accepted based on this documentation and was supplemented by an additional review as documented in the Seismic Evaluation Work Sheets, SEWS, by the SRT's.

For purposes of determining the 40 feet Above Grade elevation, effective grade for the site and/or each building must be determined. "Effective grade" at a nuclear plant is defined as the average elevation of the ground surrounding the building along its perimeter. As Cook Nuclear Plant is a soil site, effective grade was established at 608 feet.

#### 4.2.2 Caveat Compliance

The second screening guideline which must be satisfied to verify the seismic adequacy of an item of mechanical or electrical equipment is to confirm that (1) the equipment characteristics are generally similar to the earthquake experience equipment class and (2) the equipment meets the intent of the specific caveats for the equipment class. This review is only necessary when the Bounding Spectrum is used to represent the seismic capacity of an item of equipment. If equipment-specific seismic qualification data is used instead, then only the specific restrictions applicable to that equipment-specific qualification data need be applied.

Another aspect of verifying the seismic adequacy of equipment included within the scope of this procedure is explained by the "rule of the box." For the equipment included in either the earthquake or testing equipment class all of the components mounted on or in this equipment are considered to be part of that equipment and do not have to be evaluated





separately. However, the walkdown engineers did look for suspicious details or uncommon situations which could make the equipment item vulnerable.

An item of equipment should have the same general characteristics as the equipment in the earthquake experience equipment class. The intent of this caveat is to preclude items of equipment with unusual designs and characteristics which have not demonstrated seismic adequacy in earthquakes or tests.

"Caveats" are defined as the set of inclusion and exclusion rules which represent specific characteristics and features particularly important for seismic adequacy of a particular class of equipment. Appendix B of the GIP contains a summary of the caveats for the earthquake experience equipment class and for the generic seismic testing equipment class.

The "intent" of the caveats should be met when evaluating an item of equipment as they are not fixed, inflexible rules. Engineering judgment is used to determine whether the specific seismic concern addressed by the caveat is met. Each item of equipment should be evaluated to determine whether it meets the specific wording of the applicable caveats and their intent. However, if an item of equipment meets the intent of the caveats but the specific wording of the caveat rule is not met, then that item is considered to have met the caveat. At Cook Nuclear Plant, a small number of SSEL items were judged to meet the intent, if not the exact wording of a caveat and these cases are reported in Subsection 4.6.6 of this report.

#### **4.2.3 Anchorage Adequacy**

Anchorage adequacy was verified with an approach incorporating three elements:

- Comparison of the anchorage capacity with the seismic demand.
- Evaluation of the anchorage to verify that it is free of gross installation defects.
- Evaluation of the equipment anchorage load path to verify that there is adequate stiffness and strength.

The screening approach for verifying the seismic adequacy of equipment anchorage is based upon a combination of inspections, analyses, and engineering judgment. Inspections consist of measurements and visual evaluations of the equipment and its anchorage, supplemented by use of plant documentation and drawings. Analyses compare the anchorage capacity to the seismic loadings (demand) imposed upon the anchorage. These analyses were done using the guidelines in Section 4 and Appendix C of the GIP. Engineering judgment is also an important element in the evaluation of equipment anchorage. As a general rule, all unique significantly sized equipment items were rigorously analyzed using the ANCHOR4 software package developed by Stevenson & Associates that is included in the GIPPER software. Small equipment, weighing usually 100 lbs. or less was accepted by judgment and a "tug test". The tug test simply involves pulling on the device (say, a wall-mounted transmitter) with a force to exceed 2-3 g's of equivalent acceleration. Other instances where judgment was used included basing anchorage adequacy on calculations for anchorage from other equipment items at Cook Nuclear Plant.

The four main steps used to evaluate seismic adequacy of equipment anchorages at Cook Nuclear Plant followed the guidance of the GIP and are shown below:

1. Anchorage Installation Inspection
2. Anchorage Capacity Determination
3. Seismic Demand Determination
4. Comparison of Capacity to Demand

The first main step in evaluating the seismic adequacy of anchorages is to check the anchorage installation and its connection to the base of the equipment. This inspection consists of visual checks and measurements along with a review of plant documentation and drawings where necessary.

Prior to the walkdown, site technicians were trained on the anchorage inspection procedures and requirements of the GIP. Using this training, the site technicians documented the anchorage configuration for each equipment item, including the length and size of the welds, embedment length of cast in place and expansion anchors, concrete quality (cracking or

spalling), etc. The as-built anchorage drawings reduced the walkdown effort substantially and aided in the quick calculation of the equipment anchorage capacity. The SRT, however, also looked at the anchorage in the field and investigated any observed inconsistencies with the plant as-built drawings. In general the technician generated Anchorage Inspection Data Sheets included all instances of potential anchorage or concrete deficiencies (spalled concrete, missing bolt washers, etc.). Most of the time these potential deficiencies were reconciled by further SRT inspection. The Anchorage Inspection Data Sheets are included with the detailed SEWS.

All accessible anchorages were visually inspected. A check of the following equipment anchorage attributes was made:

1. Equipment Characteristics
2. Type of Anchorage
3. Size and Location of Anchorage
4. Installation Adequacy
5. Embedment Length
6. Gap at Threaded Anchors
7. Spacing Between Anchorages
8. Edge Distance
9. Concrete Strength and Condition
10. Concrete Crack Locations and Sizes
11. Essential Relays in Cabinets
12. Equipment Base Stiffness/Prying Action
13. Equipment Base Strength/Structural Load Path
14. Embedment Steel and Pads

The equipment damping for certain classes of equipment are given in Section C.1 of the GIP and were used in this study.

For expansion anchors, a tightness check is required to detect gross installation defects (such as oversized concrete holes, total lack of preload, loose nuts, damaged subsurface concrete, and missing plug for shell types) which would leave the anchor loose in the hole. The tightness check was waived for expansion anchors supporting raceway hangers. The tightness check for expansion anchors is accomplished by applying a torque to the anchor by hand until the anchor was "wrench tight," i.e., tightened without excessive exertion. If the anchor bolt or nut rotates less than about 1/4 turn, then the anchor is considered tight. The tightness checks and embedment checks were performed during the detailed anchorage inspections.

The second main step in evaluating the seismic adequacy of anchorages is to determine the allowable capacity of anchors used to secure an item of equipment. The allowable capacity is obtained by multiplying the nominal allowable capacities by the applicable capacity reduction factors. The nominal capacities and reduction factors are obtained from Appendix C of the GIP, based on the results of the anchorage installation inspection checks.

The pullout capacity allowable is based on the product of the nominal pullout capacity and the applicable capacity reduction factors:

$$P_{all} = P_{nom} RT_p RL_p RS_p RE_p RF_p RC_p RR_p$$

Where:  $P_{all}$  = Allowable Pullout capacity of installed anchor (kip)

$P_{nom}$  = Nominal allowable Pullout capacity (kip)

$RT_p$  = Reduction factor for the Type of expansion anchors

$RL_p$  = Reduction factor for short embedment Lengths

$RS_p$  = Reduction factor for closely Spaced anchors

$RE_p$  = Reduction factor for near Edge anchors

$RF_p =$  Reduction factor for low strength ( $f'_c$ ) concrete

$RC_p =$  Reduction factor for Cracked concrete

$RR_p =$  Reduction factor for expansion anchors securing equipment with  
essential Relays

The shear capacity allowable is based on the product of the nominal shear capacity and the applicable capacity reduction factors:

$$V_{all} = V_{nom} RT_s RL_s RS_s RE_s RF_s RR_s$$

Where:  $V_{all} =$  Allowable shear capacity of installed anchor (kip)

$V_{nom} =$  Nominal allowable shear capacity (kip)

$RT_s =$  Reduction factor for the Type of expansion anchors

$RL_s =$  Reduction factor for short embedment Lengths

$RS_s =$  Reduction factor for closely Spaced anchors

$RE_s =$  Reduction factor for near Edge anchors

$RF_s =$  Reduction factor for low strength ( $f'_c$ ) concrete

$RR_s =$  Reduction factor for expansion anchors securing equipment  
with essential Relays

Note that the pullout and shear capacities for anchors given above are based on having adequate stiffness in the base of the equipment and on not applying significant prying action to the anchor. If Base Stiffness and Prying Action show that stiffness is not adequate or that significant prying action is applied to the anchors, then the Seismic Capability Engineers lowered the allowable capacity loads accordingly.

The third step in evaluating the anchorages was to determine the seismic demand imposed



on the equipment. The demand was established based on the type of demand spectrum used. If the amplified floor spectra were used, an additional 1.25 factor of conservatism was used to establish the demand load since the floor spectra were deemed realistic mean centered. The demand load was simply determined based on spectral acceleration value times the weight of the equipment. Equipment weight was estimated by either using the drawing weight or the maximum weights given in Table C.1-1 of the GIP. Estimates of fundamental frequency were based on shake table or in situ vibration tests and use of Table C.1-1 of the GIP. If the item was deemed rigid, the zero period acceleration (ZPA) was used. If the item was deemed flexible, the peak of the response spectrum above the fundamental frequency was used. If the fundamental frequency is given in the SEWS, then the largest spectral acceleration in the range from that estimated frequency to the ZPA is used. If the ground spectrum is used for demand, then 1.875 times the appropriate spectral acceleration is used where 1.875 is the product of 1.5, the median amplification factor, and 1.25, the additional anchorage factor of conservatism for non-conservative demand spectra.

In the original design of the plant, many electrical equipment were seismically qualified by testing. This data was a valuable tool for estimating the lowest natural frequency of this equipment, since this was defined by a resonance search of the equipment. Many mechanical equipment items were rigorously analyzed, and as such had a calculated estimate of the first natural frequency. In addition, Report No. MT2, "Summary Report of Fundamental Frequencies Determined By In-Situ Transfer Function Testing at Cook Nuclear Plant," dated August 10, 1994<sup>(15)</sup> documents the testing of several electrical equipment items. The minimum fundamental frequency from these tests was determined for most generic electrical equipment items at Cook Nuclear Plant. These included various cabinets, panels, unistrut racks, switchgear, MCC's, and inverters. This report was also a valuable tool for estimating frequencies.

The fourth and final step to complete the anchorage evaluation compares the seismic demand to the anchorage capacity. If the demand is less than the capacity, the anchorage is acceptable; otherwise, the equipment item is declared an outlier.

#### **4.2.4 Seismic Interaction Checks**

The fourth and final screening guideline used to verify the seismic adequacy of an item of mechanical or electrical equipment was to confirm that there were no adverse seismic spatial interactions with nearby equipment, systems, and structures which could cause the equipment to fail to perform its intended safe shutdown function. The interactions of concern are (1) proximity effects, (2) structural failure and falling, and (3) flexibility of attached lines and cables. Guidelines for judging interaction effects when verifying the seismic adequacy of equipment are presented in Appendix D of the GIP.

During the plant walkdowns at Cook Nuclear Plant, the SRT's identified only a few interaction concerns. These particular issues and their resolution are discussed in detail in Section 4.6.5.

Overhead piping systems and ductwork were closely examined in all plant areas containing A-46 equipment. The SRT's identified very few potential vulnerabilities and noted that the distribution systems were, in general well supported.

#### **4.3 Outlier Resolution**

An outlier is defined as an item of equipment which does not meet the screening guidelines noted above. An outlier may be shown to be adequate for seismic loadings by performing additional evaluations such as the seismic qualification techniques currently being used in newer nuclear power plants. These additional evaluations and alternate methods recommended by the SRT were documented on the Outlier Seismic Verification Sheets (OSVS).

#### **4.4 Other Types of Seismic Evaluations and Interfaces**

In addition to the seismic evaluations covered in Section 4 for active mechanical and electrical equipment, seismic evaluations for two other types of equipment are covered in





other sections as follows:

- Section 5 - Tanks and Heat Exchangers Review
- Section 6 - Cable and Conduit Raceways Review

While seismic evaluations of the above items can generally be performed independently from those for active mechanical and electrical equipment, there are a few areas where an interface with the Relay Functionality Review is appropriate:

- Any cabinets containing essential relays, as determined by the relay review, should be evaluated for seismic adequacy using the guidelines contained in this section.
- A capacity reduction factor should be applied to expansion anchor bolts which secure cabinets containing essential relays. The capacity reduction factor is discussed in Section 4.4 and Appendix C of the GIP.
- Seismic interaction, including even mild bumping, is not allowed on cabinets containing essential relays. This limitation is discussed in Section 4.5 of the GIP.
- In-cabinet amplification factors for cabinets containing essential relays may be estimated, using the guidelines in Section 6 of the GIP, by the Seismic Capability Engineers for use in the Relay Functionality Review.

Equipment items containing relays are listed in Table 4-1 for Unit 1 and Table 4-2 for Unit 2. The special requirements for equipment containing relays were applicable to these items.

#### **4.5 Documentation**

AEP documented the results of the Screening Verification and Walkdown for Cook Nuclear Plant on Screening Verification Data Sheets (SVDS) in Appendix C.

As discussed in Section 4.4, the discussion of the review of Heat Exchangers & Tanks and

Cable Tray & Conduit Raceways is given in Sections 5 and 6, respectively.

Outliers and other concerns identified during the USI A-46 effort for all equipment are discussed in Sections 4.6, 4.7, and 7.0. The Relay Functionality Assessment is given in a separately bound report entitled, "Donald C. Cook Nuclear Plant USI A-46 Relay Evaluation Report."

#### 4.6 Class of Twenty-One Evaluation Results

This section of the USI A-46 report documents the seismic screening results for the mechanical and electrical equipment items.

The screening walkdowns gathered the necessary data to support the screening process and to implement the requirements of the GIP. Included in the scope of this effort were the evaluations performed following the screening walkdown to demonstrate the basis for screening decisions made during the walkdown. The seismic capability walkdowns also served to collect any additional data needed to complete the component evaluations. Results of the Screening and Verification Walkdowns were documented on the Screening Evaluation Work Sheets (SEWS). Photographs were also taken during the walkdowns as part of the data recording process. Photographs taken during the walkdown are included on the individual SEWS for the equipment.

In addition to the screening evaluations performed during the Seismic Screening and Verification Walkdowns, an anchorage inspection walkdown was conducted. Bolt tightness checks on all accessible equipment items bolted to a concrete floor or wall were performed as described in Section 4.2.3. The results of the tightness checks were documented on the sketches and notes of the Anchor Inspection Data Sheets prepared for each equipment item that are signed by the anchorage inspection team.

The Cook Nuclear Plant site design personnel performed detailed anchorage inspections, and documented the results on the Anchorage Inspection Data Sheets, which included detailed information on all anchorages (length, size, gaps, dimensions, concrete

imperfections, etc). The Seismic Review Capability Engineers reviewed and provided a final check for the anchorage checks during the SRT walkdowns.

The SRT performed a visual inspection of the anchorage and made final judgment on the anchorage condition. Reduction factors for the anchorage were taken for any conditions judged by the SRT to warrant a reduction in accordance with the GIP. In general the technicians performing the anchorage walkdowns documented any observable imperfections, regardless of whether the condition warranted a reduction or not.

Using the results from the anchorage inspections and tightness checks, anchorage evaluations were performed using ANCHOR4 in the "GIPPER" Software package after the completion of the Seismic Screening And Verification Walkdowns.

The walkdowns were performed in several stages as follows:

- 1) Trial Plant Walkdown of thirty-five Unit 1 RHR System Components and selected Electrical Equipment items, the week of July 15, 1991.
- 2) Unit 1 Electrical and Containment Outage Walkdown the week of July 18, 1992.
- 3) Unit 2 Electrical and Containment Outage Walkdown the week of October 29, 1992.
- 4) Balance of Plant Equipment Walkdowns the weeks of October 4, 1993, October 18, 1993, November 1, 1993, and November 15, 1993.
- 5) Miscellaneous Equipment Walkdowns the weeks of April 11, 1994 and September 26, 1994.

The walkdown comments of the SRT's were documented in the notes of the SEWS for the various items. The signed Screening Verification Data Sheets (SVDS) for the walkdowns are included by each Walkdown Team in Appendix C.

The Seismic Verification and Evaluation Walkdowns included the evaluation of 901 equipment items requiring a seismic walkdown for Unit 1, and 877 equipment items for Unit 2. Of these equipment items, many were evaluated using the "Rule of the Box". However,

each of these "box" components were inspected on the parent item and evaluated using engineering judgment that; (a) the item was in the database, (b) the attachment of the item to the parent was adequate and, (c) that there were no adverse seismic interactions for the item. This evaluation is documented on the SEWS and SVDS for the item. Tables 4-3 and 4-4 indicate the breakdown by class of the 901 and 877 equipment items requiring a seismic walkdown in Unit 1 and 2 respectively.

The walkdowns and seismic evaluations performed for the USI A-46 effort identified 47 equipment items that were outliers for Unit 1 and 39 equipment items that were outliers for Unit 2. Outlier issues and the recommended resolution by the SRT are included as Tables 4.5 and 4.6 for Unit 1 and Unit 2 respectively.

Seismic concerns, open items, and other maintenance concerns identified during the walkdowns and evaluations were tracked using AEPNO Procedure No. 66100-LTG-5400-16 SQUG Action Item Report. By the conclusion of the USI A-46 effort and the submittal of this report most of these issues had been reconciled either on a Screening Basis using the GIP guidance, or by designating the item as an outlier. Table 4-8 lists those SQUG Action Items for Class of 21 equipment not identified as outliers but requires some plant action (replacing missing ID tags, tightening a loose redundant bolt, etc.), and generic issues. There were four generic interaction concerns and one generic conduit concern that is being tracked using the SQUG Action Item Report.

These Generic Interaction Issues included general seismic housekeeping issues in the Control Room, overhead sodium lamps with open hooks in the Diesel Generator Room, portable fire extinguishers mounted on small hooks, and loose tie-down cables on Emergency Battery Lights. Rather than make a number of equipment items outliers due to these generic concerns, we believe that a more complete resolution could be provided on a plant generic basis. Issues still being tracked at the time of this submittal for Class of 21 equipment using the SQUG Action Items are included in Table 4-8.

Many of the concerns identified lent themselves to minor plant modifications. The final



documentation (SEWS and SVDS) for the project reflect the field conditions at the time when the walkdown was completed for a particular component. All other equipment items were screened successfully, except those described in Sections 4.6.2 to 4.6.5 of this report.

Tables 4-5 and 4-6 list all the 47 and 39 outlier equipment items in Unit 1 and 2 respectively. In Unit 1 there were nine equipment items with two outlier issues (See 'issue' column in Table 4-5), and therefore there were 56 total issues. Thirteen issues were due to Capacity vs Demand, twelve because of caveats, ten due to anchorage, twenty due to seismic interaction concerns, and one due to other issues.

In Unit 2 there were eight equipment items with two outlier issues (See 'issue' column in Table 4-6), and therefore, there were 47 total issues. Nine issues were due to Capacity vs Demand, eleven due to caveats, seven due to anchorage, eighteen due to interaction, and two due to other issues.

#### 4.6.1 Equipment Characteristics

Equipment at the Cook Nuclear Plant is typical of equipment in Nuclear Power facilities of the late 60's and early 70's vintage. Equipment at the Cook Nuclear Plant is well represented in the earthquake experience data base and met caveat no. 1 for Class 20 equipment items.

The results of the seismic walkdown are summarized as follows:

There are some equipment items identified as Class 0 in Unit 1 and 2 which were primarily passive, and were similar to items considered as components of the class of 21 equipment. For these equipment items the SRT assessed the potential for seismic damage and made the necessary evaluations. All these items were at locations in the plant where 1.5 times the Bounding Spectrum is greater than the floor response spectra where they were located.

The MCC's were all Cutler-Hammer MCC's, 90 inches in height by 20 inches by 20 inches. The MCC's were normally welded in the back and were either J-bolted or expansion

anchored in the front. Some were bolted on both sides.

The Class 2 and 3 switchgears were made by ITE Imperial Corporation. The weak link in the anchorage for them was plug welds. The loading on the anchorage was only in shear because of the natural frequency of the switchgear and their high aspect ratio. The Reactor Trip Breakers (Class 2) were Westinghouse DB-50 variety and were fillet welded to embeds in the front and back.

Class 4 transformers varied greatly in size and function. There were very small transformers (1 foot-9 inches by 1 foot-8 inches) mounted in the Diesel Generator Room panels, transformers in medium sized enclosures (4 feet-6 inches by 2 feet-6 inches by 2 feet-4 inches), and very large 600 VAC Bus supply transformers that are 8 feet-6 inches by 8 feet-10 inches by 5 feet and weigh 11,800 lbs. The transformers were all well anchored, primarily by expansion anchors. Manufacturers included Solidstate Controls, Square D, and BBC Brown Boveri.

Class 5 horizontal pumps varied from very small pumps such as the 135 lb Diesel Lube Oil Filter Pumps, pumps weighing 2020 lbs, 9580 lbs, 15500 lbs, and the very large Centrifugal Charging Pumps. Pumps were generally very well anchored with cast-in-place J-bolts or bolts with headed studs. All easily passed the ANCHOR analyses.

Class 6 vertical pumps include the RHR Pumps, Containment Spray Pumps, and the very large ESW Pumps. The ESW Pumps were larger than those included in the database. However, seismic adequacy was demonstrated by analysis.

The Class 7 and 8 valves had many manufacturers, depending on their size and function. Documentation normally existed demonstrating that the yokes and bodies were of steel. Several valves were outside the limits of the database. However, all met the caveat restrictions by demonstrating the yoke had acceptable stress when subjected to a 3g load. Motor operators were almost exclusively of the Limitorque variety.

The Class 9, 10, and 12 fans, air handlers, and air compressors were of several different



manufacturers and a variety of sizes. Anchorage types also varied greatly, but in general were very well anchored, (other than outliers 2-HV-AES-1 and 2), and have adequate anchorage margins.

The Class 11 chiller units were mounted on non-seismic vibration isolators, and were outliers because of this issue. The condensers and evaporators were considered as part of the chiller package during the walkdown.

Class 14 distribution panels were normally small wall mounted units that had very high anchorage margins. There were several different manufacturers.

Class 15 battery racks were two step racks. Two of the racks had their anchorage greatly upgraded. Anchorage for all the units met the GIP requirements. Some of the batteries are now greater than 10 years old and will be replaced using the criteria stated in ANSI/IEEE STD 450-1987.

Class 16 battery chargers varied in size from 2 feet-9 inches x 2 feet x 3 feet-4 inches in height, to larger units 6 feet in height. The chargers were normally anchored with at least four 1/2 inch expansion anchors.

The Class 17 Diesel Generators were very large and manufactured by Worthington Industries. Many of the supporting components were separate from the Diesel skid.

Class 18 transmitters were manufactured by Mercoid, Magnetrol International, Foxboro, and Gamma-Metrics. They were normally small (25 lb to 35 lb) and individually supported.

Class 19 temperature sensors were small, well supported, and seismically rugged.

Class 20 control panels and cabinets were either very rugged stand alone panels or part of the Main Control Board. The stand alone panels were typically anchored with expansion bolts. The Main Control Board panels were welded to embeds at the base and braced against the walls of the Control Room.

Class 21 tanks and heat exchangers include the large flat bottom tanks and the horizontal saddle supported heat exchangers that have specific GIP criteria. These are discussed in Section 5 of this report. Other tanks and heat exchangers include large buried horizontal tanks, (Diesel Fuel Oil Storage Tanks), tanks supported on legs, (e.g. Boron Injection Tanks), large vertical exchangers supported at the base and braced at the top, (e.g. RHR Heat Exchangers), and small exchangers to cool oil on pumps.

There are 63 and 58 equipment items identified as Class 21 in Unit 1 and 2 respectively. Of these tanks and heat exchangers there were only 20 where the GIP criteria was applicable. The remaining 101 were evaluated by meeting the intent of the GIP criteria. Anchorage was evaluated using the GIP criteria.

#### **4.6.2 Seismic Capacity Vs. Demand Results**

There were twenty-two equipment items in Unit 1 and 2 combined that were outliers due to the capacity vs. demand issue.

Seismic Capacity vs. Demand was primarily satisfied by use of the Earthquake Experience Bounding Spectrum. As shown in Figure 4-1 there is substantial margin between the 5 percent damped Cook Nuclear Plant Horizontal SSE Ground Response Spectrum and the four California earthquakes that were the basis of the Bounding Spectrum. Figure 4-2 shows the margin between the Cook Nuclear Plant 5 percent damped SSE Ground Response Spectrum and the Bounding Spectrum.

For screening seismic adequacy purposes, two methods are used: 1) Comparison of ground spectra to bounding spectra and 2) Comparison of floor spectra to 1.5 times bounding spectra. Since most equipment items are below 40 feet above grade and could be shown to have a first natural frequency above 8 Hz using the in-situ modal test results in Reference 15, the Cook Nuclear Plant Ground Spectrum vs. Bounding Spectrum comparison could be used. However, it is noted that the major electrical equipment items tested as documented



in Ref. 15 also pass the Capacity vs. Demand requirements by comparing the 1.5 times the Bounding Spectrum to the Cook Nuclear Plant Floor Response Spectrum. Both methods were used to meet the capacity vs. demand requirement.

As indicated in Tables 4-5 and 4-6, there were twenty-two items in Unit 1 and 2 combined that were outliers due to the Capacity vs. Demand issue. These were generally small valves in the upper portions of the Containment Building. They will be resolved by comparing test data of the valves to piping analysis results indicating the seismic demand on the valves at the SSE level. It is worth noting that these valves would easily screen using the Seismic Margins methodology for a 0.3g ZPA earthquake, since that program does not have a 40 foot limitation on use of the ground spectrum.

#### 4.6.3 Equipment Class Description/Caveat Results

Equipment items at Cook Nuclear Plant have configurations typical of equipment of the late 1960's - early 1970's vintage. The Cook Nuclear Plant used the same equipment manufacturers for similar items in Unit 1 and 2. Electrical equipment was from only a few sources. Almost all motor operators were Limitorque. Mechanical equipment including valves were from a wider range of vendors, depending on the equipment size and function. The equipment was quite typical of equipment found in other nuclear facilities of the same vintage, and easily met the description caveats for a given class.

As indicated in Tables 4-5 and 4-6, there were twenty-three equipment items in Unit 1 and 2 combined that had caveat concerns. These were due to two valves that were in contact with a pipe whip restraint (also an interaction issue), two pumps with long unsupported piping, four chillers on non-seismically designed vibration isolators, four electrical panels with essential relays and not bolted to the adjacent panel, four panels with components that were inadequately latched and could slide out, one switchgear with essential relays not bolted to an adjacent cabinet and two because of inadequate anchorage embedment (also an anchorage concern), and four battery racks that had some batteries older than 10 years.

#### 4.6.4 Equipment Anchorage Results

Equipment anchorages at Cook Nuclear Plant were of many different types and included welds to embedded steel, and many types of expansion bolts and cast-in-place J-bolts and headed studs.

Electrical equipment were either bolted with expansion anchor bolts or welded to an embed, or combination of the two. Most of the expansion anchors were determined to be either Phillips or Hilti variety. The applicable anchorage reduction factor for the type of anchorage was taken. When the type could not be determined the 0.6 factor for unknown expansion bolts was taken.

The MCC's, for example, were typically welded to embedments with fillet welds at the base in the rear and expansion bolted or J-bolted in the front. Switchgear were typically welded to embeds with plug welds through holes in the base frame of the unit provided by the manufacturer. Stand alone control panels, bench boards, battery chargers and inverters were typically anchored to the floor with expansion anchor bolts or J-bolts. Distribution panels were typically expansion anchor bolted to the supporting wall or bolted to embedded unistrut. The main control board was both anchored at the base with welds to embeds and braced against the wall with expansion bolts. Mechanical equipment and large tanks were typically anchored with cast-in-place J-bolts or headed studs. The vast majority of the anchorage was covered by the criteria in the GIP. With very few exceptions, the bolts for floor anchored equipment were accessible and were bolt tightness tested. Many of the wall mounted panels could not have their anchorage tightness checked due to inaccessibility.

There were only 17 items that were outliers due to anchorage. These included two pumps where the embedment length could not be determined, four chillers with non-seismically designed vibration isolators, three components where nozzle loads are unknown and need to be included in the anchorage analysis, four small instruments mounted on a common support with a missing bolt at its base, two panels with expansion anchors only in the pad

above the base concrete, and two fans with anchors with inadequate embedment.

#### 4.6.5 Seismic Interaction and Other Issues

During the plant walkdowns, the SRT's identified thirty-eight total interaction concerns in Unit 1 and Unit 2 combined on individual equipment items, and four generic concerns that are being tracked by the SQUG Action Item tracking as discussed in Section 4.6. The SRT's identified no vulnerabilities with regard to the distribution systems and noted that these systems were well supported.

There were 38 equipment items that were identified as interaction outliers in Unit 1 and 2 combined, not encompassed by the generic interaction action items (such as open hooks on overhead lights, brackets for wall mounted fire extinguishers, etc.). The 38 issues identified, included two valves tightly up against a pipe whip restraint, two valves close to a railing that can swing into the valves, three valves with inadequate clearance from a beam or wall, fourteen panels with essential relays not bolted to an adjacent wall or panel, two RTD's that bear directly on grating, one MOV close to a floor grating, one block wall in a non-safety related area, two panels too close to a fire extinguisher on a short hook (also a generic action item), two panels with essential relays with an unsecured shear panel and ladder near by, four panels with essential relays with a pendant light that can interact with the panels (also a generic action item), two switchgear with essential relays not bolted to an adjacent panel, two pumps with an overhead fan on vibration isolators, one tube off a hydraulic controller bearing on a railing, one panel with essential relays with an inadequately secured chain above it, and one heat exchanger with a valve touching a tubing line.

There were three outliers due to other issues. These included one pressure switch with missing hardware, one valve with a missing packing nut, and one valve out of service during the walkdowns that require a walkdown.



#### 4.6.6 Deviations and Commentary on Meeting the Intent of Caveats

No significant or programmatic deviations from the GIP were made while performing the walkdowns and seismic adequacy evaluations at Cook Nuclear Plant for resolution of USI A-46. Very few interpretations were made with respect to the specific wording of the GIP caveats versus the caveat's intent. The commentary for the interpretations of those items meeting the "intent" of the GIP for class of 21 equipment are included in Table 4-7. In general judgments and calculations performed met the caveat requirements as clarified in Appendix B of the GIP. An example of a clarification used includes the 3g load check on yokes of motor operated valves that do not meet the experience based size and operator offset limits in Table B.8-1 of the GIP. Another example is neglecting non-effective anchors or anchorage in the anchorage evaluations. If the remaining anchorage had sufficient strength and stiffness to meet the GIP requirements these items were not considered to be outliers and they were not listed in Table 4-7. These issues are not specifically called out in Table 4-7 since the GIP Appendix B wording and anchorage discussion allows these interpretations. Other equipment (not listed in Table 4-7) met the caveat rules as stated and clarified in the GIP.

#### 4.6.7 SQUG Action Items

During the SQUG project, seismic open issues and other maintenance issues identified during the plant reviews were tracked using the SQUG Action Item Log. Most of these issues were reconciled using the screening criteria in the GIP. Some of the Items were ultimately identified as outliers and are included in Tables 4-5 and 4-6. Other items are covered by the relay and SSEL reports. Table 4-8 includes Class of 21 items that were tracked using this log that were not designated as outliers or as screened equipment items, and required some modification either to the plant or documentation. There were twenty three items listed on this table that fall into this criteria.



#### 4.7 Resolution of Identified Seismic Concerns and SQUG Action Items

The USI A-46 effort at Cook Nuclear Plant included the "optional" recommendation of the SRTs to reconcile the outliers or open issues. Tables 4-5 and 4-6 include the SRT proposed resolution for the outlier issues. These recommendations were normally accepted as indicated in the "Comments" column of these tables. The resolution of the outliers were either completed or are planned to be completed by additional analytical evaluations or minor plant modifications. There are twenty non-outlier issues listed in Table 4-8 that are tracked as SQUG Action Items that require some modification either to the plant or documentation.

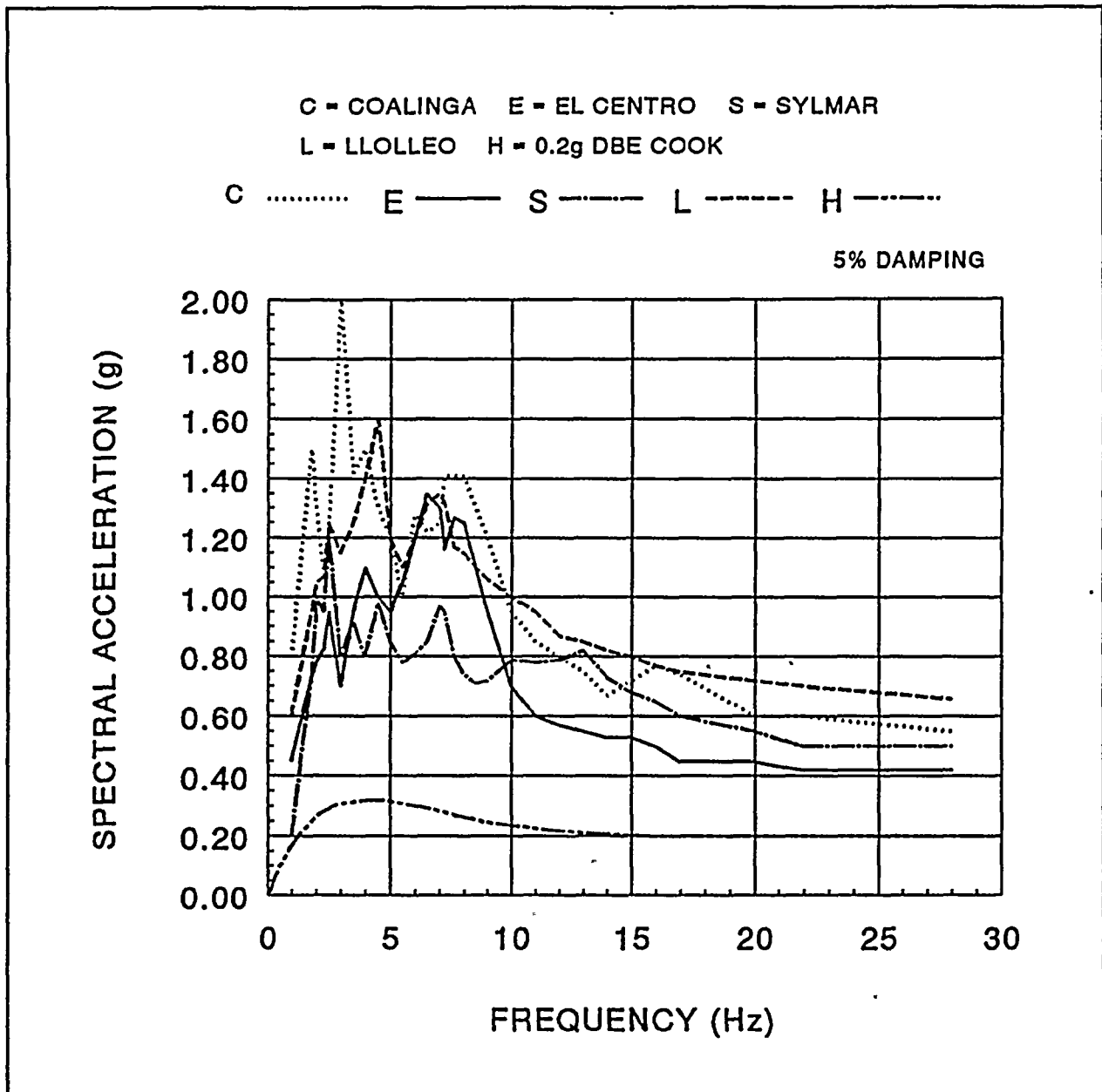


Figure 4-1 Comparison Between 5% Damped Ground Response Spectra of Database Earthquakes and Donald C. Cook Nuclear Plant DBE

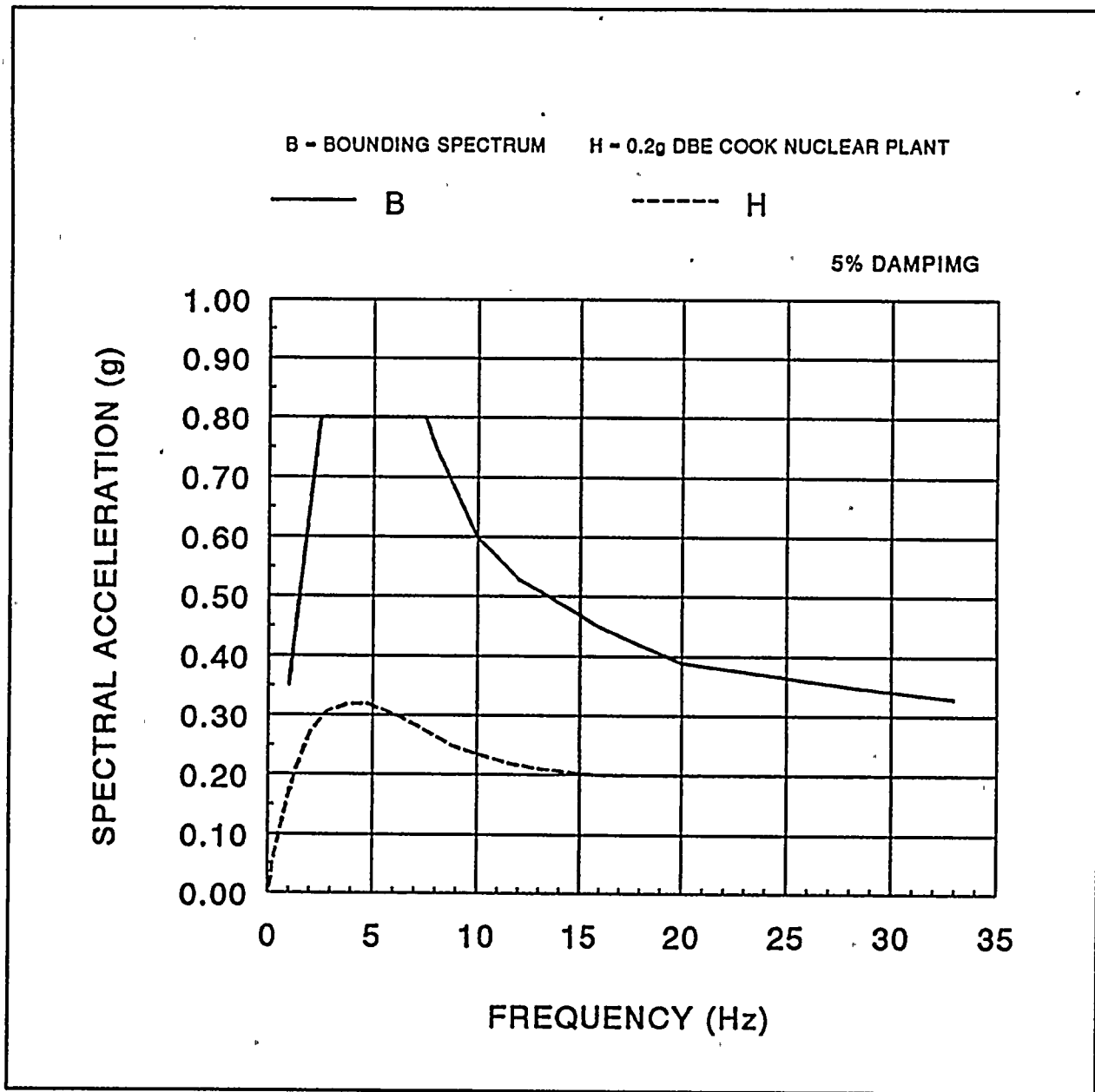


Figure 4-2 Comparison Between 5% Damped Bounding Spectrum to the Donald C. Cook Nuclear Plant DBE

Table 4-1  
Cook Nuclear Plant Unit 1 Equipment Items Containing Essential Relays

| Item | Equipment I.D. | Equipment Description   |
|------|----------------|---|
| 1    | 1-A11          | AUX RELAY PANEL A11   |
| 2    | 1-A13          | AUX RELAY PANEL A13   |
| 3    | 1-AB-N         | 250 VDC VALVE CONTROL CENTER AB-N                                       |
| 4    | 1-ABD-A        | 600 VAC MOTOR CONTROL CENTER ABD-A                                      |
| 5    | 1-ABD-B        | 600 VAC MOTOR CONTROL CENTER ABD-B                                      |
| 6    | 1-ABD-D        | 600 VAC MOTOR CONTROL CENTER ABD-D                                      |
| 7    | 1-ABV-A        | 600 VAC MOTOR CONTROL CENTER ABV-A                                      |
| 8    | 1-ABV-D        | 600 VAC MOTOR CONTROL CENTER ABV-D                                      |
| 9    | 1-ACRA-1       | CONTROL ROOM AIR HANDLING SUBPANEL #1                                   |
| 10   | 1-ACRA-2       | CONTROL ROOM AIR HANDLING SUBPANEL #2                                   |
| 11   | 1-AM-A         | 600 VAC MOTOR CONTROL CENTER AM-A                                       |
| 12   | 1-AM-D         | 600 VAC MOTOR CONTROL CENTER AM-D                                       |
| 13   | 1-ARA-2        | REACTOR PROTECTION TRAIN A AUX RELAY CAB #2                             |
| 14   | 1-AZ-BC        | 600 VAC MOTOR CONTROL CENTER AZ-BC                                      |
| 15   | 1-AZV-A        | 600 VAC MOTOR CONTROL CENTER AZV-A                                      |
| 16   | 1-BC-A         | BATTERY CHARGER A FOR N TRAIN BATTERY                                   |
| 17   | 1-BC-A-PNL     | BATTERY CHARGER A CONTROL BOX   |
| 18   | 1-BC-AB1       | PLANT BATTERY BATT-AB BATTERY CHARGER #1                                |
| 19   | 1-BC-AB2       | PLANT BATTERY BATT-AB BATTERY CHARGER#2                                 |
| 20   | 1-BC-B         | BATTERY CHARGER B FOR N TRAIN BATTERY                                   |
| 21   | 1-BC-B-PNL     | BATTERY CHARGER B CONTROL BOX   |
| 22   | 1-BC-CD1       | PLANT BATTERY BATT-CD BATTERY CHARGER#1                                 |
| 23   | 1-BC-CD2       | PLANT BATTERY BATT-CD BATTERY CHARGER #2                                |
| 24   | 1-CRID-I-INV   | 120 VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEMS CHANNEL I INVERTER |

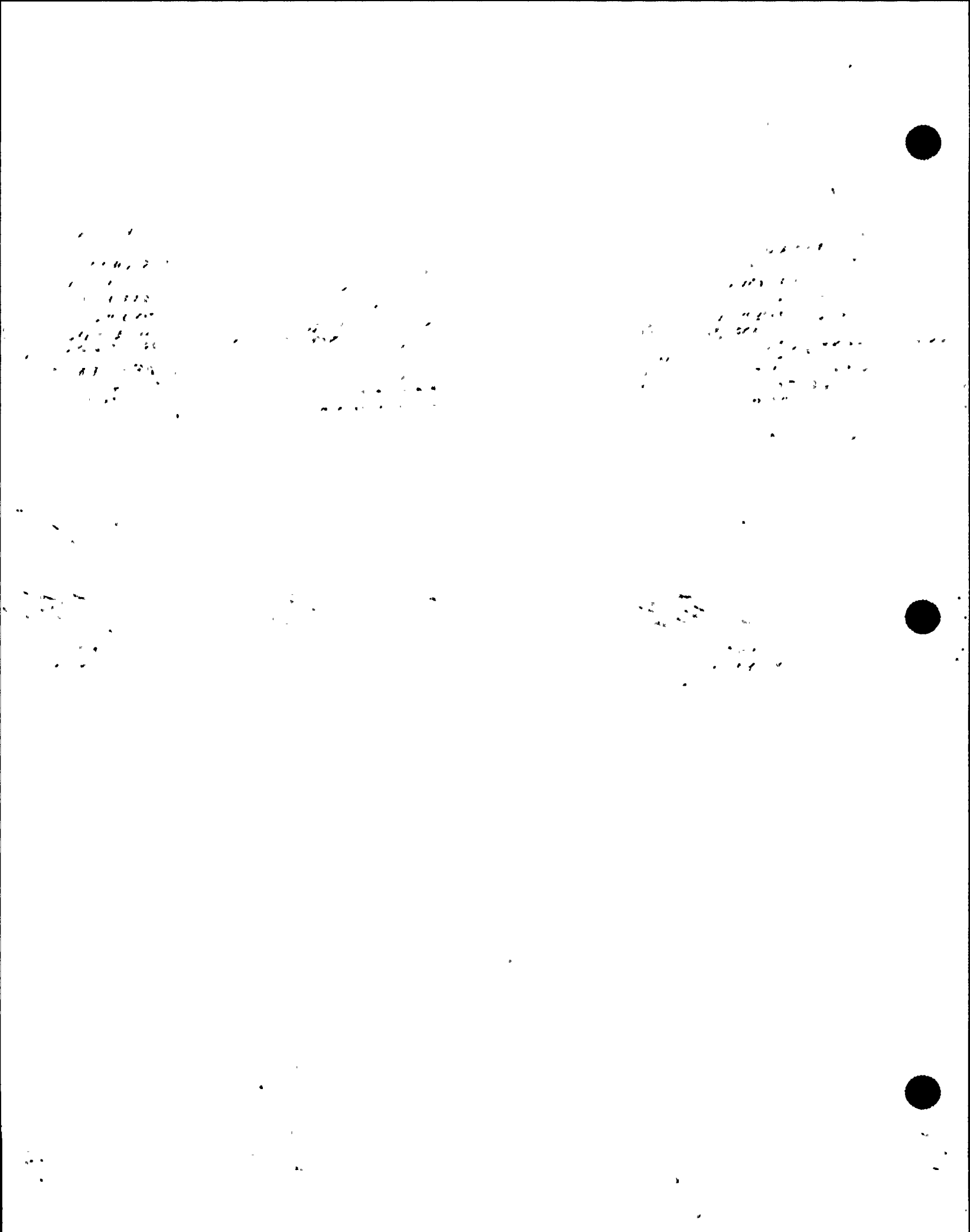


Table 4-1 cont'.

| Item | Equipment I.D. | Equipment Description   |
|------|----------------|---|
| 25   | 1-CRID-11-INV  | 120 VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEMS CHANNEL II INVERTER  |
| 26   | 1-CRID-111-INV | 120 VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEMS CHANNEL III INVERTER |
| 27   | 1-CRID-IV-INV  | 120 VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEMS CHANNEL IV INVERTER  |
| 28   | 1-DGAB         | AB EMERGENCY DIESEL GENERATOR CONTROL SUBPANEL                            |
| 29   | 1-DGAB-INV     | AB EMERGENCY DIESEL GENERATOR INVERTER                                    |
| 30   | 1-DGAB-X       | AB EMERGENCY DIESEL GENERATOR AUXILIARY SUBPANEL                          |
| 31   | 1-DGCD         | CD EMERGENCY DIESEL GENERATOR CONTROL SUBPANEL                            |
| 32   | 1-DGCD-INV     | CD EMERGENCY DIESEL GENERATOR INVERTER                                    |
| 33   | 1-DGCD-X       | CD EMERGENCY DIESEL GENERATOR AUXILIARY SUBPANEL                          |
| 34   | 1-EFR          | EMERGENCY FIRE PANEL INSTRUMENT/RELAY RACK                                |
| 35   | 1-EZC-A        | 600 VAC MOTOR CONTROL CENTER EZC-A  |
| 36   | 1-EZC-B        | 600 VAC MOTOR CONTROL CENTER EZC-B  |
| 37   | 1-EZC-C        | 600 VAC MOTOR CONTROL CENTER EZC-C  |
| 38   | 1-EZC-D        | 600 VAC MOTOR CONTROL CENTER EZC-D  |
| 39   | 1-GR1          | GENERATOR PANEL REAR INSTRUMENT/RELAY RACK #1                             |
| 40   | 1-GR2          | GENERATOR PANEL REAR INSTRUMENT/RELAY RACK #2                             |
| 41   | 1-GRB          | GENERATOR PANEL REAR INSTRUMENT/RELAY RACK B                              |
| 42   | 1-HSD1R        | UNIT 1 HOT SHUTDOWN PANEL REAR RACK                                       |
| 43   | 1-LSI-1        | STEAM GENERATORS #1 AND #4 LOCAL SHUTDOWN STATION                         |



Table 4-1 cont'.

| Item | Equipment I.D. | Equipment Description  |
|------|----------------|--|
| 44   | 1-LSI-2        | STEAM GENERATORS #2 AND #3 LOCAL SHUTDOWN STATION                    |
| 45   | 1-LSI-3        | REACTOR COOLANT SYSTEM CHARGING AND LETDOWN LOCAL SHUTDOWN STATION   |
| 46   | 1-N21-RACK     | NUCLEAR INSTRUMENTATION CHANNEL I LOCAL INSTRUMENT RACK              |
| 47   | 1-N23-RACK     | NUCLEAR INSTRUMENTATION CHANNEL LOCAL INSTRUMENT RACK                |
| 48   | 1-NIS-III      | NUCLEAR INSTRUMENTATION SYSTEM PROTECTION CHANNEL III CONTROL PANEL  |
| 49   | 1-NSR          | NUCLEAR INSTRUMENTATION SYSTEM REAR INSTRUMENT RELAY RACK            |
| 50   | 1-PS-A         | 600 VAC MOTOR CONTROL CENTER PS-A                                    |
| 51   | 1-PS-D         | 600 VAC MOTOR CONTROL CENTER PS-D                                    |
| 52   | 1-RPC-1        | REACTOR PROTECTION CHANNEL I CAB #1, 2, 3, 4                         |
| 53   | 1-RPC-2        | REACTOR PROTECTION CHANNEL II #5, 6, 7                               |
| 54   | 1-RPC-3        | REACTOR PROTECTION CHANNEL III CAB #9, 10, 11                        |
| 55   | 1-RPC-4        | REACTOR PROTECTION CHANNEL IV CAB #12, 13                            |
| 56   | 1-RPS-A        | REACTOR PROTECTION AND SAFEGUARD ACTUATION TRAIN A CABINET           |
| 57   | 1-RPS-B        | REACTOR PROTECTION AND SAFEGUARD ACTUATION TRAIN B CABINET           |
| 58   | 1-RPSX-A       | REACTOR PROTECTION AND SAFEGUARD ACTUATION TRAIN A AUXILIARY CABINET |
| 59   | 1-RPSX-B       | REACTOR PROTECTION AND SAFEGUARD ACTUATION TRAIN B AUXILIARY CABINET |
| 60   | 1-SA           | STATION AUXILIARIES CONTROL PANEL                                    |
| 61   | 1-SR1          | STATION AUXILIARIES REAR INSTRUMENT/RELAY RACK #1                    |
| 62   | 1-SR2          | STATION AUXILIARIES REAR INSTRUMENT/RELAY RACK #2                    |



Table 4-1 cont'.

| Item | Equipment I.D. | Equipment Description  |
|------|----------------|--|
| 63   | 1-SR3          | STATION AUXILIARIES REAR INSTRUMENT/RELAY RACK #3              |
| 64   | 1-SR4          | STATION AUXILIARIES REAR INSTRUMENT/RELAY RACK #4              |
| 65   | 1-SSR          | ENGINEER SAFETY SYSTEM REAR INSTRUMENT/RELAY RACK              |
| 66   | 1-SWR          | NUCLEAR INSTRUMENTATION SOURCE RANGE N21 INSTRUMENT/RELAY RACK |
| 67   | 1-T11A         | 4KV T11A SWITCHGEAR  |
| 68   | 1-T11B         | 4KV T11B SWITCHGEAR  |
| 69   | 1-T11C         | 4KV T11C SWITCHGEAR  |
| 70   | 1-T11D         | 4KV T11D SWITCHGEAR  |
| 71   | 1-TFP          | TURBINE DRIVEN AUX FEEDPUMP SUBPANEL                           |
| 72   | 1-TRB          | TURBINE PANEL REAR INSTRUMENT/RELAY RACK B                     |
| 73   | 1-TRD          | TURBINE PANEL REAR INSTRUMENT/RELAY RACK D                     |
| 74   | 1-TRE          | TURBINE PANEL REAR INSTRUMENT/RELAY RACK E                     |
| 75   | 1-WRR          | CONTROL ROOM WEST INSTRUMENT RELAY RACK                        |

Table 4-2  
Cook Nuclear Plant Unit 2 Equipment Items Containing Essential Relays

| Item | Equipment I.D. | Equipment Description   |
|------|----------------|---|
| 1    | 2-A11          | AUX RELAY PANEL A11   |
| 2    | 2-A13          | AUX RELAY PANEL A13   |
| 3    | 2-AB-N         | 250 VDC VALVE CONTROL CENTER AB-N                                       |
| 4    | 2-ABD-A        | 600 VAC MOTOR CONTROL CENTER ABD-A                                      |
| 5    | 2-ABD-B        | 600 VAC MOTOR CONTROL CENTER ABD-B                                      |
| 6    | 2-ABD-D        | 600 VAC MOTOR CONTROL CENTER ABD-D                                      |
| 7    | 2 ABV-A        | 600 VAC MOTOR CONTROL CENTER ABV-A                                      |
| 8    | 2-ABV-D        | 600 VAC MOTOR CONTROL CENTER ABV-D                                      |
| 9    | 2-ACRA-1       | CONTROL ROOM AIR HANDLING SUBPANEL #1                                   |
| 10   | 2-ACRA-2       | CONTROL ROOM AIR HANDLING SUBPANEL #2                                   |
| 11   | 2-AM-A         | 600 VAC MOTOR CONTROL CENTER AM-A                                       |
| 12   | 2-AM-D         | 600 VAC MOTOR CONTROL CENTER AM-D                                       |
| 13   | 2-ARA-2        | REACTOR PROTECTION TRAIN A AUX RELAY CAB #2                             |
| 14   | 2-AB-A         | 600 VAC MOTOR CONTROL CENTER AB-A                                       |
| 15   | 2-AZV-A        | 600 VAC MOTOR CONTROL CENTER AZV-A                                      |
| 16   | 2-BC-A         | BATTERY CHARGER A FOR N TRAIN BATTERY                                   |
| 17   | 2-BC-A-PNL     | BATTERY CHARGER A CONTROL BOX   |
| 18   | 2-BC-AB1       | PLANT BATTERY BATT-AB BATTERY CHARGER #1                                |
| 19   | 2-BC-AB2       | PLANT BATTERY BATT-AB BATTERY CHARGER #2                                |
| 20   | 2-BC-B         | BATTERY CHARGER B FOR N TRAIN BATTERY                                   |
| 21   | 2-BC-B-PNL     | BATTERY CHARGER B CONTROL BOX   |
| 22   | 2-BC-CD1       | PLANT BATTERY BATT-CD BATTERY CHARGER #1                                |
| 23   | 2-BC-CD2       | PLANT BATTERY BATT-CD BATTERY CHARGER #2                                |
| 24   | 2-CRID-I-INV   | 120 VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CHANNEL I INVERTER  |
| 25   | 2-CRID-II-INV  | 120 VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CHANNEL II INVERTER |

Table 4-2 cont'.

| Item | Equipment I.D. | Equipment Description  |
|------|----------------|--|
| 26   | 2-CRID-III-INV | 120 VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CHANNEL III INVERTER |
| 27   | 2-CRID-IV-INV  | 120 VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CHANNEL IV INVERTER  |
| 28   | 2-DGAB         | AB EMERGENCY DIESEL GENERATOR CONTROL SUBPANEL                           |
| 29   | 2-DGAB-INV     | AB EMERGENCY DIESEL GENERATOR INVERTER                                   |
| 30   | 2-DGAB-X       | AB EMERGENCY DIESEL GENERATOR AUXILIARY SUBPANEL                         |
| 31   | 2-DGCD         | CD EMERGENCY DIESEL GENERATOR CONTROL SUBPANEL                           |
| 32   | 2-DGCD-INV     | CD EMERGENCY DIESEL GENERATOR INVERTER                                   |
| 33   | 2-DGCD-X       | CD EMERGENCY DIESEL GENERATOR AUXILIARY SUBPANEL                         |
| 34   | 2-EFR          | EMERGENCY FIRE PANEL INSTRUMENT/RELAY RACK                               |
| 35   | 2-EZC-A        | 600 VAC MOTOR CONTROL CENTER EZC-A                                       |
| 36   | 2-EZC-B        | 600 VAC MOTOR CONTROL CENTER EZC-B                                       |
| 37   | 2-EZC-C        | 600 VAC MOTOR CONTROL CENTER EZC-C                                       |
| 38   | 2-EZC-D        | 600 VAC MOTOR CONTROL CENTER EZC-D                                       |
| 39   | 2-GR1          | GENERATOR PANEL REAR INSTRUMENT/RELAY RACK #1                            |
| 40   | 2-CR2          | GENERATOR PANEL REAR INSTRUMENT/RELAY RACK #2                            |
| 41   | 2-HSD2R        | UNIT 2 HOT SHUTDOWN PANEL REAR RACK                                      |
| 42   | 2-LSI-1        | STEAM GENERATORS #1 AND #4 LOCAL SHUTDOWN STATION                        |
| 43   | 2-LSI-2        | STEAM GENERATORS #2 AND #3 LOCAL SHUTDOWN STATION                        |
| 44   | 2-LSI-3        | REACTOR COOLANT SYSTEM CHARGING AND LETDOWN LOCAL SHUTDOWN STATION       |
| 45   | 2-N21-RACK     | NUCLEAR INSTRUMENTATION CHANNEL I LOCAL INSTRUMENT RACK                  |

Table 4-2 cont'.

| Item | Equipment I.D. | Equipment Description  |
|------|----------------|--|
| 46   | 2-N23-RACK     | NUCLEAR INSTRUMENTATION CHANNEL III LOCAL INSTRUMENT RACK            |
| 47   | 2-NIS-III      | NUCLEAR INSTRUMENTATION SYSTEM REAR INSTRUMENT/RELAY RACK            |
| 48   | 2-NSR          | NUCLEAR INSTRUMENTATION SYSTEM REAR INSTRUMENT/RELAY RACK            |
| 49   | 2-PS-A         | 600 VAC MOTOR CONTROL CENTER PS-A                                    |
| 50   | 2-PS-D         | 600 VAC MOTOR CONTROL CENTER PS-D                                    |
| 51   | 2-RPC-1        | REACTOR PROTECTION CHANNEL I CAB #1, 2, 3, 4                         |
| 52   | 2-RPC-2        | REACTOR PROTECTION CHANNEL II CAB #5, 6, 7                           |
| 53   | 2-RPC-3        | REACTOR PROTECTION CHANNEL III CAB #9, 10, 11                        |
| 54   | 2-RPC-4        | REACTOR PROTECTION CHANNEL IV CAB. #12, 13                           |
| 55   | 2-RPS-A        | REACTOR PROTECTION AND SAFEGUARD ACTUATION TRAIN A CABINET           |
| 56   | 2-RPS-B        | REACTOR PROTECTION AND SAFEGUARD ACTUATION TRAIN B CABINET           |
| 57   | 2-RPSX-A       | REACTOR PROTECTION AND SAFEGUARD ACTUATION TRAIN A AUXILIARY CABINET |
| 58   | 2-RPSX-B       | REACTOR PROTECTION AND SAFEGUARD ACTUATION TRAIN B AUXILIARY CABINET |
| 59   | 2-SA           | STATION AUXILIARIES CONTROL PANEL                                    |
| 60   | 2-SR1          | STATION AUXILIARIES REAR INSTRUMENT/RELAY RACK #1                    |
| 61   | 2-SR2          | STATION AUXILIARIES REAR INSTRUMENT/RELAY RACK #2                    |
| 62   | 2-SR3          | STATION AUXILIARIES REAR INSTRUMENT/RELAY RACK #3                    |
| 63   | 2-SR4          | STATION AUXILIARIES REAR INSTRUMENT/RELAY RACK #4                    |
| 64   | 2-SSR          | ENGINEER SAFETY SYSTEM REAR INSTRUMENT/RELAY RACK                    |

Table 4-2 cont'.

| Item | Equipment I.D. | Equipment Description   |
|------|----------------|---|
| 65   | 2-SWR          | NUCLEAR INSTRUMENTATION SOURCE RANGE N21<br>INSTRUMENT/RELAY RACK |
| 66   | 2-T21A         | 4 KV T21A SWITCHGEAR  |
| 67   | 2-T21B         | 4 KV T21B SWITCHGEAR  |
| 68   | 2-T21C         | 4 KV T21C SWITCHGEAR  |
| 69   | 2-T21D         | 4 KV T21D SWITCHGEAR  |
| 70   | 2-TFP          | TURBINE DRIVEN AUX FEEDPUMP SUBPANEL                              |
| 71   | 2-TRB          | TURBINE PANEL REAR INSTRUMENT/RELAY RACK B                        |
| 72   | 2-TRD          | TURBINE PANEL REAR INSTRUMENT/RELAY RACK D                        |
| 73   | 2-TRE          | TURBINE PANEL REAR INSTRUMENT/RELAY RACK E                        |
| 74   | 2-WRR          | CONTROL ROOM WEST INSTRUMENT RELAY RACK                           |

Table 4-3  
Cook Nuclear Plant Unit 1 Breakdown of Class of 21  
Equipment Items Requiring a Seismic Walkdown

| Equipment Class                                | Number | Equipment Class  | Number |
|--|--------|--|--------|
| 0. Other (Miscellaneous Equipment Items)       | 50     | 11. Chillers   | 6      |
| 1. Motor Control Centers                       | 19     | 12. Air Compressors  | 2      |
| 2. Low Voltage Switchgear                      | 65     | 13. Motor-Generators   | 0      |
| 3. Medium Voltage Switchgear                   | 34     | 14. Distribution Panels  | 35     |
| 4. Transformers                                | 12     | 15. Batteries on Racks   | 3      |
| 5. Horizontal Pumps                            | 32     | 16. Battery Chargers & Inverters                                       | 12     |
| 6. Vertical Pumps                              | 6      | 17. Engine-Generators  | 2      |
| 7. Fluid-Operated Valves (including SRVs)      | 194    | 18. Instruments on Racks (Including individually mounted transmitters) | 73     |
| 8. Motor-Operated and Solenoid Operated Valves | 135    | 19. Temperature Sensors  | 34     |
| 9. Fans  | 36     | 20. Instrumentation and Control Panels and Cabinets                    | 84     |
| 10. Air Handlers                               | 4      | 21. Tanks and Heat Exchangers  | 63     |



Table 4-4  
Cook Nuclear Plant Unit 2 Breakdown of Class of 21  
Equipment Items Requiring a Seismic Walkdown

| Equipment Class                                | Number | Equipment Class  | Number |
|--|--------|--|--------|
| 0. Other (Miscellaneous Equipment Items)       | 51     | 11. Chillers   | 6      |
| 1. Motor Control Centers                       | 18     | 12. Air Compressors  | 2      |
| 2. Low Voltage Switchgear                      | 55     | 13. Motor-Generators   | 0      |
| 3. Medium Voltage Switchgear                   | 34     | 14. Distribution Panels  | 35     |
| 4. Transformers                                | 12     | 15. Batteries on Racks   | 3      |
| 5. Horizontal Pumps                            | 31     | 16. Battery Chargers & Inverters                                       | 12     |
| 6. Vertical Pumps                              | 6      | 17. Engine-Generators  | 2      |
| 7. Fluid-Operated Valves (including SRVs)      | 193    | 18. Instruments on Racks (Including individually mounted transmitters) | 72     |
| 8. Motor-Operated and Solenoid Operated Valves | 135    | 19. Temperature Sensors  | 33     |
| 9. Fans  | 33     | 20. Instrumentation and Control Panels and Cabinets                    | 82     |
| 10. Air Handlers                               | 4      | 21. Tanks and Heat Exchangers  | 58     |



**Table 4-5**  
**Cook Nuclear Plant Unit 1 Outliers – for Class of 21 Equipment**  
**Reasons, SRT Proposed Resolution, Comments**

|   | ID        | ISSUES                         | REASONS   | SRT PROPOSED RESOLUTION  | COMMENTS   |
|---|-----------|--------------------------------|---|--|------------|
| 1 | 1-DCR-310 | Caveats<br>Seismic Interaction | Diaphragm of the valve tightly up against a pipe whip restraint. Load on the operator is like a cold spring on the piping system. SRT examined the valve when piping was in the hot condition, it appears when the pipe is cold the condition could get worse. The valve Bonnet connects a circular tube member at the bottom of the valve 1.6 inch in outside diameter. This is the weak link in the valve for transferring the seismic load on the operator (not the yoke). | Recommend action to get adequate clearance for the valve diaphragm from the pipe whip support.   | Note No. 3 |
| 2 | 1-DCR-320 | Caveats<br>Seismic Interaction | The diaphragm of valve tightly up against a pipe whip restraint. Load on the operator is a cold spring on the piping system. SRT examined the valve when piping was in the hot condition, it appears when the pipe is cold the condition could get worse. The valve bonnet connects a circular tube member at the bottom of the valve 1.6 inch in outside diameter. This is the week link in the valve for transferring the seismic load on the operator (not the yoke).      | Recommend action to get adequate clearance for the valve diaphragm from the pipe whip support.   | Note No. 3 |
| 3 | 1-MMO-220 | Seismic Interaction            | Adjacent railing can rotate and swing into the valve operator.  | Move the railing at least 4 inches from the operator.  | Note No. 2 |
| 4 | 1-MMO-230 | Seismic Interaction            | Adjacent railing can rotate and swing into the valve operator.  | Move the railing at least 4 inches from the operator.  | Note No. 2 |
| 5 | 1-DRV-407 | Seismic Interaction            | The valve has less than 1 inch clearance to adjacent structural steel beam and the SRT can easily push the valve so it makes contact with the steel beam.   | Restrain pipe at valve from the beam.  | Note No. 1 |
| 6 | 1-PP-46-1 | Anchorage                      | Only one bolt is known to have sufficient embedment (identified as Anchor A in the Anchorage Inspection)  | Testing of Bolts C and D (inaccessible due to insulation) to show adequate embedment for at least one of these bolts would resolve this issue. | Note No. 2 |



|    | ID         | ISSUES                      | REASONS  | SRT PROPOSED RESOLUTION   | COMMENTS   |
|----|------------|-----------------------------|--|---|------------|
| 7  | 12-PP-31N  | Caveats Anchorage           | Must check inlet and outlet pipe nozzle loads – piping is laterally unrestrained. Pump is classed an outlier pending definition of piping nozzle loads.            | Define Inlet and outlet piping loads for input to ANCHOR evaluation. Rerun ANCHOR evaluation to determine adequacy with piping nozzle loads included. | Note No. 4 |
| 8  | 1-HV-ACR-1 | Caveats Anchorage           | Vibration isolators have no detail from manufacturer. SRT did not observe any restraint for seismic loads and therefore have designated the chiller as an outlier. | Design and install a bumper system around the vibration isolation system that is adequate for seismic loads.  | Note No. 1 |
| 9  | 1-HV-ACR-2 | Caveats Anchorage           | Vibration isolators have no detail from manufacturer. SRT did not observe any restraint for seismic loads and therefore have designated the chiller as an outlier. | Design and install a bumper system around the vibration isolation system that is adequate for seismic loads.  | Note No. 1 |
| 10 | 1-RPC-III  | Seismic Interaction         | Cabinet with essential relays is right up against a wall of the Control Room and not bolted to it.   | Bolt the cabinet at the top to the adjacent wall.   | Note No. 1 |
| 11 | 1-RPC-IV   | Caveats Seismic Interaction | Cabinet is right next to Cabinet 1-RPST-A, and is not bolted to it. There is also a 10 lb duct cover above the unit which could fall on it.                        | Bolt the cabinet to the adjacent cabinet 1-RPST-A. Secure or remove the duct cover above.   | Note No. 1 |
| 12 | 1-NTR-230  | Seismic Interaction         | Platform grating support beam bears directly on RTD. There is no flexibility.  | Bend RTD away from steel.   | Note No. 3 |
| 13 | 1-NTR-240  | Seismic Interaction         | Platform grating bears directly on RTD, and there is no flexibility.   | Bend RTD away from steel.   | Note No. 3 |
| 14 | 1-SV-45C   | Capacity vs. Demand         | Capacity Spectrum does not envelope Demand Spectrum below about 2.5 Hz and above 12 Hz. There are no GERS for this equipment type.                                 | Review piping analyses and seismic qualification test data to demonstrate that capacity exceeds demand.   | Note No. 4 |
| 15 | 1-SV-45A   | Capacity vs. Demand         | Capacity Spectrum does not envelope Demand Spectrum below about 2.5 Hz and above 12 Hz. There are no GERS for this equipment type.                                 | Review piping analyses and seismic qualification test data to demonstrate that capacity exceeds demand.   | Note No. 4 |
| 16 | 1-SV-45B   | Capacity vs. Demand         | Capacity Spectrum does not envelope Demand Spectrum below about 2.5 Hz and above 12 Hz. There are no GERS for this equipment type.                                 | Review piping analyses and seismic qualification test data to demonstrate that capacity exceeds demand.   | Note No. 4 |

|    | ID        | ISSUES                           | REASONS   | SRT PROPOSED RESOLUTION  | COMMENTS   |
|----|-----------|----------------------------------|---|--|--|
| 17 | 1-NRV-151 | Capacity vs. Demand              | 1.5 x Bounding Spectrum does not envelope the floor response spectrum below about 2.5 Hz and above 12 Hz. Using a maximum amplification factor of 7 for the floor spectrum, exceeds the FOV-GERS at all frequencies.  | Determine valve response level from piping analysis, and compare to FOV-GERS, or determine capacity based on test data and compare to appropriate demand.  | Note No. 4   |
| 18 | 1-NRV-152 | Capacity vs. Demand              | 1.5 x Bounding Spectrum does not envelope the floor response spectrum below about 2.5 Hz and above 12 Hz. Using a maximum amplification factor of 7 for the floor spectrum, exceeds the FOV-GERS at all frequencies.  | Determine valve response level from piping analysis, and compare to FOV-GERS, or determine capacity based on test data and compare to appropriate demand.  | Note No. 4   |
| 19 | 1-NRV-153 | Capacity vs. Demand              | 1.5 x Bounding Spectrum does not envelope the floor response spectrum below about 2.5 Hz and above 12 Hz. Using a maximum amplification factor of 7 for the floor spectrum, exceeds the FOV-GERS at all frequencies.  | Determine valve response level from piping analysis, and compare to FOV-GERS, or determine capacity based on test data and compare to appropriate demand.  | Note No. 4   |
| 20 | 1-MRV-240 | Seismic Interaction              | Lifting eye-bolt on large horizontal motor drive is in close proximity of grating floor.  | Notch curbing (kick plate) to preclude any seismic banging.  | Note No. 3   |
| 21 | 12-QC-3   | Anchorage<br>Seismic Interaction | <p>1) Overhead crane trolley needs to be parked not directly over cubicle—crane support also may not be seismically adequate, but OK if trolley is not parked over filter room.</p> <p>2) Blockwall enclosure does not appear seismically qualified.</p> <p>3) Anchorage capacity evaluation is required including nozzle loads, due to attached piping being laterally unrestrained. For one 3 inch line, approximately 40 foot length is unrestrained, and for the other, approximately 20 foot length is unrestrained.</p> | <p>1) Trolley should be parked and tied in a position which is not over the blockwall cubicle for 12-QC-3.</p> <p>2) For Blockwall enclosure, determined if these walls were included in the IE 80-11 program, since this is a non-safety related item.</p> <p>3) Piping needs to be evaluated to provide nozzle loads to QC-12-3 for evaluation of the anchorage.</p> | <p>1. Note No. 2</p> <p>2. Note No. 4</p> <p>3. Note No. 4</p> |



|    | ID        | ISSUES                 | REASONS  | SRT PROPOSED<br>RESOLUTION  | COMMENTS   |
|----|-----------|------------------------|--|---|------------|
| 22 | 1-NMO-151 | Capacity vs.<br>Demand | 1.5 x Bounding Spectrum does not envelope the Realistic Median Centered Floor Response Spectra at frequencies below about 2.5 Hz and above about 12 Hz. Similarly, assuming an amplification factor of 7 for in-line equipment applied to the floor response spectra, the MOV-GERS do not envelope below about 2.5 Hz and above 33 Hz. | Review piping analysis to determine actual response level for this valve and compare to GERS. | Note No. 4 |
| 23 | 1-NMO-152 | Capacity vs.<br>Demand | 1.5 x Bounding Spectrum does not envelope the Realistic Median Centered Floor Response Spectra at frequencies below about 2.5 Hz and above about 12 Hz. Similarly, assuming an amplification factor of 7 for in-line equipment applied to the floor response spectra, the MOV-GERS do not envelope below about 2.5 Hz and above 33 Hz. | Review piping analysis to determine actual response level for this valve and compare to GERS. | Note No. 4 |
| 24 | 1-NMO-153 | Capacity vs.<br>Demand | 1.5 x Bounding Spectrum does not envelope the Realistic Median Centered Floor Response Spectra at frequencies below about 2.5 Hz and above about 12 Hz. Similarly, assuming an amplification factor of 7 for in-line equipment applied to the floor response spectra, the MOV-GERS do not envelope below about 2.5 Hz and above 33 Hz. | Review piping analysis to determine actual response level for this valve and compare to GERS. | Note No. 4 |
| 25 | 1-NSO-61  | Capacity vs.<br>Demand | 1.5 x Bounding Spectrum does not envelope the floor response spectra below about 2.5 Hz and above about 12 Hz. Also, the SOV-GERS do not envelope the floor response spectra using an amplification factor of 7 below about 4 Hz and above about 20 Hz.  | Determine the response of the valve from analysis of the piping and compare to SOV-GERS.      | Note No. 4 |
| 26 | 1-NSO-62  | Capacity vs.<br>Demand | 1.5 x Bounding Spectrum does not envelope the floor response spectra below about 2.5 Hz and above about 12 Hz. Also, the SOV-GERS do not envelope the floor response spectra using an amplification factor of 7 below about 4 Hz and above about 20 Hz.  | Determine the response of the valve from analysis of the piping and compare to SOV-GERS.      | Note No. 4 |

|    | ID       | ISSUES                 | REASONS  | SRT PROPOSED<br>RESOLUTION  | COMMENTS                                  |
|----|----------|------------------------|--|---|---|
| 27 | 1-NSO-63 | Capacity vs.<br>Demand | 1.5 x Bounding Spectrum does not envelope the floor response spectra below about 2.5 Hz and above about 12 Hz. Also, the SOV-GERS do not envelope the floor response spectra using an amplification factor of 7 below about 4 Hz and above about 20 Hz.  | Determine the response of the valve from analysis of the piping and compare to SOV-GERS.  | Note No. 4                                |
| 28 | 1-NSO-64 | Capacity vs.<br>Demand | 1.5 x Bounding Spectrum does not envelope the floor response spectra below about 2.5 Hz and above about 12 Hz. Also, the SOV-GERS do not envelope the floor response spectra using an amplification factor of 7 below about 4 Hz and above about 20 Hz.  | Determine the response of the valve from analysis of the piping and compare to SOV-GERS.  | Note No. 4                                |
| 29 | 1-VDAB-1 | Seismic Interaction    | There is a fire extinguisher hung on the side of the rack on a very short hook. The SRT judged that the fire extinguisher could fall off the hook and possibly rupture.  | Support the fire extinguisher more securely.  | Note No. 2                                |
| 30 | 1-VDAB-2 | Seismic Interaction    | There is a fire extinguisher hung on the side of the rack on a very short hook. The SRT judges that the fire extinguisher could fall off the hook and possibly rupture.  | Support the fire extinguisher more securely.  | Note No. 2                                |
| 31 | 1-A11    | Seismic Interaction    | <p>1. The unsecured shear panel between cabinets 1-A9 and 1-A10 can lift and then strike the embedded steel, possibly causing relay chatter. Resolve by welding to embedded steel.</p> <p>2. There are 2 step ladders chained to the wall in front of the cabinet. While they are currently chained tight enough not to hit the cabinet, they don't miss by much (1 inch - 2 inch) and can easily be rechained so that they would hit.</p> | <p>1. Weld the back (west edge) of the base of the shear panel to existing embedded steel.</p> <p>2. Remove or more tightly secure the ladders.</p> | <p>1. Note No. 3</p> <p>2. Note No. 2</p> |

|    | ID        | ISSUES              | REASONS   | SRT PROPOSED<br>RESOLUTION  | COMMENTS                                  |
|----|-----------|---------------------|---|---|---|
| 32 | 1-A13     | Seismic Interaction | <p>1. The unsecured shear panel between cabinets 1-A9 and 1-A10 can lift and then strike the embedded steel, possibly causing relay chatter. Resolve by welding to embedded steel.</p> <p>2. There are 2 step ladders chained to the wall in front of the cabinet. While they are currently chained tight enough not to hit the cabinet, they don't miss by much (1 inch- 2 inch) and can easily be rechained so that they would hit.</p> | <p>1. Weld the back (west edge) of the base of the shear panel to existing embedded steel.</p> <p>2. Removed or more tightly secure the ladders.</p>  | <p>1. Note No. 3</p> <p>2. Note No. 2</p> |
| 33 | 1-RPSX-A  | Seismic Interaction | 1-RPSX-A contains essential relays. It is bolted to the adjacent 1-RPS-A, but is not bolted to the adjacent 1-RPST-A.   | Bolt 1-RPSX-A to 1-RPST-A.  | Note No. 1                                |
| 34 | 1-RPSX-B  | Seismic Interaction | 1-RPSX-B contains essential relays. It is bolted to the adjacent 1-RPS-B, but is not bolted to the adjacent 1-RPST-B.   | Bolt 1-RPSX-B to 1-RPST-B.  | Note No. 1                                |
| 35 | 1-SG      | Caveats             | Recorders 1-MR-17,18,19,20 can slide out. They latch once they slide out almost their entire length, at that point the SRT judges that they are vulnerable to vertical forces.  | Secure the recorders so that they cannot slide out more than about half their length without being unlatched in some manner.  | Note No. 1                                |
| 36 | 1-LLS-120 | Anchorage           | The four instruments 1-LLS-120, 121, 122 and 123 are mounted on a stanchion bolted to the floor by three 1/2 inch wedge couplings instead of four. This item was designated as an outlier because one of the four bolts was not present.  | Due to the light weight of switches (natural frequency 10 Hz) the SRT judge that remaining three bolts were adequate and that no operability concern existed (maximum weight of total assembly supported is 150 lbs) SQUG Action Item # 41 was written so this missing anchor would be installed. | Note No. 2                                |



|    | ID        | ISSUES    | REASONS  | SRT PROPOSED<br>RESOLUTION  | COMMENTS   |
|----|-----------|-----------|--|---|------------|
| 37 | 1-LLS-121 | Anchorage | The four instruments 1-LLS-120, 121, 122 and 123 are mounted on a stanchion bolted to the floor by three 1/2 inch wedge couplings instead of four. This item was designated as an outlier because one of the four bolts was not present. | Due to the light weight of switches (natural frequency 10 Hz) the SRT judge that remaining three bolts were adequate and that no operability concern existed (maximum weight of total assembly supported is 150 lbs) SQUG Action Item # 41 was written so this missing anchor would be installed. | Note No. 2 |
| 38 | 1-LLS-122 | Anchorage | The four instruments 1-LLS-120, 121, 122 and 123 are mounted on a stanchion bolted to the floor by three 1/2 inch wedge couplings instead of four. This item was designated as an outlier because one of the four bolts was not present. | Due to the light weight of switches (natural frequency 10 Hz) the SRT judge that remaining three bolts were adequate and that no operability concern existed (maximum weight of total assembly supported is 150 lbs) SQUG Action Item # 41 was written so this missing anchor would be installed. | Note No. 2 |
| 39 | 1-LLS-123 | Anchorage | The four instruments 1-LLS-120, 121, 122 and 123 are mounted on a stanchion bolted to floor by three 1/2 inch wedge couplings instead of four. This item was designated as an outlier because one of the four bolts was not present.     | Due to the light weight of switches (natural frequency 10 Hz) the SRT judge that remaining three bolts were adequate and that no operability concern existed (maximum weight of total assembly supported is 150 lbs) SQUG Action Item # 41 was written so this missing anchor would be installed. | Note No. 2 |
| 40 | 1-CPS-314 | Other     | Screws attaching the component to the mounting plate (one screw is missing the nut, the second screw is missing and the third one is loose).   | The missing hardware should be installed and loose hardware tightened.  | Note No. 3 |

|    | ID        | ISSUES                           | REASONS   | SRT PROPOSED RESOLUTION  | COMMENTS                     |
|----|-----------|----------------------------------|---|--|------------------------------|
| 41 | 1-BA      | Caveats                          | Taylor Strip Chart Recorder on 1-BA can slide out, it is not secured.   | Secure the recorder so that it cannot slide out without being unlatched.   | Note No. 1                   |
| 42 | 1-RPS-A   | Caveats<br>Seismic Interaction   | 1-RPS-A contains essential relays. On one side 1-RPS-A is bolted to the adjacent 1-RPSX-A, but on the other side it is hard up against (but not attached) a reinforced concrete (r/c) wall. Also inside the same assembly 1-RPST-A and 1-RPC are not bolted together. | Anchor 1-RPS-A to the adjacent r/c wall, and attach 1-RPST-A to 1-RPC.   | Note No. 1                   |
| 43 | 1-RPS-B   | Caveats                          | 1-RPSX-B which is in the same assembly as 1-RPS-B is not bolted together to 1-RPST-B.   | Attach 1-RPSX-B to 1-RPST-B.   | Note No. 1                   |
| 44 | 1-BATT-AB | Caveats                          | Batteries just over 10 years old.   | Evaluate the batteries to determine that they are seismically adequate since they are greater than 10 years old. | This item has been resolved. |
| 45 | 1-BATT-CD | Caveats                          | Batteries just over 10 years old.   | Evaluate the batteries to determine that they are seismically adequate since they are greater than 10 years old. | This item has been resolved. |
| 46 | 1-DGCD    | Seismic Interaction              | Overhead pendant florescent light is free to swing into the panel. Since the panel contains essential relays (HFA, etc.) the panel is an outlier, although the impact force on the panel will be minor.   | Restrain the light so it will not impact the panel.  | Note No. 1                   |
| 47 | 1-TFP     | Seismic Interaction<br>Anchorage | The panel is right up against a wall and contains essential relays. The panel can rattle against the wall, which violates Interaction Caveat #2. The anchorage is only in the pad above the base concrete.  | The panel should be bolted to the wall at the top. This will resolve both outlier issues.                        | Note No. 1                   |

Notes Applicable to Comments

- No. 1. This item will be implemented under a design change.
- No. 2. This item will be implemented by plant maintenance under a job order.
- No. 3. This item has been corrected and/or resolved.
- No. 4. This item will be resolved by further evaluation and/or analysis.



**Table 4-6**  
**Cook Nuclear Plant Unit 2 Outliers – for Class of 21 Equipment**  
**Reason, SRT Proposed Resolution, Comments**

|   | ID           | ISSUES                         | REASONS   | SRT PROPOSED RESOLUTION   | COMMENTS                           |
|---|--------------|--------------------------------|---|---|------------------------------------|
| 1 | 2-MRV-154    | Other                          | At the time of the walkdown (during a plant outage) one of the packing nuts on this valve was missing.  | Replace the missing packing nut.  | Note No. 3                         |
| 2 | 2-DGAB-X     | Seismic Interaction            | Interaction issues are chain which is restrained but could still swing into cabinet and overhead pendant lights.  | Restrain the chain and secure overhead light.   | Note No. 2                         |
| 3 | 2-DGCD-X     | Seismic Interaction            | Interaction issues are:<br>1. Chain which is restrained but could still swing into cabinet<br>2. Overhead pendant lights hung on open hooks.  | Secure the chain and overhead light.  | 1. Note No. 1<br><br>2. Note No. 2 |
| 4 | 2-T21A       | Caveats<br>Seismic Interaction | Cabinet sections 2-T21A8 and 2-T21A9 are not bolted together in the front. Switchgear assembly is right next to Cabinet 2-ABLV-B and not bolted together.                             | Bolt Sections 2-T21A8 and 2-T21A9 together and bolt the assembly and 2-ABLV-B together.   | Note No. 1                         |
| 5 | 2-T21D       | Seismic Interaction            | Switchgear assembly is right next to the 2-ABLV-A relay panel and not bolted together.  | Bolt the assembly and 2-ABLV-A together.  | Note No. 1                         |
| 6 | 2-QT-106-AB1 | Seismic Interaction            | If the vibration isolators on the non-safety exhaust fan, above the pumps, fail, the exhaust fan could fall on the transfer pumps. This is an interaction issue and needs evaluation. | The SRT of George Thomas and Satyan Sharma were able to inspect the fan in great detail due to the erection of scaffolding. This inspection resulted in the conclusion that although the fan could jump off the vibration isolators during an earthquake the supporting structure (base frame, rod hangers, etc.) would preclude it from falling. The fan was large enough that it cannot slip through the support structure. | Note No. 3                         |



|    | ID           | ISSUES                 | REASONS  | SRT PROPOSED<br>RESOLUTION  | COMMENTS   |
|----|--------------|------------------------|--|---|------------|
| 7  | 12-PP-31S    | Caveats<br>Anchorage   | Should check inlet and outlet pipe nozzle loads – piping is laterally unrestrained. Pump is classified as an outlier pending definition of piping nozzle loads.  | Define piping nozzle loads for input to ANCHOR evaluation. Rerun Anchor evaluation including piping nozzle loads.   | Note No. 4 |
| 8  | 2-AFWX       | Seismic<br>Interaction | Overhead pendant lights hung on open hook.   | Secure the light.   | Note No. 1 |
| 9  | 2-QT-106-AB2 | Seismic<br>Interaction | If the vibration isolators on the non-safety exhaust fan, above the pumps, fail, the exhaust fan could fall on the transfer pumps. This is an interaction issue and needs evaluation.  | The SRT of George Thomas and Satyan Sharma were able to inspect the fan in great detail due to the erection of scaffolding. This inspection resulted in the conclusion that although the fan could jump off the vibration isolators during an earthquake the supporting structure (base frame, rod hangers, etc.) would preclude it from falling. The fan was large enough that it cannot slip through the support structure. | Note No. 3 |
| 10 | 2-HV-ACR-1   | Caveats<br>Anchorage   | Vibration isolators have no detail from manufacturer. SRT did not observe any restraint for seismic loads and therefore have designated the chiller as an outlier.   | Design and install a bumper system around the vibration isolation system that is adequate for seismic loads.  | Note No. 1 |
| 11 | 2-HV-ACR-2   | Caveats<br>Anchorage   | Vibration isolators have no detail from manufacturer. SRT did not observe any restraint for seismic loads, and therefore have designated the chiller as an outlier.  | Design and install a bumper system around the vibration isolation system that is adequate for seismic loads.  | Note No. 1 |
| 12 | 2-HV-AES-1   | Caveats<br>Anchorage   | Embedments for the 5/8 inch non-shell anchors are at or below some of the minimum embedments of the GIP from several anchorage types. This equipment item is being designated as an outlier because of the embedment issue. The bounding calculation for 1-HV-AES-1 indicated a relatively small margin of 1.18. | Perform more investigation with regard to the type of bolt, and its capacity for the installed embedment.   | Note No. 4 |

|    | ID         | ISSUES                              | REASONS  | SRT PROPOSED<br>RESOLUTION  | COMMENTS   |
|----|------------|-------------------------------------|--|---|------------|
| 13 | 2-HV-AES-2 | Caveats<br>Anchorage                | Bolt embedments for 5/8 inch expansion anchors are very short (at or below some of the minimum embedments for several anchor types in the GIP). This equipment item is being designated as an outlier due to the embedment issue. The bounding calculation for 1-HV-AES-1 indicated a relatively small margin of 1.18. | Perform more investigation with regard to the type of bolt, and its capacity for the installed embedments.            | Note No. 4 |
| 14 | 2-TFP      | Seismic<br>Interaction<br>Anchorage | Some Debris has worked its way into the gap between the panel and the wall. It is postulated that the panel can rattle against this debris during a seismic event, which violates Interaction Caveat #2. The anchorage is only in the pad above the base concrete.   | The debris be removed between the wall and panel and that the panel be attached to the wall at the top.               | Note No. 1 |
| 15 | 2-RPC-I    | Seismic<br>Interaction              | 2-RCP-I is too close to the wall and can potentially pound against it during an earthquake. Also, fire extinguisher 633A-32-CO2 which is on the concrete wall about 25 inch from 2-RPC-I, can fall off its small hook and impact 2-RCP-I, and discharge.   | Bolt the cabinet at the top to the adjacent wall. Also, either move the fire extinguisher or put it on a longer hook. | Note No. 1 |
| 16 | 2-RPC-II   | Seismic<br>Interaction              | 2-RCP-II is too close to the wall and can potentially pound against it during an earthquake.   | Bolt the cabinet at the top to the adjacent wall.   | Note No. 1 |
| 17 | 2-RPC-III  | Seismic<br>Interaction              | 2-RCP-III is too close to the wall and can potentially pound against it during an earthquake.  | Bolt the cabinet at the top to the adjacent wall.   | Note No. 1 |
| 18 | 2-RPC-IV   | Caveats                             | Cabinet 2-RCP-IV is right next to Cabinet 2-RPST-A, and is not bolted to it. Cabinet 2-RCP-IV contains essential relays.   | Bolt cabinet 2-RCP-IV to the adjacent Cabinet 2-RPST-A.   | Note No. 1 |
| 19 | 2-MRV-230  | Seismic<br>Interaction              | Tube off of hydraulic controller on piston is bearing on railing. May lack sufficient flexibility.   | Relocate Tube.  | Note No. 2 |

|    | ID        | ISSUES                              | REASONS   | SRT PROPOSED<br>RESOLUTION   | COMMENTS  |
|----|-----------|-------------------------------------|---|--|---|
| 20 | 12-HE-25A | Anchorage<br>Seismic<br>Interaction | <p>1) Component is supported off shell of much larger (about 4.0 feet) diameter tank 12-TK-148. Information required to evaluate this support condition is presently unavailable.</p> <p>2) Inlet and outlet piping to condenser have large heavy central valves with no lateral restraint. Nozzle loads are presently unavailable.</p> <p>3) RRV-248 valve is touching 3/4 inch to 5/8 inch tubing line coming from the bottom of the tank supporting condenser. Should have 1 inch gap.</p> | <p>1) Need to get physical data on 12-TK-148 tank to determine anchorage adequacy.</p> <p>2) Obtain nozzle loads to use in evaluating condenser anchorage.</p> <p>3) Relocate valve to provide sufficient clearance.</p> | Note No. 4<br>(Currently under evaluation; to be isolated from the flow path) |
| 21 | 2-SV-45A  | Capacity vs.<br>Demand              | 1.5 x Bounding Spectrum does not envelope the Floor Response Spectrum below about 2.5 Hz and above about 12 Hz. There are no GERS for relief valves.  | Review piping analyses and seismic qualification test data to demonstrate capacity exceeds demand.   | Note No. 4  |
| 22 | 2-SV-45B  | Capacity vs.<br>Demand              | 1.5 x Bounding Spectrum does not envelope the Floor Response Spectrum below about 2.5 Hz and above about 12 Hz. There are no GERS for relief valves.  | Review piping analyses and seismic qualification test data to demonstrate capacity exceeds demand.   | Note No. 4  |
| 23 | 2-SV-45C  | Capacity vs.<br>Demand              | 1.5 x Bounding Spectrum does not envelope the Floor Response Spectrum below about 2.5 Hz and above about 12 Hz. There are no GERS for relief valves.  | Review piping analyses and seismic qualification test data to demonstrate capacity exceeds demand.   | Note No. 4  |
| 24 | 2-NRV-151 | Capacity vs.<br>Demand              | 1.5 x Bounding Spectrum does not envelope Floor Response Curve below about 2.5 Hz and above 12 Hz. Using an amplification factor of 7 for in-line equipment results in the demand spectrum exceeding the FOV-GERS at all frequencies.   | Review piping analysis to determine actual response level for this valve to establish demand, and compare to FOV-GERS.   | Note No. 4  |





|    | ID        | ISSUES                 | REASONS   | SRT PROPOSED<br>RESOLUTION  | COMMENTS   |
|----|-----------|------------------------|---|---|------------|
| 25 | 2-NRV-152 | Capacity vs.<br>Demand | 1.5 x Bounding Spectrum does not envelope Floor Response Curve below about 2.5 Hz and above 12 Hz. Using an amplification factor of 7 for in-line equipment results in the demand spectrum exceeding the FOV-GERS at all frequencies. | Review piping analysis to determine actual response level for this valve to establish demand, and compare to FOV-GERS.  | Note No. 4 |
| 26 | 2-NRV-153 | Capacity vs.<br>Demand | 1.5 x Bounding Spectrum does not envelope Floor Response Curve below about 2.5 Hz and above 12 Hz. Using an amplification factor of 7 for in-line equipment results in the demand spectrum exceeding the FOV-GERS at all frequencies. | Review piping analysis to determine actual response level for this valve to establish demand, and compare to FOV-GERS.  | Note No. 4 |
| 27 | 2-MRV-152 | Other                  | Valve operator was missing during first walkdown (10-29-93) and was still missing during a subsequent walkdown 3/14/94.   | Per DC Cook Plant personnel (R. Leonard), the actuator for 2-MRV-152 was removed to replace a broken actuator on valve 2-DCR-304 (Ref. A/R A000091). A new actuator had to be ordered for 2-MRV-152 (Activity 3 of Job Order C8549). The new actuators were received at the plant just prior to March 18, 1994. | Note No. 3 |
| 28 | 2-BA      | Caveats                | Recorder 2-MR-42 on 2-BA can slide out, it is not secured   | Secure the recorder so that it cannot slide out without being unlatched.  | Note No. 1 |
| 29 | 2-RPS-A   | Seismic<br>Interaction | 2-RPS-A contains essential relays. One side, 2-RPS-A is bolted to the adjacent 2-RPSX-A, but on the other side, it is hard-up against (but not attached to) an r/c wall   | Anchor 2-RPS-A to the adjacent r/c wall.  | Note No. 1 |
| 30 | 2-RPSX-A  | Seismic<br>Interaction | 2-RPSX-A contains essential relays. It is bolted to the adjacent 2-RPS-A, but is not bolted to the adjacent 2-RPST-A..  | Bolt 2-RPSX-A to 2-RPST-A.  | Note No. 1 |
| 31 | 2-RPSX-B  | Seismic<br>Interaction | 2-RPSX-B contains essential relays. It is bolted to the adjacent 2-RPS-B, but is not bolted to the adjacent 2-RPST-B.   | Bolt 2-RPSX-B to 2-RPST-B.  | Note No. 1 |

|    | ID        | ISSUES               | REASONS  | SRT PROPOSED<br>RESOLUTION   | COMMENTS                     |
|----|-----------|----------------------|--|--|------------------------------|
| 32 | 2-SG      | Caveats              | Recorders 2-MR-17,18,19,20 can slide out. They latch once they slide out almost their entire length, at that point the SRT judges that they are vulnerable to vertical forces  | Secure the recorders so that they cannot slide out more than about half their length without being unlatched in some manner. | Note No. 1                   |
| 33 | 2-NMO-151 | Capacity vs. Demand  | 1.5 x Bounding Spectrum does not envelope the Realistic Median Centered Floor Response Spectra at frequencies below about 2.5 Hz and above about 12 Hz. Similarly, assuming an amplification factor of 7 for in-line equipment applied to the floor response spectra, the MOV-GERS do not envelope below about 2.5 Hz and above 33 Hz. | Review piping analysis to determine actual response level for this valve and compare to GERS.                                | Note No. 4                   |
| 34 | 2-NMO-152 | Capacity vs. Demand  | 1.5 x Bounding Spectrum does not envelope the Realistic Median Centered Floor Response Spectra at frequencies below about 2.5 Hz and above about 12 Hz. Similarly, assuming an amplification factor of 7 for in-line equipment applied to the floor response spectra, the MOV-GERS do not envelope below about 2.5 Hz and above 33 Hz. | Review piping analysis to determine actual response level for this valve and compare to GERS.                                | Note No. 4                   |
| 35 | 2-NMO-153 | Capacity vs. Demand  | 1.5 x Bounding Spectrum does not envelope the Realistic Median Centered Floor Response Spectra at frequencies below about 2.5 Hz and above about 12 Hz. Similarly, assuming an amplification factor of 7 for in-line equipment applied to the floor response spectra, the MOV-GERS do not envelope below about 2.5 Hz and above 33 Hz. | Review piping analysis to determine actual response level for this valve and compare to GERS.                                | Note No. 4                   |
| 36 | 2-BATT-AB | Caveats              | Batteries just over 10 years old.  | Evaluate the batteries to determine that they are seismically adequate since they are greater than 10 years old.             | This item has been resolved. |
| 37 | 2-BATT-CD | Caveats              | Batteries just over 10 years old.  | Evaluate the batteries to determine that they are seismically adequate since they are greater than 10 years old.             | This item has been resolved. |
| 38 | 2-LSI-3   | Seismic Interactions | Chain located above the panel is not adequately secured to the wall.   | Secure the chain.  | Note No. 2                   |



|    | ID        | ISSUES                  | REASONS   | SRT PROPOSED<br>RESOLUTION   | COMMENTS   |
|----|-----------|-------------------------|---|--|------------|
| 39 | 2-DRV-407 | Seismic<br>Interactions | Valve is an outlier because it has less than a 2 inch clearance to an adjacent R/C Wall. The pipe line is rod hung and may swing into the wall. | Either restrain the piping so the valve cannot swing or check the piping analysis to ensure that the displacement of the valve during a DBE is less than 2 inches. | Note No. 1 |

Notes Applicable to Comments

- No. 1. This item will be implemented under a design change.
- No. 2. This item will be implemented by plant maintenance under a job order.
- No. 3. This item has been corrected and/or resolved.
- No. 4. This item will be resolved by further evaluation and/or analysis.

Table 4-7  
Commentary on Equipment Items Meeting the Intent of GIP Caveats

| N<br>o. | Component or Category  | Commentary   |
|---------|--|--|
| 1       | Unit 1 and 2 Class 0 Components<br>Generic Interpretation                    | There are 50 and 51 equipment items identified as Class 0 in Unit 1 and Unit 2 respectively. These items were primarily passive and were similar to items considered as components of class of 21 equipment. For these equipment items the SRT assessed the potential for seismic damage and made the necessary evaluations. All these items were at locations in the plant where 1.5 times the Bounding Spectrum is greater than the floor response spectra where they are located. Anchorage was evaluated using the GIP criteria.   |
| 2       | Unit 1 and 2 Class 21 Tanks and Heat Exchangers not covered by the criteria. | There are 63 and 58 equipment items identified as Class 21 in Unit 1 and Unit 2 respectively. Of these tanks and heat exchangers, there were only 20 where the GIP criteria was applicable. The remaining 101 were evaluated by meeting the intent of the GIP criteria. Anchorage was evaluated using the GIP criteria.  |
| 3       | 1-QT-113-CD1<br>1-QT-113-CD2   | <p>Each of these strainers is supported on four legs. Each leg of 1-QT-113-CD1 is anchored by one 1/2 inch J-bolt anchor, each leg of 1-QT-113-CD2 is anchored by one 3/8 inch bolt, but the anchor type is unknown. One bolt was broken. One of the 3/8 inch bolts is broken. According to the memo from Jerry A. Reiniger at AEPSC and James Wisniewski at Cook Nuclear Plant Construction, the 3/8 inch bolts appear to have been welded to the 1/2 inch embedded J-bolt. The welding looked questionable.</p> <p>The SRT believed that even with the questionable weld, the 3/8 inch bolts are sufficient to carry the tensile load of an unknown expansion bolt (a 0.6 reduction factor) and a further .5 reduction for prying action. The broken bolt was not included in the evaluation.</p> <p>The ANCHOR analysis was performed for 1-QT-113-CD1 and 1-QT-113-CD2 together, since they are connected by a relatively rigid piping segment.</p> <p>The minimum embedment of the 1/2 inch J-bolts for 1-QT-113-CD1 is 9.5 inches and was used for the embedment reduction factor for the J-bolts. The unknown expansion anchor was used for the three 3/8 inch bolts on 1-QT-113-CD2.</p> <p>The SRT also judged the bolts may be subject to prying. Therefore a very conservative .5 reduction factor was applied for prying.</p> <p>ANCHOR analysis included nozzle loads as specified in the piping analysis nozzle/anchor load summary sheets for the attached piping. Conservatively assume that the inlet and outlet nozzle loads are distributed between the two strainers, 1-QT-113-CD1 and CD2, because of the way they are joined. Therefore, the nozzle loads modeled in the ANCHOR analysis are the absolute values of the larger of the two loads specified.</p> <p>The ANCHOR analysis even with the highest nozzle loads and anchorage reduction factors, shows a high margin of safety (1.6).</p> |

| N<br>o. | Component or Category   | Commentary   |
|---------|---|--|
| 4       | <div> <div>1-11A      1-21A</div> <div>1-11B      2-21B</div> <div>1-11C      2-21C</div> <div>1-11D      2-21D</div> </div> <div>600 VAC Bus Switchgear</div>                | <p>The switchgear manufacturer is ITE Imperial. The side to side breaker restraint caveat normally applies to Westinghouse DB-25 and DB-50 switchgear assemblies.</p> <p>Side to side restraint of breaker was judged adequate. Primary breaker contacts at top are horizontal, secondary breaker contacts at bottom are vertical. Breaker weight estimated to be about 80 lbs. Frame at bottom of breakers judged sufficiently stiff to withstand earthquake inertia such that secondary contacts will not fail.</p>  |
| 5       | <div> <div>1-52BYA      2-52BYA</div> <div>1-52BYB      2-52BYB</div> <div>1-52RTA      2-52RTA</div> <div>1-52RTB      2-52RTB</div> </div> <div>Reactor Trip Breakers</div> | <p>The switchgear are of the Westinghouse DB-50 type, which normally applies to the side to side breaker restraint caveat. However, the breaker is supported by two rails that were judged very stiff. Breakers were pulled and pushed sideways (at about 80 lbs. force) and there was not even a slight movement observed.</p> <p>After review of the seismic test for the unit that included the breakers (although the breaker qualification was not the prime objective of the test) and the load test in the field it was judged that there was no possibility of damaging the secondary contacts in an SSE event. Therefore, caveat 3 was judged acceptable.</p> <p>On the front, the rail on which the breaker may slide back and forth, is bolted to the side of the cabinet. The wheels have a top restraint on the flange of the channel to prevent the wheels from lifting.</p> |
| 6       | <div> <div>1-PP-7E      2-PP-7E</div> <div>1-PP-7W      2-PP-7W</div> </div>  | <p>VP/BS Caveat 2: These pumps are outside the seismic experience database because of the long shaft (approximately 45 feet long—Ref. Johnston Turbine Pumps H-4193-D). However, seismic adequacy is demonstrated by a stress analysis report, which indicates shaft and casing stresses and deflections to be within acceptable limits. Therefore, the intent of this Caveat is considered to be met by the SRT.</p>  |

| N<br>o. | Component or Category  | Commentary  |
|---------|--|---|
| 7       | 1-DCR-301    2-DCR-301<br>1-DCR-302    2-DCR-302<br>1-DCR-303    2-DCR-303<br>1-DCR-304    2-DCR-304<br>1-FRS-257    2-FRS-257<br>1-FRS-258    2-FRS-258<br>1-IRV-116    2-IRV-116<br>1-IRV-136    2-IRV-136<br>1-IRV-146    2-IRV-146<br>1-IRV-147    2-IRV-147<br>1-IRV-148    2-IRV-148<br>1-IRV-149    2-IRV-149<br>1-IRV-150    2-IRV-150<br>1-IRV-160    2-IRV-160<br>1-MCR-251    2-MCR-251<br>1-MCR-252    2-MCR-252<br>1-MCR-253    2-MCR-253<br>1-MCR-254    2-MCR-254<br>1-MRV-154    2-MRV-154<br>1-NRV-101    2-NRV-101<br>1-NRV-102    2-NRV-102<br>1-NRV-103    2-NRV-103<br>1-NRV-104    2-NRV-104<br>1-QRV-150    2-QRV-150<br>1-SV-101    2-SV-101<br>1-SV-102    2-SV-102<br>1-SV-120-AB    2-SV-120-AB<br>1-SV-120-CD    2-SV-120-CD<br>1-SV-121    2-SV-121<br>1-SV-140-1    2-SV-140-1<br>1-SV-140-2    2-SV-140-2<br>1-SV-15E    2-SV-15E<br>1-SV-15W    2-SV-15W<br>1-SV-169E    2-SV-169E<br>1-SV-169W    2-SV-169W<br>1-SV-200-AB    2-SV-200-AB<br>1-SV-200-CD    2-SV-200-CD<br>1-SV-201-AB1    2-SV-201-AB1<br>1-SV-201-AB2    2-SV-201-AB2<br>1-SV-201-CD1    2-SV-201-CD1<br>1-SV-201-CD2    2-SV-201-CD2<br>1-SV-66    2-SV-66<br>1-SV-67-1    2-SV-67-1<br>1-SV-67-2    2-SV-67-2<br>1-SV-67-3    2-SV-67-3<br>1-SV-79-AB1    2-SV-79-AB1<br>1-SV-79-AB2    2-SV-79-AB2<br>1-SV-79-CD1    2-SV-79-CD1<br>1-SV-79-CD2    2-SV-79-CD2<br>1-SV-96    2-SV-96<br>1-SV-97    2-SV-97<br>1-SV-98N    2-SV-98N<br>1-SV-98S    2-SV-98S | <p>Small air operated valves or safety valves on lines less than 1 inch. The valves were either supported independently and could not overstress the lines or the valve was so small the SRT judged that the line cannot be overstressed.</p> |



| N<br>o. | Component or Category  | Commentary   |
|---------|--|--|
| 8       | 1-SV-200-AB    2-SV-200-AB<br>1-SV-200-CD    2-SV-200-CD<br>1-SV-201-AB1    2-SV-201-AB1<br>1-SV-201-AB2    2-SV-201-AB2<br>1-SV-201-CD1    2-SV-201-CD1<br>1-SV-201-CD2    2-SV-201-CD2 | FOV/BS Caveat 2: Valve bodies are cast iron. However, since this is a pressure relief valve, the only stress on the body will be due to inertia loads on the body itself (no loads will be imported by the pipe line). The valves weigh < 10 lb and the inertia will be low, such that the stress will be less 0.20 Fu allowed by this caveat for cast iron valves.  |
| 9       | 1-HV-SGR-MD3    2-HV-SGR-MD3<br>1-HV-SGR-MD4    2-HV-SGR-MD4<br>1-HV-SGR-MD5    2-HV-SGR-MD5   | Could not see motor operator for damper because internal to duct. Evaluated based on documentation package. Operator is small and light weight and adequately anchored. Documentation package indicates operator purchased and installed to IEEE 344-75 requirements.  |
| 10      | Class 14 wall mounted Distribution<br>Panels, Unit 1 and Unit 2  | The expansion anchors, anchoring most of the distribution panels to the wall were in general not accessible for the bolt tightness check. Some of these only had four bolts which are not enough bolts to meet the reduced inspection criteria and the concrete strength is 3500 psi and not 4000 psi. Testing these bolts would entail unwiring the components and removing the panel from the wall. The ANCHOR analyses for these light weight panels indicated a margin greater than 10. Most of these panels were also tug tested. When tightness checks could be performed, the anchors were found to be tight. Therefore, the SRT believed the panel anchorage evaluations met the "intent" of the GIP requirements. |
| 11      | 1-BC-CD1<br>1-BC-CD2   | The minimum embedment for the J-bolts on the Anchor Inspection Data Sheet is 9-5/8 inches, slightly below (3/8 inch) the 16 diameter minimum embedment in the GIP. However, due to the high margin of the analysis for 1-BC-AB1 with a smaller 1/2 inch bolt, and the knowledge that the 5/8 inch bolt will have a higher capacity, the SRT judged that the anchorage "met the intent" of the embedment caveat. The anchorage was deemed acceptable based on the calculation for 1-BC-AB1.   |
| 12      | 1-OME-150-AB    2-OME-150-AB<br>1-OME-150-CD    2-OME-150-CD   | Diesel Generator and driver not on same skid, however large concrete foundations originate from common floor; differential motion is not a concern.  |
| 13      | 1-DGAB<br>1-DGCD<br>Panels   | Panels contain essential relays.<br><br>Although Anchorage Inspection Data Sheets indicate greater than 1/4 inch gaps for the anchorage, the panel is not subject to pounding which is the intent of this caveat. These gaps are due to the panel resting on adjacent shim plates. Also due to the size of the panel the loading will primarily be in shear.   |



| N<br>o. | Component or Category  | Commentary   |
|---------|--|--|
| 14      | 1-TSC-I/O-07<br>1-TSC-I/O-09<br>1-TSC-I/O-13<br>1-TSC-I/O-15<br>Panels | <p>The cabinet sits on a 1 inch thick grout pad (appears sound) and is anchored with twelve (12) 3/4 inch Hilti Kwik bolts. The ANCHOR analysis showed a margin of 25. Per the anchorage package, the bolts were UT tested and found to be 8.5 inch long, so the embedment length is more than adequate. The bolts could not be tightness tested due to congestion in the cabinet. Per GIP Section C.2.10, the Reduced Inspection Alternative cannot be used because the concrete strength is less than 4000 psi, but given the very high margin, the SRT judged the anchorage adequate.</p>   |
| 15      | 12-SFP-12<br>Panel   | <p>Panel is 36 inches x 42 inches x 90 inches in height, mounted on a 6 inch concrete pad. The pad is reinforced with wire mesh.</p> <p>Using the GIP rules of neglecting the pad for embedment, the minimum embedment for the 5/8 inch expansion anchors into the base floor concrete is 1-1/8 inch (less than the GIP allowable).</p> <p>It was postulated in order for the panel to tip, the concrete pad would have to lift off the floor. To calculate a minimum bolt tension allowable, the minimum g load for uplift of the pad was calculated (only considering the slab weight, and neglecting any cohesion of the slab to the base concrete). Using the value for zero uplift of the pad a bolt tension allowable was determined. The allowable conservative bolt tension was calculated to be 343 lbs, which is much less than the 1660 lb allowable from the GIP for 5/8 inch bolts with full embedments with the appropriate knockdown factors considered.</p> <p>An ANCHOR Analysis was performed with the reduced tension allowable. The anchorage was adequate with an additional margin of 1.4.</p> |
| 16      | 1-TK-32      2-TK-32<br>1-TK-33      2-TK-33<br>RWST and CST           | <p>Anchored with metal straps. The straps were converted to equivalent bolts to meet the GIP criteria. Also, the actual frequencies and capacity were calculated using the formulas used to generate the GIP tables and charts. The tanks were outside the range of the tables and charts.</p>   |
| 17      | 2-PP-9E<br>Vertical Pump   | <p>VP/BS Caveat 3: Discharge piping is not laterally restrained in the E-W direction in the plane of the discharge nozzle, may overload discharge nozzle. This unit (Unit 2) has snubbers on the inlet piping while Unit 1 pumps did not. Therefore, piping nozzle loads were included in evaluating the pump anchorage. Nozzle loads were obtained from EDS Calculation 406, 9-19-72, for the suction, and from AEPSC Calculation DC-D-2-CTS-7, 1-18-94, for the discharge. The nozzle loads were within AEP acceptance criteria and the anchorage met GIP acceptance criteria.</p>   |



| N<br>o. | Component or Category                    | Commentary  |
|---------|--|---|
| 18      | 2-PP-9W<br>Vertical Pump                 | <p>VP/BS Caveat 3: Attached piping appears to have no lateral restraint in either direction, only vertical downward support. May overload nozzles. Therefore, piping nozzle loads were included in evaluating the pump anchorage. Nozzle loads were obtained from EDS Calculation 406/40CX, 9-10-73, for the suction, and from AEPSC Calculation DC-D-2-CTS-5, 1-9-94, for the discharge. The nozzle loads were within AEP acceptance criteria and the anchorage met GIP acceptance criteria.</p>   |
| 19      | 2-BC-CD1<br>2-BC-CD2<br>Battery Chargers | <p>There was some uncertainty as to the type of anchorage used for the Battery Charger. Drawing 12-3436-2 indicates 5/8 inch diameter J-bolts and Drawing 12-3446B-5 indicates 3/4 inch through bolts. The ultrasonic evaluation yielded the type of inconclusive results indicative of J-bolts. The bolts were measured in the field as 5/8 inch diameter.</p> <p>In either case the anchorage is more than adequate, and the uncertainty is a Quality of Documentation Issue and not a seismic capacity issue which is the "intent" of the USI A-46 program. The anchorage is most likely 5/8 inch J-bolts like the Unit 1 CD Chargers, based on the measurement and ultrasonic results. The minimum embedment based on the anchor length above concrete is 9-9/16 inches, slightly below (7/16 inch) the 16 diameter minimum embedment in the GIP. However, due to the high margin of the ANCHOR analysis for a smaller 1/2 inch bolt, and the knowledge that the 5/8 inch bolt will have a higher capacity, the SRT judged that the anchorage "met the intent" of the embedment caveat. The anchorage was deemed acceptable based on the calculation for 2-BC-AB1.</p> <p>The 3/4 inch throughbolt or 5/8 inch throughbolt would even have a higher capacity.</p> |
| 20      | 2-A11<br>2-A13<br>Panel                  | <p>This panel contains essential relays.</p> <p>There is a door at the far end of the A6-A15 bank that is commonly left open. The door could strike the panel, but the SRT judges the impact is far enough away from the essential relays not to be significant.</p> <p>There is a fire extinguisher hung on the end of A6 that will bang against the cabinet. The SRT judges that it will not affect the essential relays in A11 and A13.</p>  |

Table 4-8

## Issues Tracked Using the SQUG Action Item Report Not Included as an Outlier

| Item Number | Equipment ID         | Reason  | Comments   |
|-------------|----------------------|---|--|
| 1           | N/A                  | General Housekeeping; There were loose items in the control room – loose tool cart, loose panel   | Plant Maintenance is reviewing what policy regarding seismic housekeeping in the Control Room should be instituted.. |
| 2           | 1-FLX                | One bolt on the panel is loose and should be tightened.   | Note No. 3   |
| 3           | 1-NIS-I              | Two bolts at bottom of panel were missing that bolt the panel to the base frame. Remaining bolts are sufficient to meet SQUG GIP, however bolts should be replaced.   | Note No. 2   |
| 4           | 1-ACRA-2<br>2-ACRA-1 | Halon fire extinguishers should be attached to the block walls by through bolts. The SRT did not think this was a credible interaction but believed this should be done for consistency and greater assurance.                                  | Note No. 1   |
| 5           | 2-LSI-1              | Overhead grating was not completely clamped in. SRT judged there was sufficient interference from structural members to preclude the grating coming down. Therefore this was not designated as an outlier.                                      | Note No. 2   |
| 6           | 2-LSI-6XX            | Drawing for anchorage shows wrong anchorage type. This was not an outlier since the installed anchorage was adequate.   | Note No. 3   |
| 7           | 2-HE-33E             | Two bolts attaching the heat exchanger to the pump were not in place and appeared broken. The SRT judged that the connecting pipes were adequate to secure the small exchanger during an earthquake. However, the condition should be repaired. | Note No. 2   |
| 8           | 2-HE-35S             | The equipment ID tag was missing.   | Note No. 2   |
| 9           | 1-QP-21              | The equipment ID tag was missing.   | Note No. 2   |

| Item Number | Equipment ID     | Reason  | Comments   |
|-------------|------------------|---|------------|
| 10          | 2-HFK-606        | Item not on SSEL. However, during the walkdowns it was discovered that the screw that secures the cover for the rear terminal block is missing.   | Note No. 3 |
| 11          | 2-GR-1<br>2-GR-2 | One bolt attaching the bottom of the frame angle to the supporting system (near the north end) was missing. The SRT judged the remaining anchorage adequate without this bolt to meet the SQUG GIP criteria, however the bolt should be replaced.   | Note No. 2 |
| 12          | 2-NSR            | A couple of bolts (near the north end) attaching the bottom of the base angle to the control panel supporting system were found to be loose. The SRT judged that the anchorage was sufficient with these loose bolts to meet the SQUG GIP criteria, however, the bolts should be tightened. | Note No. 3 |
| 13          | 1-HV-AES-2       | Anchorage walkdown states anchors were expansion bolts. The drawings showed J-bolts. Both types are sufficient to meet SQUG GIP criteria.   | Note No. 3 |
| 14          | N/A              | This is a generic outlier for both AB and CD Unit 1 and 2 Diesel Generator Rooms. The sodium lamps (overhead) will swing and are on open hooks. The hooks should be modified so they are closed.  | Note No. 1 |
| 15          | 1-QT-113-CD2     | One of the four anchor bolts is broken. ANCHOR analysis with remaining bolts indicates that the anchorage is adequate. Therefore this was not declared as an outlier. However, this bolt should be replaced.  | Note No. 2 |

| Item Number | Equipment ID           | Reason   | Comments   |
|-------------|------------------------|--|------------|
| 16          | 1-MRV-213<br>1-MRV-243 | Valves 1-MRV-213, 243 have a half inch copper tubing that is connected to the solenoids on the top of the valve. It is in contact with the grating steel or steel beam. This was not an interaction outlier because the valve is designed fail safe, and the air line is not required for the valves to perform their safe shutdown function. However, the condition should be modified to increase the clearance. | Note No. 2 |
| 17          | 1-QFA-240              | Overhead monorail could move during a seismic event and hit other equipment in the area if it is not locked in place. Not an outlier since 1-QFA-240 would not be impacted. However, the SRT noted that the monorail should be locked in place when not in use.  | Note No. 2 |
| 18          | 1-ICM-305<br>1-ICM-306 | The boom of the overhead jib crane was not secured. It can potentially move and hit nearby conduit during a seismic event. This was not an interaction outlier since the valves could not be impacted, however, it is recommended that the boom be secured to the top of the valve enclosure.  | Note No. 2 |
| 19          | 2-SV-66                | The 1 inch line connecting the safety valve has two missing "U-bolts." The SRT judged that the line was adequately supported and therefore this was not declared an outlier. However, the SRT noted that the "U-bolts" should be installed.  | Note No. 2 |





| Item Number | Equipment ID       | Reason  | Comments   |
|-------------|--------------------|---|------------|
| 20          | 1-TK-33<br>2-TK-33 | The RWST supports are rusted and should be cleaned and painted. This was not an outlier because the supports were not deteriorated. However, the supports should be painted to ensure that the supports do not degrade in the future.   | Note No. 3 |
| 21          | N/A                | The clips to which the portable fire extinguishers in the Auxiliary Building are mounted, appear to be too small and the possibility exists that the extinguishers could fall off the supports in an earthquake. Larger clips should be installed, as the extinguishers are near safety related equipment.                      | Note No. 2 |
| 22          | N/A                | A minor modification should be initiated to install an isolation valve in the nitrogen header to allow the separation of the nitrogen supply to plant services from the nitrogen supply to the steam generator PORVs. This will allow for the use of the nitrogen storage tanks to operate the PORVs following a seismic event. | Note No. 4 |
| 23          | N/A                | Some of the cables on emergency battery packs (for BATLIT's) tie down cables were loose. These cables should be inspected and tightened as appropriate.   | Note No. 2 |

Notes Applicable to Comments

- No. 1. This item will be implemented under a design change.
- No. 2. This item will be implemented by plant maintenance under a job order.
- No. 3. This item has been corrected and/or resolved.
- No. 4. This item will be resolved by further evaluation and/or analysis.

## 5.0 TANK AND HEAT EXCHANGER REVIEW

### 5.1 Summary of Review

#### 5.1.1 Vertical Tanks

The vertical tank review, as developed in Section 7 of the GIP as part of the resolution of USI A-46, is for large flat bottom tanks and consists of a field inspection and an engineering evaluation of those tanks required for safe shutdown. The only tanks applicable to the GIP methodology at Cook Nuclear Plant were the two Condensate Storage Tanks 1-TK-32 and 2-TK-32, and the two Refueling Water Storage Tanks 1-TK-33 and 2-TK-33.

Vertical tanks are addressed in detail in the USI A-46 evaluation because of the occurrence of tank failures in past earthquakes. The procedure used for resolution of USI A-46 uses current methods to provide justification of the structural integrity of vertical tanks for the Safe Shutdown Earthquake (SSE).

There are several key technical issues addressed in the tank evaluation regarding the seismic demand on the tank, the seismic capacity of the tank, and the tank's critical components. The purpose of this discussion is to provide the background for the USI A-46 evaluation of large flat bottom tanks at Cook Nuclear Plant.

The response of a vertical tank to a seismic event is a combination of sloshing fluid and the impulsive mode from fluid-structure interaction. The sloshing of the fluid at the top surface contributes to the overturning moment of the tank as well as producing loads on the tank roof. Adequate freeboard (i.e. height above the water to the tank's roof) should be provided to prevent roof failure. The sloshing effect occurs at very low frequencies and damping values. The impulsive mode includes the tank shell responding to seismic events at frequencies associated with the shell modes of vibration. This response includes the tank and its contents moving together.

The seismic demand on the tank is discussed in terms of the base shear and overturning moment produced at the tank base. Recent technical research has produced several simplified procedures which develop the response of fluid-filled tanks. The evaluation procedure used for vertical cylindrical tanks at Cook Nuclear Plant includes the sloshing and impulsive modes of the tank.

The USI A-40 issues regarding tanks as identified in Ref. 16 are based on the assumption that several tanks in existing nuclear facilities were designed considering that the impulsive mode of the tank shell and fluid were rigid. In some instances, the original design of the tanks makes this erroneous assumption, which have been the case at Cook Nuclear Plant. The evaluations for USI A-46 resolve USI A-40 issues regarding these tanks.

Attached piping was neglected in computing tank responses. However, flexibility of attached piping was checked during the walkdown to judge whether it could accommodate slight uplift expected in the tank base.

A description of the tanks included in the review for Cook Nuclear Plant and their locations are shown in Table 5-1.

Table 5-1

Vertical Flat Bottom Tanks Reviewed for Cook Nuclear Plant

| Tank ID No.        | Description  |
|--------------------|--|
| 1-TK-33<br>2-TK-33 | Refueling Water Storage Tanks; 48 feet-0 inches Diameter x 32 feet-3 inches Height; ASTM A-240 Type 304 Stainless Steel Flat Bottom Vertical Tanks |
| 1-TK-32<br>2-TK-32 | Condensate Storage Tanks; 52 feet-0 inches Diameter x 34 feet-5 inches; Carbon Steel Flat Bottom Vertical Tank                                     |

### 5.1.2 Method of Solution for Vertical Tanks

The GIP has established a procedure for evaluating large flat bottom tanks. The GIP procedure was used for the Cook Nuclear Plant USI A-46 effort for the evaluation of the tanks at the SSE level.

As will be discussed in Section 5.2 all four tanks reviewed met the intent of the GIP Methodology. However, the anchorage for the tanks consists of 3/8 inch thick straps that are welded to the tank, and embedded in the concrete 2 feet with a hook at its end. This anchorage is not explicitly covered by the GIP anchorage criteria. The intent of the GIP was met by evaluating the strap connection to the tank and embedment in the concrete, showing that the full strength of the strap can be developed. Then the strap was converted to an equivalent bolt.

A description of the procedures outlined in Section 7 of the GIP is as follows. Note, for USI A-46, simplifying tables and charts have been developed. In some cases because of the GIP table and chart limitations, these values were calculated directly, using the applicable basis of the GIP tables and charts.

### 5.1.3 Determine Tank Seismic Demand

The horizontal impulsive mode natural frequency is determined considering the fluid/tank wall interaction. Using this response frequency, the seismic spectral acceleration (using 4% equipment damping) is determined. Using the determined impulsive mode horizontal spectral response acceleration, the impulsive base shear load and overturning moment for the tank are calculated.

The convective (sloshing) mode natural frequency is also estimated for the 0.3g High Confidence Low Probability of Failure (HCLPF) evaluation. The convective base shear load and overturning moment for the tank are calculated for 0.5% damping. These values are combined with the corresponding impulsive mode values by square-root-sum-of-the-squares

(SRSS) to obtain the total horizontal seismic responses. The USI A-46 procedure considers the effects of the convective mode response by factoring the impulsive mode.

#### **5.1.4 Determine Tank Seismic Capacity**

The overturning moment capacity is controlled by the compressive buckling capacity of the shell and the bolt holddown capacity. The compressive buckling capacity for the tanks is controlled by "elephant-foot" buckling. The bolt holddown capacity was determined by checking the anchor bolt tensile capacity, and the ability of the anchor connection to the tank to transmit the load from the tank to the anchor bolts. The pullout capacity of the anchor bolts is also checked to determine if the full tensile capacity of the anchor bolts can be developed.

The overturning moment capacity was then determined as a combination of the limiting shell buckling capacity for compression and the limiting tensile resistance of the anchorage for tension. This value is then compared with the calculated base overturning moment.

The resistance to sliding (shear capacity) was calculated using a friction coefficient of 0.55 for USI A-46. The base shear capacity is compared to the calculated base shear demand. A check of the height of the sloshing wave was also made and compared to the available freeboard.

For the USI A-46 review, normal allowable stresses apply for the tank shell for buckling and for evaluating the anchor bolts and anchor bolt chairs, with the exception of an increase in the allowable weld capacity.

The concrete for the tank foundations is specified to have minimum compressive strength,  $f'_c$ , of 3500 psi.

#### **5.1.5 Horizontal Tanks and Heat Exchangers**

Horizontal tanks and heat exchangers were evaluated in accordance with the rules and

procedures given in Section 7 of the GIP. This section gives the method for how the heat exchanger reviews were to be performed.

The screening evaluation described in this section for verifying the seismic adequacy of horizontal tanks and heat exchangers covers those features of horizontal tanks and heat exchangers which experience has shown can be vulnerable to seismic loadings. The evaluations included the following features:

- Check that the anchor bolts and their embedments have adequate strength against breakage and pullout.
- Check that the anchorage connection between the anchor bolts and the tank shell (e.g., saddles) have adequate strength.

The SRT reviewed these evaluations to verify that they met the intent of these guidelines. This review included a field inspection of the heat exchanger, the anchorage connection and the anchor bolt installation. The horizontal tanks and heat exchangers included in the effort that are applicable to the GIP guidance are included in Table 5-2.

The derivation and technical justification for the guidelines utilized for these exchangers were developed specifically for horizontal cylindrical tanks and heat exchangers with support saddles made of plates. The types of loadings and analysis methods described in this section are considered to be appropriate for these types of horizontal tanks and heat exchangers. However, a generic procedure cannot cover all the possible design variations. Other design features not covered by the GIP were evaluated using the same procedures and loading conditions as given in Section 7 of the GIP.

The horizontal tanks and heat exchangers which are covered by the screening guidelines in Section 7 of the GIP are cylindrical steel tanks and heat exchangers whose axes of symmetry are horizontal and are supported on their curved bottom by steel saddle plates. The screening guidelines are based on the assumption that the horizontal tanks are anchored to

a stiff foundation which has adequate strength to resist the seismic loads applied to the tank. All the base plates under the saddles are assumed to have slotted anchor bolt holes in the longitudinal direction to permit thermal growth of the tank, except for the saddle at one end of the tank which is fixed. The saddles are assumed to be uniformly spaced a distance (S) apart, with the two ends of the tank overhanging the end saddles a maximum distance of  $S/2$ .

A simple, equivalent static method is used to determine the seismic demand and the capacity of the anchorages and the supports for horizontal tanks and heat exchangers. The screening guidelines contained in Section 7 of the GIP specifically addressed only the seismic loads due to the inertial response of horizontal tanks and heat exchangers. If, during the Screening Verification and Walkdown of a tank the Seismic Capability Engineers determined that the imposed nozzle loads due to the seismic response of attached piping may be significant, then the GIP requires these loads to be included in the seismic demand applied to the anchorage and supports of the tank. Nozzle loads were included when judged significant by the SRT.

There were several other small tanks and heat exchangers included in the walkdowns. However, these were not applicable to the GIP calculation methodology. For these items the SRT checked either by calculation or by judgment any potential seismic vulnerabilities. This included the component anchorage, structural members and connections for tanks on legs, etc.

## **5.2 Summary of Results**

### **5.2.1 Results - Vertical Tanks**

Results of the USI A-46 evaluation for large vertical tanks are summarized in this subsection. All tanks were screened to meet the intent of the GIP requirements.



### 5.2.2 Results - Horizontal Tanks and Heat Exchangers

Results of the USI A-46 evaluation for saddle supported horizontal tanks and heat exchangers are summarized in this subsection. All horizontal tanks and heat exchangers met the GIP requirements.

Table 5-2  
Horizontal Tanks and Heat Exchangers on at Least Two Saddles  
Reviewed for Cook Nuclear Plant

| Heat Exchanger ID No.                                    | Description   |
|--|---|
| 1-HE-14<br>2-HE-14                                       | Letdown Heat Exchangers. Small exchangers about 2 feet diameter on 2 saddle supports.                                   |
| 1-HE-15E<br>1-HE-15W<br>2-HE-15E<br>2-HE-15W             | Component Cooling Water CCW Heat Exchangers. About 5 feet diameter, 35 feet long.                                       |
| 12-HE-16N<br>12-HE-16S                                   | North and South Spent Fuel Pit Heat Exchangers. 3 feet 2 inch Diameter by 22 feet long on two saddle supports           |
| 1-QT-107-AB<br>1-QT-107-CD<br>2-QT-107-AB<br>2-QT-107-CD | Emergency Diesel Fuel Oil Day Tanks. Small horizontal tanks on two saddles about 4 feet in diameter by 10 feet long.    |
| 1-QT-115-AB<br>1-QT-115-CD<br>2-QT-115-AB<br>2-QT-115-CD | Emergency Diesel Lube Oil Sump Tanks. Small Horizontal tanks on three saddles about 4 feet in diameter by 10 feet long. |

## **6.0 CABLE TRAY AND CONDUIT RACEWAY REVIEW**

The cable and conduit raceway review was performed as specified in Section 8 of the GIP Revision 2 dated 2/14/92. Raceway systems were walked-down, checked against the Inclusion Rules and Other Seismic Performance Concerns as specified in Section 8.2 of the GIP, and examined for seismic spatial interactions with adjacent equipment and structures. Representative, worst-case raceway supports were selected and as-built. These supports then received a Limited Analytical Review per Section 8.3 of the GIP. Outliers were identified and documented.

The following summarizes the raceway review. The full documentation - including Plant Area Summary Sheets (PASS), Limited Analytical Reviews (LARs), Outlier Seismic Verification Sheets (OSVS), and back-up documentation - is contained in a separate report entitled "USI A-46 Cable Tray & Conduit Raceway Review" (Reference 17).

### **6.1 Scope of the Raceway Review**

The review includes all cable and conduit raceway systems in the plant which could support power, control, or instrumentation wiring for equipment on the Safe Shutdown Equipment List (SSEL). This consists of all raceway systems in both Containments, all areas in the Auxiliary Building, and the safety related areas of the Screen House.

### **6.2 Seismic Review Team**

The Seismic Capability Engineers for the raceway review were I.C. Huang (AEPSC), Stephen Anagnostis (S&A), and George Gary Thomas (S&A). Mr. Anagnostis and Mr. Thomas reviewed the Unit 1 Containment. Mr. Huang and Mr. Anagnostis reviewed the Unit 2 Containment and the rest of the plant.

### 6.3 Summary of the Plant Area Summary Sheets (PASS)

Table 6-1 summarizes the PASS. The first column contains the ID used to track the PASS, the second column describes the area of the plant covered by the PASS, and the third column lists the LARs (if any) associated with the PASS. The PASS themselves - including the checklist, SRT notes, photographs, and LAR as-builts - can be found in Section 2 of Reference 17.

The four PASS that produced outliers are annotated on the right hand side of Table 6-1. The annotations contain a brief description of the outliers. The outliers are discussed in more detail below.

### 6.4 Summary of the Limited Analytical Reviews (LARs)

Table 6-2 summarizes the LARs. The first column lists the ID used to track the LARs, the second column lists the ID of the PASS which generated the LAR. The third column contains the governing interaction value for the LAR, and the fourth column lists the load case that generated the governing interaction value. The two LARs that resulted in outliers are annotated on the right hand side of Table 6-2 (note that these are two of the four outliers noted in Table 6-1).

The interaction in Column 3 is the ratio of a computed value to an allowable value, so an interaction of one (1) or less indicates that the value is less than or equal to the allowable. Two LARs (LAR010 and LAR018) produced interactions slightly above 1, but were judged acceptable by the SRT. Two of the LARs (LAR005 and LAR022) produced interactions significantly above 1, and were declared outliers.

The complete LARs are contained in Section 3 of Reference 17.

## 6.5 Summary of Raceway Outliers

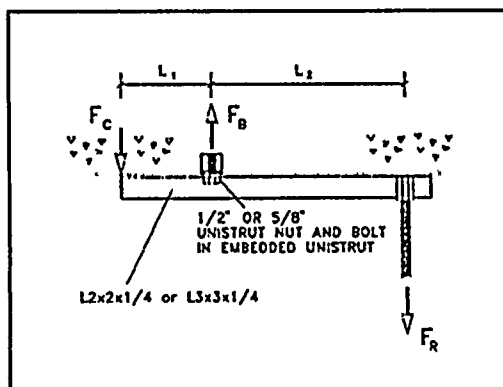
The raceway review resulted in four (4) outliers. They are summarized below and fully documented in Section 4 of Reference 17.

**RACE003** In this area, two cable trays are rigidly supported from steel columns that are about 15 feet apart. 2x2x1/4 steel angle framing spanning between the columns, supports the cable trays at mid-span. The LAR (LAR022) showed that the framing alone does not meet design allowables for the deadweight of the cable trays. If the framing is ignored, the trays do not meet the Inclusion Rule requirement of 10 feet between supports.

The outlier is resolved analytically (the resolution is included with the OSVS in Section 4 of Reference 17) by showing that the combination of the trays and the framing can support the required load.

**RACE101** A 1 inch conduit in this area is missing several conduit clamps, resulting in an overspan condition. The recommended resolution is to replace the clamps. The clamps have been replaced; see Cook Nuclear Plant action request A/R #0108046.

**RACE103** A common (but not prevalent) rod hanger anchorage detail used is shown below (the SRT referred to it as the "prying-action" detail). In most cases it has an acceptable configuration:  $L_2 \leq L_1$  and  $L_2 + L_1 \leq 12$  inches. The worst-case configuration was that of LAR005: a heavily loaded hanger (1200 lb deadweight) with  $L_2 = 10$  inches and  $L_1 = 2$  inches. This configuration does not meet the LAR requirements.



The recommended resolution to this outlier is to walk-down the plant and document all occurrences of this detail, screen the specific configuration of each detail using an acceptance criteria based on the LAR requirements, and modify those occurrences that do not meet the criteria. The first part of this resolution - the walkdown and screening - has already been implemented and is documented in Section 4 of Reference 17. Fifty occurrences were found and documented, 12 require modification.

RACE130 Two small diameter conduit in this area are unsupported over a length of about 30 feet. The recommended resolution is to support the conduit so that they meet the Inclusion Rules' requirements. This overspan condition has been corrected.

Table 6-1  
Summary of the Plant Area Summary Sheets (PASS)

| PASS No. | Plant Area   | LAR No.                              |
|----------|--|--------------------------------------|
| RACE001  | Unit 2 - Containment - Instrument Room   |                                      |
| RACE002  | Unit 2 - Containment - Accumulators 1, 4                                       | LAR019<br>LAR020                     |
| RACE003  | Unit 2 - Containment Accumulators 2, 3 Area                                    | LAR021 [1]<br>thru<br>LAR024         |
| RACE004  | Unit 2 - Containment - Annulus   | LAR025<br>LAR027                     |
| RACE005  | Unit 2 - Lower Containment, El 598   | LAR028                               |
| RACE006  | Unit 2 - Lower Containment, El 625 to 650                                      |                                      |
| RACE007  | Unit 2 - Upper Containment   |                                      |
| RACE100  | Unit 1 & 2 - Auxiliary Building, El 573  | LAR017                               |
| RACE101  | Unit 1 - Auxiliary Building - Startup Blowdown Flashtank Room & Vestibule Area | LAR011 [2]                           |
| RACE102  | Unit 2 - Auxiliary Building - Startup Blowdown Flashtank Room & Vestibule Area | LAR003<br>LAR004                     |
| RACE103  | Unit 1 - Auxiliary Building - Area around Containment from Az 90 to AZ 360     | LAR005 [3]                           |
| RACE104  | Unit 2 - Auxiliary Building - Area around Containment from AZ 90 to Az 360     | LAR006<br>LAR007                     |
| RACE105  | Unit 1 - East Main Steam Stop Enclosure El 612 and up                          |                                      |
| RACE106  | Unit 2 - East Main Steam Stop Enclosure El 612 and up                          |                                      |
| RACE107  | Unit 1 - Auxiliary Building - Vestibule Area El 633 and El 650                 |                                      |
| RACE108  | Unit 2 - Auxiliary Building - Vestibule Area El 633 and El 650                 |                                      |
| RACE109  | Unit 1 - Cable Penetration Area - El 596                                       | LAR008<br>LAR009<br>LAR010<br>LAR012 |
| RACE110  | Unit 2 - Cable Penetration Area - El 596                                       | LAR016                               |
| RACE111  | Unit 1 - West Main Steam Stop Enclosure El 621 and up                          |                                      |
| RACE112  | Unit 2 - West Main Steam Stop Enclosure El 621 and up                          |                                      |

| PASS No. | Plant Area  | LAR No.          |
|----------|---|------------------|
| RACE113  | Unit 1 - Diesel Generator Rooms   |                  |
| RACE114  | Unit 2 - Diesel Generator Rooms   |                  |
| RACE115  | Unit 1 & 2 - Motor Driven and Turbine Driven Auxiliary Feed Pump Rooms    |                  |
| RACE117  | Unit 1 - 4KV Switchgear Area  | LAR013<br>LAR015 |
| RACE118  | Unit 2 - 4KV Switchgear Area  | LAR018           |
| RACE119  | Unit 1 - Cable Vault  | LAR014           |
| RACE120  | Unit 2 - Cable Vault  |                  |
| RACE121  | Unit 1 & 2 - Control Room Air Conditioning and Computer Rooms             |                  |
| RACE122  | Unit 1 & 2 - UPS Inverter Room and Battery Room                           |                  |
| RACE123  | Unit 1 & 2 - Screen House   |                  |
| RACE124  | Unit 1 & 2 - Auxiliary Building El 650                                    |                  |
| RACE125  | Unit 1 & 2 - Auxiliary Building El 609                                    | LAR001           |
| RACE126  | Unit 1 & 2 - Auxiliary Building El 633                                    |                  |
| RACE127  | Unit 1 & 2 - Auxiliary Building El 587                                    |                  |
| RACE128  | Unit 1 & 2 - Control Room   |                  |
| RACE129  | Unit 1 - Containment - Outside Crane Wall El 598 (Annulus)                |                  |
| RACE130  | Unit 1 - Containment - Outside Crane Wall El 609-638                      | [2]              |
| RACE131  | Unit 1 - Containment - Inside Crane Wall El 598 (Lower Containment)       | LAR030           |
| RACE132  | Unit 1 - Containment - Inside Crane Wall El 620-650 (Lower Containment)   |                  |
| RACE 133 | Unit 1 - Containment - Inside Crane Wall Above El 650 (upper Containment) | LAR031<br>LAR032 |

- [1] Outlier due to LAR022  
[2] Outlier due to small diameter conduit overspans.  
[3] Outlier due to LAR005

Table 6-2  
Summary of The Limited Analytical Reviews (LARs)

| LAR Number | PASS Number | Interaction Coefficient | Controlling Load Case |
|------------|-------------|-------------------------|-----------------------|
| LAR001     | RACE125     | 0.68                    | 3DL                   |
| LAR002     | (Not Used)  |                         |                       |
| LAR003     | RACE102     | 0.50                    | DL                    |
| LAR004     | RACE102     | 0.29                    | DL                    |
| LAR005     | RACE103     | 5.60                    | 3DL [1]               |
| LAR006     | RACE104     | 0.76                    | 3DL                   |
| LAR007     | RACE104     | 0.81                    | DL                    |
| LAR008     | RACE109     | 0.94                    | DL                    |
| LAR009     | RACE109     | 0.85                    | LL                    |
| LAR010     | RACE109     | 1.05                    | DL                    |
| LAR011     | RACE101     | 1.02                    | LL                    |
| LAR012     | RACE109     | 0.45                    | DL                    |
| LAR013     | RACE117     | 0.72                    | DL                    |
| LAR014     | RACE119     | 0.93                    | 3DL                   |
| LAR015     | RACE117     | 0.84                    | DL                    |
| LAR016     | RACE110     | 0.79                    | LL                    |
| LAR017     | RACE100     | 0.70                    | DL                    |
| LAR018     | RACE118     | 1.04                    | 3DL                   |
| LAR019     | RACE002     | 0.33                    | DL                    |
| LAR020     | RACE002     | 0.67                    | DL                    |
| LAR021     | RACE003     | 0.22                    | DL                    |
| LAR022     | RACE003     | 1.70                    | DL [2]                |
| LAR023     | RACE003     | 0.90                    | DL                    |
| LAR024     | RACE003     | 0.25                    | DL                    |
| LAR025     | RACE004     | 0.55                    | LL                    |
| LAR026     | (Not Used)  |                         |                       |





| LAR Number | PASS Number | Interaction Coefficient | Controlling Load Case |
|------------|-------------|-------------------------|-----------------------|
| LAR027     | RACE004     | 0.96                    | 3DL                   |
| LAR028     | RACE005     | 0.14                    | DL                    |
| LAR029     | (Not Used)  |                         |                       |
| LAR030     | RACE131     | low                     | DL                    |
| LAR031     | RACE133     | 0.19                    | DL                    |
| LAR032     | RACE133     | 0.68                    | DL                    |

|     |                                    |
|-----|------------------------------------|
| DL  | Dead Load Check                    |
| 3DL | 3x Dead Load (Vertical Load Check) |
| LL  | Lateral Load Check                 |
| RF  | Rod Fatigue Check                  |

- [1] Outlier due to "prying-action" detail  
[2] Outlier due to hanger construction

## **7.0 PLAN FOR ADDRESSING UNRESOLVED OUTLIERS AND OPEN ISSUES**

Tables 4-5 and 4-6 identify all outliers for Class of 21 equipment, Section 6.5 identifies outliers for the cable tray and conduit, and Table 4-8 lists items requiring further review or action, but not included as an outlier.

Some of the outliers have been resolved and modifications have been implemented at the plant. The outliers and other items identified have been evaluated against the current licensing and design basis and no deviations or operability concerns were identified. AEPSC is continuing to evaluate these issues with the intent to resolve all of them and implement modifications if required.

It is currently AEPSC's intent to close out all remaining issues before the conclusion of the refueling outages following the next three operating cycles.

## 8.0 CONCLUSIONS AND RESULTS

Cook Nuclear Plant has developed and implemented a program to satisfy the requirements of the USI A-46 seismic evaluation. The program implemented concentrated on verifying the seismic adequacy of electrical and mechanical equipment, large tanks, cable tray and conduit raceway systems. The screening and verification walkdowns verified that the Cook Nuclear Plant equipment, tanks, distribution systems and structures are able to withstand the design basis SSE and perform their safe shutdown function.

There were several walkdowns performed from the summer of 1991 through the fall of 1995. Screening Evaluation Work Sheets and Seismic Verification Data Sheets were developed for each equipment item on the equipment list. The SVDS contain walkdown observations as well as screening results and are contained in Appendix C. Seismic Evaluation Work Sheets for all equipment items on the equipment list were developed. The work sheets consisted of general descriptions of the equipment, and walkdown observations.

There were 47 and 39 outliers for Class of 21 equipment items in Unit 1 and Unit 2 respectively. Although there were several outliers, no outliers resulted in equipment inoperability. Open issues will be resolved as noted in Section 7.0.

There were four outliers identified in the cable tray and conduit raceway walkdowns and two due to the LAR calculations. All have been resolved except for one that will require minor plant modifications.



## 9.0 REFERENCES

1. NRC Regulatory Guide 1.100, "Seismic Qualification of Electrical Equipment for Nuclear Power Plants," March 1976.
2. IEEE 344-1975, "IEEE Recommended Practice for Seismic Qualification of Class 1E Equipment for Nuclear Power Generating Stations," 1975.
3. USNRC Standard Review Plan Section 3.10, "Seismic and Dynamic Qualification of Mechanical and Electrical Equipment," NUREG-0800, July 1981.
4. Generic Letter 87-02, "Verification of Seismic Adequacy of Mechanical and Electrical Equipment in Operating Reactors, Unresolved Safety Issue (USI) A-46," USNRC, Washington, D.C., February 19, 1987.
5. "Generic Implementation Procedure (GIP), for Seismic Verification of Nuclear Plant Equipment," Revision 2, February 1992, Seismic Qualification Utility Group.
6. USNRC, Supplement 1 to Generic Letter (GL) 87-02, that transmits "Supplemental Safety Evaluation Report No. 2 (SSER No. 2) on SQUG Generic Implementation Procedure, Revision 2, as Corrected on February 14, 1992 (GIP-2)," May 22, 1992.
7. USAEC Regulatory Guide 1.60, "Design Response Spectra for Seismic Design of Nuclear Power Plants," December 1973.
8. USAEC Regulatory Guide 1.61, "Damping Values for Seismic Design of Nuclear Power Plants," October 1973.
9. USAEC, TID-7024, "Nuclear Reactors and Earthquakes," August 1963.

10. G.W. Housner, "Design of Nuclear Power Reactors Against Earthquakes," Proceedings of the Second World Conference on Earthquake Engineering, Vol. 1, Japan 1960, pg. 133, 134, and 137.
11. ANSI/IEEE 344-1971, IEEE Guide for Seismic Qualification of Class 1 Electric Equipment for Nuclear Power Generating Stations, Approved September 16, 1971.
12. "The GIPPER, User's Manual," Stevenson and Associates, April 1993.
13. SSRAP Report, "Use of Seismic Experience Data to Show Ruggedness of Equipment in Nuclear Power Plants," Senior Seismic Review and Advisory Panel, published by Sandia National Laboratory, Report DE92-019328, June 1992.
14. EPRI NP-5228, "Seismic Verification of Nuclear Plant Anchorage, Volume 1: Development of Anchorage Guidelines; Vol. 2: Anchorage Inspection Workbook," URS Corp./John A. Blume & Associates, Prepared for Electric Power Research Institute, Palo Alto, CA, Rev. 1, June 1991.
15. AEPSC Report No. MT2, Rev. 0, "Summary Report of Fundamental Frequencies Determined By In-Situ Transfer Function Modal Testing at Cook Nuclear Plant," approved August 10, 1994.
16. NUREG/CR-3480, "Value/Impact Assessment for Seismic Design Criteria USI A-40," Lawrence Livermore National Laboratory, August 1984.
17. Stevenson & Associates Report, "USI A-46 Cable Tray and Conduit Raceway Review," November 1995.

**APPENDIX A**

**RESUMES OF**

**SEISMIC EVALUATION PERSONNEL**

**(PER SQUG GENERIC IMPLEMENTATION  
PROCEDURE, SECTION 2)**



**GEORGE G. THOMAS****EDUCATION**

B.S. - Civil Engineering - Purdue University, 1976

M.S. Civil Engineering - Purdue University, 1978

**REGISTRATION:**

Registered Engineer-in-Training: Indiana

Passed Principals and Practices Exam: Texas

**PROFESSIONAL HISTORY:**

Stevenson & Associates, Cleveland, Ohio, Project Engineer, 1982 - Present

Cleveland State University, Cleveland Ohio, Engineering Instructor, 1981 - 1987

Davy McKee Company, Cleveland, Ohio, Lead Engineer, 1980 - 1982

Exxon Production Research Company, Texas, Research Engineer, 1978 - 1980

McDermott-Hudson Engineering Con., Engineer/Draftsman, 1976 - 1977

**PROFESSIONAL EXPERIENCE:**

Mr. Thomas has served as a Project Manager for Stevenson & Associates on a variety of projects involving the evaluation and qualification of nuclear safety-related structures, equipment and piping. He has been responsible for the detailed seismic analysis, testing and qualification of a variety of mechanical and electrical equipment and piping systems, including the anchorage and support structure evaluations. He has performed analysis of safety-related piping systems subject to extreme loadings of earthquake, tornado wind, and missile impact. He has performed a failure analysis of a piping system due to water hammer loading. He has performed in-situ modal testing of nuclear components to determine their dynamic characteristics, and to determine structure amplified response spectra.

Mr. Thomas developed a large portion of the Generic Implementation Procedure, GIP, for the Seismic Qualification Utilities Group, SQUG, that defined the generic walkdown requirements for USI A-46. Mr. Thomas was a walkdown participant for both the SQUG Zion and Nine Mile Point 1 trial plant walkdowns for SQUG. Mr. Thomas prepared and presented the training modules on the GIP for the SQUG training program, and was one of the Subject Matter Experts for the development of the training program and the training program tapes.

Mr. Thomas was the Project Manager and a Lead Walkdown Engineer on a Seismic Review Team for the D.C. Cook Nuclear Station Units 1 and 2 for USI A-46, Arkansas Nuclear One Units 1 and 2 for a combine USI A-46 and Seismic Margins Assessment for IPEEE, and Waterford 3, Grand Gulf 1 and V.C. Summer 1 for the Seismic Margins Assessment for IPEEE. In addition, Mr. Thomas was the Project Engineer for the Turkey Point Unit 3 and 4 and St. Lucie Unit 1 and 2 USI A-46 and seismic IPEEE efforts using Florida Power & Light's

Utility specific program. Mr. Thomas was Project Manager and participated on the walkdown for the seismic IPEEE Probabilistic Risk Assessment for Beaver Valley Unit 2. Mr. Thomas as Project Manager for these evaluations is the primary author of the final IPEEE and USI A-46 reports.

Mr. Thomas has developed background material and a seismic criteria document for a utility client for an older nuclear power plant to be used by the utility in seismic evaluations for modifications and additions to plant structures, equipment and piping. He has served as a Project Engineer for a pilot snubber reduction program for a utility and has provided expert consulting services to another utility for their in-house snubber reduction program.

Mr. Thomas developed program COMPARE which consisted of the assembly of a data base of nuclear power plant components that have been previously seismically qualified. He developed the computer software on an IBM-PC computer to store and retrieve seismic qualification data on these components. The program is used to facilitate seismic qualification of components not previously qualified by comparison to those components qualified in the data base.

Mr. Thomas has served as a part time instructor in the School of Civil Engineering and Engineering Technology at Cleveland State University. On the undergraduate level, he has taught Static, Dynamics, Material Science, Structural Analysis and Concrete Design. In the graduate program, he has taught Advanced Steel Design. In all of the teaching assignments he was responsible for developing the course outline, lecture notes, problems and tests.

Mr. Thomas served as Lead Engineer in the Piping Engineering Group of Davy McKee Company. His work consisted of the design supervision and design of piping networks in a number of different petrochemical facilities. His responsibilities comprised the following:

Designing and analyzing piping networks subjected to thermal, weight, wind, earthquake, and pressure loadings using both manual and computerized techniques.

Design and analysis of pipe supports and pipe support structures. Preparing specifications for expansion joints, and providing an overall support and expansion joint package. Preparing hydrotest procedures and planning of hydrotest circuits.

Mr. Thomas served as a Research Engineer in the Offshore Structures Division of Exxon Production Research Company. His work consisted of development of design and analysis procedures for the Guyed Tower, a type of deepwater offshore production platforms. He performed the dynamic, structural, and fatigue analysis necessary for the Guyed Tower design of three proposed structures. He also wrote, revised, and maintained computer programs used in the Guyed Tower analysis and design procedures.

Mr. Thomas served as an Engineer and Draftsman for Robert W. Crooks Consulting Engineer and McDermott-Hudson Engineering Company. His work consisted of structural design, drafting, foundation design, railroad layout, and site development for chemical facilities.

## PUBLICATIONS:

1. Mr. Thomas, G.G. and Finn, L.D., "A Guyed Tower for North Sea Production," Presented at 4th Offshore North Sea Technology Conference in Stavanger, Norway, 1980.
2. Thomas, G.G. and Starck, R.G., "Overview of SQUG Generic Implementation Procedure (GIP)," "Second Symposium on Current Issues Related to Nuclear Power Plant Structures, Equipment, and Piping with Emphasis on Resolution of Seismic Issues in Low-Seismicity Regions, EPRI NP-6437-D Proceedings, May 1989.
3. Thomas, G.G. and Starck, R.G., "Overview of SQUG Generic Implementation Procedure (GIP)," Nuclear Engineering and Design, Vol. 123 (1990), Nos. 2&3, October (II) 1990, Pgs 225-231.

## WALTER DJORDJEVIC

### EDUCATION:

B.S. - Civil Engineering, University of Wisconsin at Madison, 1974

M.S. - Structural Engineering, Massachusetts Institute of Technology, 1976

### REGISTRATION:

State of California, State of Wisconsin, Commonwealth of Massachusetts, State of Michigan

### PROFESSIONAL HISTORY:

Stevenson & Associates, Inc., Vice President and General Manager of the Boston office, 1983 - present

URS/John A. Blume & Associates, Engineers, Boston, Massachusetts, General Manager, 1980 - 1983; San Francisco, California, Supervisory Engineer, 1979 - 1980

Impell Corporation, San Francisco, California, Senior Engineer, 1976 - 1979

Stone & Webster Engineering Corporation, Boston, Massachusetts, Engineer, 1974 - 1976

### PROFESSIONAL EXPERIENCE:

Mr. Djordjevic founded the Stevenson & Associates Boston office in 1983 and serves as Vice President and General Manager of the Boston area office.

Mr. Djordjevic is expert in the area of dynamic qualification of electrical and mechanical equipment. He has participated in and managed over twenty major projects involving the evaluation and qualification of vibration sensitive equipment and seismic hardening of equipment. As demonstrated by his committee work and publications, Mr. Djordjevic has participated in and contributed steadily to the development of equipment qualification and vibration hardening methodology.

Mr. Djordjevic's previous walkdown experience included all of the SEP plants (8 plants), Nine Mile - Unit 1, D.C. Cook - Units 1 & 2, the Hanford Reservation Purex facility and the Savannah River Plant Reservation L-Reactor.

Representative projects include overseeing the SEP shake-table testing of electrical raceways, in-situ testing of control panels and instrumentation racks at various nuclear facilities, equipment anchorage walkdowns and evaluations at various nuclear facilities, principal author of the CERTIVALVE software package to evaluate nuclear service valves, and contributing author in



the development of the ANCHOR and EDASP software packages commercially distributed by Stevenson & Associates.

Mr. Djordjevic has been involved extensively in the reassessment of safety-related equipment for commercial nuclear facilities and government U.S. Department of Energy facilities, for which he maintains an active Q-clearance status. He has served on advisory groups and review teams touring older existing nuclear facilities to assess safety and has performed earthquake reconnaissance at such installations following seismic events.

#### PROFESSIONAL GROUPS:

Member, Institute of Electrical and Electronics Engineers, Nuclear Power Engineering Committee Working Group SC 2.5 (IEEE-344)

Chairman, American Society of Civil Engineers Nuclear Structures and Materials Committee, Working Group for the Analysis and Design of Electrical Cable Support Systems

Member, American Society of Mechanical Engineers Operation, Application, and Components Committee on Valves, Working Group SC-5



## STEPHEN ANAGNOSTIS

### EDUCATION:

B.S. - Civil Engineering, Columbia University School of Engineering, 1974

M.S. - Structural Engineering, Massachusetts Institute of Technology, 1976

### PROFESSIONAL HISTORY:

Stevenson & Associates, Inc., Project Manager, 1983 - present

URS / John A. Blume & Associates, Engineers, Boston, Massachusetts, Project Engineer 1982 - 1983; Senior Engineer, 1980 - 1982

Charles Stark Draper Laboratory, Cambridge, Massachusetts, Technical Staff, 1976 - 1980; Draper Fellow, 1974 - 1976

### PROFESSIONAL EXPERIENCE:

Mr. Anagnostis joined Stevenson & Associates in February 1983 as Project Manager of the Boston area office.

Mr. Anagnostis was extensively involved in both analysis (frequency domain and time domain structural dynamics) and testing (in-situ modal and full-scale shaking-table) at URS/Blume's Boston office. He had lead technical responsibility for a two year program to develop a seismic evaluation criteria for electrical raceway systems at eight of the oldest United States nuclear power stations. This program included the design, supervision, and data analysis of shaking-table tests of full-scale raceway systems, cyclic/fatigue tests of raceway components, and the development of analytical evaluation techniques incorporating the test results.

As a member of the technical staff of Charles Stark Draper Laboratory, Mr. Anagnostis was involved in the assessment of space based surveillance (infra-red and radar) and defense systems for the Defense Advanced Research Projects Agency. He was a major author of a software simulation system to assess the capabilities of spaced based optical systems including structural vibrations, control dynamics, and optical performance.

### PROFESSIONAL GROUPS:

Committee, Working Group for the Analysis and Design of Electrical Cable Support Systems

Member, American Society of Civil Engineers Nuclear Structures and Materials







## STEPHEN ANAGNOSTIS

### EDUCATION:

B.S. - Civil Engineering, Columbia University School of Engineering, 1974

M.S. - Structural Engineering, Massachusetts Institute of Technology, 1976

### PROFESSIONAL HISTORY:

Stevenson & Associates, Inc., Project Manager, 1983 - present

URS / John A. Blume & Associates, Engineers, Boston, Massachusetts, Project Engineer 1982 - 1983; Senior Engineer, 1980 - 1982

Charles Stark Draper Laboratory, Cambridge, Massachusetts, Technical Staff, 1976 - 1980; Draper Fellow, 1974 - 1976

### PROFESSIONAL EXPERIENCE:

Mr. Anagnostis joined Stevenson & Associates in February 1983 as Project Manager of the Boston area office.

Mr. Anagnostis was extensively involved in both analysis (frequency domain and time domain structural dynamics) and testing (in-situ modal and full-scale shaking-table) at URS/Blume's Boston office. He had lead technical responsibility for a two year program to develop a seismic evaluation criteria for electrical raceway systems at eight of the oldest United States nuclear power stations. This program included the design, supervision, and data analysis of shaking-table tests of full-scale raceway systems, cyclic/fatigue tests of raceway components, and the development of analytical evaluation techniques incorporating the test results.

As a member of the technical staff of Charles Stark Draper Laboratory, Mr. Anagnostis was involved in the assessment of space based surveillance (infra-red and radar) and defense systems for the Defense Advanced Research Projects Agency. He was a major author of a software simulation system to assess the capabilities of spaced based optical systems including structural vibrations, control dynamics, and optical performance.

### PROFESSIONAL GROUPS:

Committee, Working Group for the Analysis and Design of Electrical Cable Support Systems

Member, American Society of Civil Engineers Nuclear Structures and Materials



## JOHN D. STEVENSON

### EDUCATION:

B.S. - Civil Engineering-Virginia Military Institute, 1954  
M.S. - Civil Engineering-Case Institute of Technology, 1962  
Ph.D.- Civil Engineering-Case Institute of Technology, 1968

### REGISTRATION:

Commonwealth of Virginia, State of Ohio

### PROFESSIONAL HISTORY:

Stevenson & Associates, Cleveland, Ohio, President: 1981 - present  
Structural Mechanics Associates, Cleveland, Ohio, Vice President: 1980 - 1981  
Woodward Clyde Consultants, Cleveland, Ohio, Vice President: 1979 - 1980  
A.G. McKee & Co., Cleveland, Ohio, Vice President: 1976 - 1979  
Case Western Reserve University, Cleveland, Ohio, Assoc. Prof.: 1974 - 1976  
Westinghouse Electric Co., Pittsburgh, Pennsylvania, Consultant: 1972 - 1974  
University of Pittsburgh, Pittsburgh, Pennsylvania, Adjunct Professor: 1970 - 1972  
Westinghouse Nuclear Energy Systems, Manager Structural System Engineering: 1966 - 1970  
Virginia Military Institute, Assistant Professor: 1957 - 1962

### PROFESSIONAL EXPERIENCE:

Since November 1981, Dr. Stevenson has managed and has served as President and Senior Consultant to Stevenson & Associates. The firm specialized in high technology consulting and engineering services associated with failure analysis of structural and mechanical systems; extreme load; and nonlinear, dynamic, probabilistic and high temperature analyses.

His years of expertise include structural and mechanical design and qualification of nuclear power plant structures and components. He serves on several committees of the ASCE, ASME, ANS, ACI and AISC charged with the development of standards devoted to design of nuclear power stations and 23 years as a structural-mechanical engineer with particular application to structural design, analysis and evaluation of containment structures. A list of nuclear containment related projects which Dr. Stevenson performed or directly supervised, is as follows:

1. Developed seismic design criteria for 5 nuclear containments: Westinghouse Turnkeys
2. Reviewed and approved structural design adequacy from plans and specifications for 5 nuclear power plant containments: Westinghouse Turnkeys
3. Quality Assurance audit (technical) of the Tokamak fusion test reactor tritium containment structures to resist seismic loads: U.S. Department of Energy

## JOHN D. STEVENSON

Page Two

4. Review and evaluation of the Purex facility structural capabilities at Hanford Plant: U.S. Department of Energy.
5. Survey and evaluation of the L reactor containment capabilities for Savannah River Plant: E.I. DuPont
6. Systematic evaluation of the structural capacity of a 600 MW Candu reactor containment in Argentina
7. Review of structural adequacy of the nuclear plant containment facilities for the D.C. Cook Nuclear Power Plant: American Electric Power Corporation to include probabilistic determination of ultimate strength capacity of the containment to carry severe accident loads
8. Review of structural adequacy of the nuclear plant containment for the Ft. Calhoun containment to include probabilistic determinations of ultimate strength capacity of the containment to carry severe accident loads
9. Personally performed walkdowns of 12 operating nuclear power plant containments to determine "as is" condition and to recommend up-grade and in-service inspection procedures for VVER-PWR plants

### PROFESSIONAL GROUPS:

Member, American Society of Civil Engineers, Structural Division Committee on Dynamic Analysis of Nuclear Facilities  
Chairman, American Society of Civil Engineers, Nuclear Standards Committee  
Former Chairman, American Society of Civil Engineers, Executive Committee Technical Council Codes and Standards  
Member, American Concrete Institute, Joint ACI-ASME Committee on Concrete Pressure Retaining Components in Nuclear Service, ASME BPVC-Section III-Div. 2  
Former Chairman, American Concrete Institute, Joint ACI-ASME Committee on Concrete Pressure Retaining Components in Nuclear Service, ASME BPVC-Section III-Div. 2, Subgroup on Design of Concrete Containments and Reactor Vessels  
Member, American Society of Mechanical Engineers, Subgroup on Design of ASME BPVC-Section III-Div. 1 Nuclear Components Subcommittee on Qualification of Mechanical Components in Nuclear Service  
Chairman, American Society of Mechanical Engineers, Subgroup on Design of Shipping Cask Containments ASME BPVC-Section III-Div. 3  
Member, NUPPSO, American Nuclear Society Committee on Nuclear Power Plant Codes and Standards  
Member, ANS-2, American Nuclear Society Committee on Site Evaluation; NUPPSO, American Nuclear Society Committee on Nuclear Power Plant Codes and Standards  
Chairman, ANS-2.3, American Nuclear Society Committee on Site Evaluation; NUPPSO, American Nuclear Society Committee on Nuclear Power Plant Codes and Standards, Tornado Criteria  
Member, AISC, American Institute of Steel Construction Committee on Specifications for Structural Steel in Safety Class Nuclear Structures

G. A. Harstead

**GUNNAR A. HARSTEAD**

**EDUCATION**

B.S.C.E., Columbia University, New York, 1954  
M.S.C.E., Columbia University, New York, 1962  
Ph.D., New York University, New York, 1966

**REGISTRATION:**

States of New York, New Jersey, Pennsylvania and Florida

**PROFESSIONAL HISTORY:**

HEA, Inc., President, (1979-Present)  
Soot & Harstead Associates, Vice President, (1975-1979)  
Stone & Webster, Assistant Chief Structural Eng, (1974-1975)  
Burns & Roe, Inc., Senior Supervising Civil Eng, (1967-1974)  
Westinghouse, Senior Engineer, (1965-1967)  
Severud Associates, Structural Engineer, (1959-1963)  
Howard Needles, Structural Designer, (1957-1959)  
US Navy, Commissioned Officer, (1954-1957)

**PROFESSIONAL EXPERIENCE:**

Dr. Harstead has thirty five years experience in structural analysis and design, mainly in the area of nuclear power. He has served as a consultant for NRC design audits and site inspections of nuclear power plants. He has developed design criteria and code requirements for design of nuclear power plant structures and equipment, and served as a leader of expert investigations of structural and mechanical failures. In his current position as President of HEA, Inc, Dr. Harsted is responsible for the direction of structural and mechanical engineers, with primary responsibility for design and analysis of nuclear power facilities.

G. A. Harstead

As a consultant to the Nuclear Regulatory Commission, Dr. Harstead has performed integrated design inspections at the Sequoyah, Byron, Seabrook, River Bend, and Perry nuclear power plants. The inspections included field walkdowns to determine seismic adequacy of mechanical and electrical equipment and distribution systems and structures. He has also conducted independent design reviews at the Limerick, Clinton, Vogtle, Nine Mile Point, and South Texas nuclear power plants. Here he conducted site visits to validate "as built" and as designed" consistency. Dr. Harstead has also performed structural audits at the Waterford 3, Midland 1 & 2 and Comanche Peak nuclear power plants. Extensive field walkdowns were performed at Midland to evaluation structural adequacy.

The U.S. Department of Energy contracted with Dr. Harstead as a consultant for the development of the USDOE Criteria for Seismic Analysis for the NPR program.

As Vice President of Soot & Harstead Associates, Dr. Harstead was responsible for analysis and design of vessels and tanks for Angra (Brazil) nuclear plant; seismic analysis of mechanical equipment for Allens Creek and South Texas Nuclear Plants; field erection of post-tensioned concrete parking garage.

As the Assistant Chief Structural Engineer for Stone & Webster, he managed a group of engineers in the following areas of nuclear power plants (Surry 3,4, and Indian Point 3): Vessels and tanks; pipe stress and pipe supports; pipe rupture analysis; containment analysis and design; Category I structures; seismic evaluation of equipment. Extensive inspections at Indian Point #3 were performed for the New York Power Authority.

His work as the Senior Supervising Civil Engineer for Burns & Roe involved analysis and design of Category I structures and for seismic evaluation of equipment and pipe supports. Projects include TMI #2, Forked River, Laguna Verde, Clinch River, WPPSS #2, Cooper nuclear plants.

At Westinghouse, his responsibilities included the development of criteria and review of design for nuclear projects: Ginna, H.B. Robinson, Indian Point No. 2, and Point Beach.

#### Summary of Nuclear Projects Experience - Power Companies & Authorities

Indian Point Unit #2: Seismic analysis and development of instructure response spectra for concrete and steel buildings. Analysis of block

G. A. Harstead

walls for additional seismic loads.

Indian Point #3: Analysis of base plates for pipe supports. Design of structural steel bracing system for service water pump enclosure. Evaluation of spent fuel pool for cask drop loads.

Angra (Brazil): Analysis and design of safety related air handling systems.

Kori (Korea): Seismic analysis of air handling units.

Donald C. Cook: Piping analysis and evaluation of pipe supports and seismic analysis of electric control panels.

Salem: Evaluation of the effects of tornado missile impact on auxiliary feedwater tank. Nonlinear time history analysis of the steam generator snubbers and supports for accident loads. Specification preparation for spent fuel storage racks.

Clinton: Design analysis and detailed fabrication and installation drawings of safety equipment for reactor piping (flow diverters).

Oyster Creek: Analysis of the as-built concrete floor slab and supports for a new heat exchanger. Analysis of the spent fuel storage pool for high density racks and thermal effects. Fuel rack drop analysis on concrete plugs above reactor vessel. Structural modification of the radwaste Building, Analysis of horizontal structural bracing system. Analysis of control room panels under missile impact. Evaluation of reinforcement of steel containment penetrations. Design of rigging for the removal and replacement of switchgear. Review of seismic models.

J.A. Fitzpatrick: Analysis of the as-built reactor building mat for additional hydrodynamic loads. Elasto-plastic analysis of the spent fuel pool consolidated fuel loads.

Catawba: Stability - buckling analysis of the steel containment vessel by using BOSOR4 and ANSYS computer programs.

Ranch Seco: Design and finite element analysis of steel buried diesel fuel tanks.

Waterford III: Structural evaluation of the as-built common mat by using finite element analysis.

Alto Lazio (Italy): Analysis and design of a steel flow diverter to be used in the reactor safety system.

G. A. Harstead

Diablo Canyon: Review and assessment of seismic analysis of structures, piping, electrical raceways and HVAC systems and their supports. Field visits were made to verify designs of piping supports and structural supports.

Palisades: Investigation of temperature effects on the reinforced concrete biological shield wall.

Palo Verde: Review of structural design criteria.

Connecticut Yankee: Seismic analysis of Aux Feedwater Pumphouse including soil structure interaction and interaction with Containment.

#### PROFESSIONAL GROUPS:

American Society of Civil Engineers

Chi Epsilon

American Nuclear Society

American Concrete Institute. ACI 349, Chairman of Subcommittee on Design

American Institute of Steel Constructions

#### PUBLICATIONS AND REPORTS

Numerous publications on structural and seismic analysis of nuclear power plants.

## PAUL R. WILSON

### EDUCATION:

B.S. - Civil Engineering - Bradley University, 1980

### REGISTRATION:

State of Ohio

### PROFESSIONAL HISTORY:

Stevenson & Associates, Cleveland, Ohio, Project Engineer: 1981 - present  
Fabco Metals, East Peoria, Illinois, Detailer: 1978-1980

### EXPERIENCE:

Since April 1981 Mr. Wilson has served as a Staff, Senior and Project Engineer for Stevenson & Associates. He has over fourteen years experience as a structural-mechanical engineer.

Mr. Wilson has been involved with fragility analyses of structures and components for seismic and other accident loads. For those project involving seismic fragilities, he was involved in the development of seismic floor response spectra including soil-structure interaction effects. Additionally, he has developed seismic floor response spectra for use in the USI-A46 program and seismic IPEEE program. He co-developed a computer program to evaluate the seismic margin capacity of vertical cylindrical liquid storage tanks.

Mr. Wilson has been responsible for a design audit of the analysis of a reactor containment building internal structural steel and seismic capabilities of a variety of mechanical and electrical equipment and distribution systems. He has performed analysis for the seismic qualification of structural steel supports of more than 100 electrical components and piping systems. Mr. Wilson served as project engineer for the reevaluation of the seismic capabilities of some 69 electrical and mechanical components of an operating nuclear power plant for Northeast Utilities Company. He has also performed in-depth comparisons between the structural steel design requirements of the AISC specification and the ASME Codes.

While serving as a consultant for the Midland Nuclear Power Project to Bechtel Power Corporation, Ann Arbor Office, Mr. Wilson helped prepare and review seismic qualification documentation for a large number of components in preparation for an



NRC SQRT audit of the Midland Nuclear Power Project.

Mr. Wilson has been involved in in-situ modal testing and analysis of structures, including structural steel truss type electrical transmission towers and nuclear plant electrical cabinets and racks, and in the recording of ground motion characteristics due to underground blast.

In addition, Mr. Wilson has performed numerous linear and nonlinear computer analyses of components structures, and structural systems. He has also developed computer software to automate analysis of mechanical components for limiting nozzle loads.

Mr. Wilson has provided technical litigation support with respect to structural analysis and design, which included document reviews, and deposition preparation and support.

#### PROFESSIONAL GROUPS:

Member, American Society of Civil Engineers

Member, American Concrete Institute

Member, National Society of Professional Engineers

#### PUBLICATIONS:

1. Skreiner, K.M., Stevenson, J.D., Wilson, P.R., "Relay Behavior at the Perry Nuclear Power Plant During the 1986 Earthquake in Leroy, Ohio," EPRI NP-6472, Project 2849-2, September 1989.
2. Stevenson, J.D., Wilson, P.R., "The 1986 Leroy Ohio Earthquake: Performance of Power and Industrial Facilities," EPRI NP-6558, Project 2849-3, November 1989.



100



101



SATYAN-SHARMA, TIRUMANI

352 CORNHILL COURT  
WESTERVILLE, OHIO, 43081  
Phone: 614-895-2278

Citizenship: United States Citizen

EDUCATION: New York University, New York - M.S. (Struc. Mech) - 1973  
University of Mysore, India - B.E. (Struc. Mech) - 1967  
Completed Westinghouse Reactor Simulator Training (1 week)

REGISTRATION: Professional Engineer, New York State

EXPERIENCE SUMMARY: September 1978 - Present:

AMERICAN ELECTRIC POWER SERVICE CORPORATION  
1 Riverside Plaza, Columbus, Ohio 43215

Principal Engineer - Project Manager  
Nuclear Engineering Department (1994 - Present)

Project Manager responsible for all issues related to the reactor vessels of Cook Nuclear Plant Units 1 & 2.

Project Manager for NRC GL 87-02, Seismic Verification of Electrical and Mechanical Equipment in Nuclear Plants, SQUG Project.

Principal Engineer, (Nuclear Safety & Licensing)  
Nuclear Operations Division (1978 - 1993)

Responsible for the licensing efforts and providing safety analyses support to operating power plants (Cook Nuclear Plant, Units 1 & 2) in the areas of engineering mechanics, structural mechanics and mechanical engineering. Responsible for responding to the NRC on I.E. Bulletins related to the above fields, preparation of Technical Specification amendments, coordination for licensing interface for the Inservice Inspection Program, responding to the NRC Inspection Reports and participation in the meetings with the NRC to resolve items related to the above fields.

Lead Engineer/Group Supervisor responsible for safety reviews performed in accordance with 10 CFR 50.59 for all design changes and plant modifications; design criteria and specification changes; evaluation of problem reports for reportability evaluation. Cognizant Seismic Engineer for equipment seismic qualification.

Representative for the AEPSC in: Westinghouse Utility Owners Group Material Subcommittee; Corporate Representative for Seismic Qualification Utility Group (SQUG) on USIA-46; Attending Member for Material Property Council (MPC), review technical papers for MPC for publication, Member of EPRI-Post Earthquake Investigation; AEP representative in the W utility group that developed the Leak-Before-Break criterion; Member ASCE/ASME Committee on Nuclear Standards.



Experience (cont'd):

AEPSC representative to the Westinghouse Utility Group that developed the leak-before-break criterion. Lead engineer for the pressurizer surge line monitoring instrumentation and evaluation project. Performed safety evaluation for steam generator replacement. Performed plant decommissioning studies. Act as AEPS cognizant engineer on seismic qualification of electrical and mechanical components. I am also responsible for contract administration and technical coordination with consulting companies. AEPS representative to the WOG-Material Subcommittee.

1978 to 1979: Responsible for safety and licensing activities of proposed changes to the plant as per 10CFR50.59, preparing licensing amendments, and coordinating efforts on responses to NRC Bulletins, Generic Letters, etc.

1975 to 1978: Stone & Webster Engineering Corporation, 1 Penn Plaza, New York, New York. Staff Engineer - Engineering Mechanics.

My responsibilities, associated with the Green County Nuclear Power Plant, included: Engineering and specification of an ASME Class 1 (plate and shell type) structural support for the reactor vessel, which included preliminary and final designs; finite element stress analysis and stress reports as per ASME Section III - NR; and supervision of Engineering and Design. I also designed the housing for excore nuclear instrumentation.

Coordinated with the NSSS vendor (Babcock & Wilcox) in performing the NSSS primary loop analysis for pipe rupture/break forces, determining the effect of rupture loads on the reactor vessel, and developing preliminary designs for guard pipes for coolant loop elbows. Also coordinated with the NSSS vendor concerning the installation of major nuclear components with respect to refueling procedures.

Responsible for Class I equipment seismic qualifications conducted in accordance with IEEE-344. This means that I provided seismic/ASME stress criteria input for all of the Stone & Webster specifications, aided in the bid evaluation and contract award and was involved in final vendor document review in the areas of stress reports and seismic qualifications. The Class I equipment involved included major equipment such as the diesel generator, polar crane and main steam safety valves, etc. I was also involved in writing the PSAR and other licensing activities.

I had concurrent similar responsibilities on two other nuclear projects, the Surry Nuclear Station for the Virginia Power and Light Co., and Santillan Nuclear Station for Electra-De-Viesgo (Spain).

Experience (cont'd):

12/73 to 1/75: Bechtel Power Corporation, Ann Arbor, Michigan.  
Structural Mechanics Engineer.

Responsible for engineering, finite element analysis and design of the pre-stressed concrete containment building for a 1380 MWe PWR nuclear station for the Consumer Power Co. Responsibilities included coordination with the Construction Department and pre-stress vendors. I was also responsible for preliminary studies/criteria and final design for a coal power plant for the Texas Light and Power Company.

2/72 to 12/73: Burns & Roe, Inc., Oradell, New Jersey. Structural Engineer.

Responsible for engineering and design of the diesel generator building, containment mat and biological shield analysis by using the finite element program for a BWR nuclear plant for WPPSS. Responsible for engineering and design of all the NSSS component supports and pipe restraints and engineering analysis coordination with the NSSS vendor and related interface on a PWR plant for the Jersey Central Power and Light Company. This involved extensive finite element analysis of the heavy section steel components.

6/69 to 2/72: E. Lionel Pavlo Engineering Company, New York, New York. Structural Engineer (Long Span Bridge Division).

Engineering, design and supervisory responsibilities associated with drafting plans for the 1688-foot span cantilever truss bridge (longest in USA) (Chester Bridgeport Bridge across Delaware River). Extensive finite element stress analysis, and designs for pile foundations, piers and cofferdams in conformance to AISC and AASHTO codes. Coordinated efforts in fabricating the main truss with Bethlehem Steel Company and the construction groups.

9/67 to 9/68: Government of Mysore, India. Junior Engineer.

Designed a multi-story reinforced concrete building and several bridges for a national highway project. In addition, designed and supervised construction of an elevated reinforced concrete water tank and an industrial building.

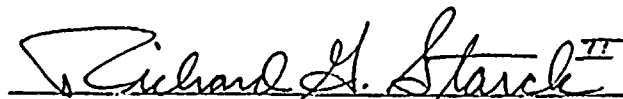
Language  
Capabilities:

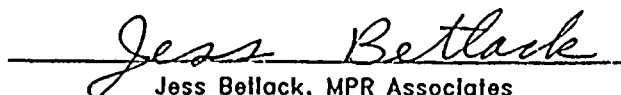
English  
Kannada, Hindi (Indian languages)

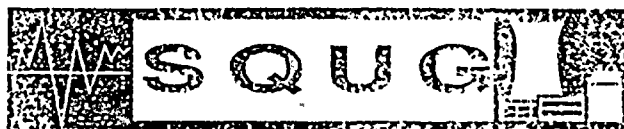


Systems and Relay Evaluation Training Course

This is to Certify that T. R. Satyan-Sharma has  
Attended the SQUG Systems and Relay Evaluation  
Training Course held on November 14-16, 1989. This includes  
Attendance in the Systems and Relay Workshop(s).  
Systems and/or Relay

  
Richard G. Starck, II, MPR Associates  
Systems Instructor

  
Jess Bellock, MPR Associates  
Relay Instructor

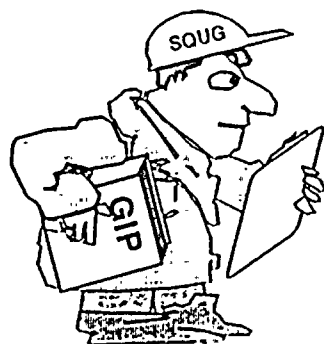


# Certificate of Achievement

This is to Certify that

**T. R. Satyan-Sharma**

has Completed the SQUG Walkdown Screening  
and Seismic Evaluation Training Course  
Held June 22-26, 1992



David A. Freed, MPR Associates  
SQUG Training Coordinator

Neil P. Smith, Commonwealth Edison  
SQUG Chairman

Robert P. Kassawara, EPRI  
SQUG Program Manager



Bertil A. Svensson

**EXPERIENCE**

I have been continuously employed by an American Electric Power Company subsidiary company since September 15, 1955 in various positions as follows:

July, 1986 to December 31, 1993  
Executive Staff Assistant  
Indiana Michigan Power Company  
Donald C. Cook Nuclear Plant  
One Cook Place, Bridgman, Michigan 49106

Responsible to the Plant Manager for organizing and coordinating licensing activities at the plant level and for assuring earliest and continuous plant involvement in licensing and other regulatory processes.

Representing the Plant on the 'Seismic Qualification Utility Group' and the Company Task Force formed to implement the NRC Generic Letter 87-02, "Verification of Seismic Adequacy of Mechanical and Electrical Equipment in Operating Reactors, Unresolved Safety Issue, USI A-46".

Representing the Plant Donald C. Cook Nuclear Plant Design Basis Documentation Reconstitution Project.

Serving as the alternate primary representative to the Westinghouse Owners Group and as the Company/Plant representative to the WOG Operations Subcommittee.

July, 1977 to July, 1986  
Assistant Plant Manager - Operations  
Cook Nuclear Plant

Responsible to the Plant Manager for the direction of the Operations Department activities to assure safe, efficient and reliable operation of the Plant. Coordinating operations and maintenance activities with the plant departments.

Performed the duties of the Plant Manager in his absence.

Served as a member and the Secretary of the Plant Nuclear Safety Review Committee and the Chairman of the PNSRC Subcommittee on Operations.

Bertil A. Svensson  
Page 2

September, 1969 to July, 1977  
Operations Supervisor  
Cook Nuclear Plant

Planning and Staffing the Cook Nuclear Plant Operations department.

Cold-License reactor operator training conducted by Westinghouse during the year 1970, which included obtaining a Reactor Operator Certificate on the Saxton Nuclear Reactor Plant.

Participated in the planning and execution of the pre-operational and start-up testing programs.

Responsible for all operations department pre-operation and startup test procedures and as a PNSRC member for reviewing all pre-operational and startup test procedures for the plant.

Responsible for the development of all operations department normal, abnormal, emergency, surveillance testing and annunciator response procedures.

Responsible to the Plant Manager for the safe and efficient execution of all Operations department activities associated with the operation of the two 1100 MW Cook Nuclear Plant units.

Responsible for compliance with the plants's technical specifications governing the operation of the nuclear plant.

Obtained a Cold Senior Reactor Operators License in 1974 and maintained the license until August, 1987.

July, 1968 to September, 1969  
Engineer  
American Electric Power Service Corporation  
New York, NY

Transferred to AEP Service Corporation, New York offices to (1) complete the Muskingum River Plant, Unit 5 startup report and operating procedures and (2) to work with the Cook Nuclear Plant, Plant Manager on system design reviews and to assist in the planning of the Cook Nuclear Plant organization including visits to other nuclear plants.

Bertil A. Svensson  
Page 3

July, 1965 to July, 1968  
Startup Engineer  
American Electric Power Service Corporation  
Canton, OH

I was officially transferred from the Kammer Plant to AEP Service Corporation, Mechanical Engineering Division, in Canton, OH as a startup engineer, July, 1965. I was working in this capacity on loan from the Kammer Plant since January, 1965. My duties in this position over the three year period involved the following:

January, 1965 to July, 1965 - worked as one of four on-shift startup engineers on the Tanners Creek Plant, Unit 4. A 500 MW unit with a coal fired supercritical boiler. My duties involved systems checkout, coordinating resolutions of checklist items, pre-operational and startup testing, planning and coordinating startup activities and the preparation of startup reports and operating procedures.

July, 1965 to December, 1967 - Cardinal Plant Simulator commissioning and startup of Units 1 and 2. My responsibilities involved the following activities:

- Final checkout and testing of the Cardinal Plant Control Room Simulator. (This was the first complete control room simulator in the country).
- Lead instructor on the simulator for the operating crews for the two Cardinal Units and the Muskingum River Plant, Unit 5 operators.
- Lead Startup Engineer for Cardinal Plant Unit 2. The Cardinal Plant units are both 600 MW units with coal fired supercritical boilers.
- December, 1967 to July, 1968 - Lead Startup Engineer for the Muskingum River Plant, Unit 5 a 600 MW coal fired supercritical boiler.

June, 1958 to July, 1965  
Engineer  
Ohio Power Company, Kammer Plant  
Moundsville, WV

Transferred to the Kammer Plant. During my seven years at the Kammer Plant I held the following positions:



22  
2



22  
22  
22



June, 1958 to September, 1959 - Test Engineer. My responsibilities as a test engineer involved performance testing and monitoring of the boilers, turbines and auxiliary systems for the three 225 MW conventional boiler units.

September, 1959 to December, 1960 - Assistant Results Engineer. Responsible for the maintenance, calibration and tuning of the instrumentation and control systems for the three Kammer units.

December, 1960 to July, 1965 - Results Engineer. Responsible to the Operations Supervisor for supervising and directing the Instrument and Controls Section and the Plant Performance Section for the three Kammer Plant units.

September, 1955 to June, 1958  
Engineer, Piping Section  
American Electric Power Service Corporation  
New York, NY

My responsibilities as an engineer in the Piping Section involved flow diagram reviews, piping system designs, piping sizing and pressure drop calculations and working with piping and hanger manufacturers including field trips to manufacturers and our plants under construction to check on piping fabrication and installation.

November, 1953 to September, 1955  
Exchange Student - Engineer  
Knutsen's Shipbuilding Corporation  
Halsite, NY

My employment with Knutsen's Shipbuilding Corporation was as an exchange student - engineer. I was sponsored by the American Scandinavian Foundation for the purpose of gaining practical experience in American industry. My primary duties involved working with mechanical and fluid systems design and installation on small navy landing crafts and rescue boats.

## EDUCATION

Graduated with a degree in Mechanical Engineering (3 year program) in 1952 from "Norrköpings Tekniska Gymnasium" (Norrköping's Technical College), Norrköping, Sweden



## Systems and Relay Evaluation Training Course

This is to Certify that Bert Svensson has  
Attended the SQUG Systems and Relay Evaluation  
Training Course held on September 26-28, 1989. This includes  
Attendance in the Systems and Relay Workshop(s).  
Systems and/or Relay

Richard G. Starck II  
Richard G. Starck, II, MPR Associates  
Systems Instructor

Jess Bellack  
Jess Bellack, MPR Associates  
Relay Instructor

GORDON P. ARENT  
2588 RACHER DRIVE  
POWELL, OHIO 43065  
(614)798-8430  
(614)223-2048

---

### WORK EXPERIENCE

January 1993 to Present

Project Coordinator, NSL&F (Licensing) previously NSL&A (Assessment) : Duties include: an independent assessment of shutdown risk issues and schedules related to plant outages, licensing related issues, ownership of environmental issues and Technical Specifications. Additional duties include the performance of self-assessments of all facets of D. C. Cook Nuclear Plant Operation including outages. The assessments provided a critical review of the Plant in comparison to NRC and INPO standards and expectations.

July 1992 to January 1993

Licensing Coordinator, Safety and Assessment Department, D. C. Cook Nuclear Plant. Responsibilities included: determination of prompt reportability for operational events, review and determination of issues related to licensing in support of plant operations and coordination of the Licensee Event Report System. Other duties included: alternate PNSRC Secretary, NRC liaison (with resident inspectors) and special projects (including the Design Basis Reconstitution Project and SQUG).

September 1991 to July 1992

Operations Department Procedure Supervisor. Formally established the Operations Department Procedure Section, including development of position descriptions, writers guides, administrative guidelines for the section and a strategic plan for procedure upgrade. Responsibilities included: management and administrative duties associated with the section, formal development of the section including the Five Year Strategic Plan and implementation of the Operations Department Modification Analysis Program. Collateral duties included: Acting Operations Training Specialist, department interviewer for prospective operators and special project assignments (e.g., WOG, SQUG, IPE/PRA, and Reduced Inventory Programs).

December 1986 to September 1991

Operations Department Training Specialist. Responsible for the development and implementation of on-the-job training for all Operations Department on-shift personnel. Additional responsibilities included: the review of all training materials presented to the operators for both the classroom and simulator settings, evaluation of simulator performance and training and acting as the liaison between the Operations Superintendent and the Operations Training Supervisor on issues pertaining to operator training. Collateral duties included: Acting Procedure Supervisor (beginning January 1990) and special projects (e.g. simulator task force, site liaison-Appendix R).

August 1985 to December 1986

Operations Department Administrative Compliance Coordinator. Duties included investigation and reporting of operational events related to the Operations Department, development of administrative procedure and policies and responding to issues identified by internal and external regulatory groups (e.g., INPO, NRC, ANI and Quality Assurance).

## WORK EXPERIENCE (cont)

September 1979 to August 1985

Plant Operator. Started at the plant as a utility operator and held on-shift positions up to and including reactor operator. Performed activities which included: plant tours, surveillance, system tagouts and alignments. Once licensed, performed all licensed operator activities including duties as a Unit Supervisor (stepped up following achievement of senior operators license). Additionally, acted as Field Coordinator for the Unit One 10 year ISI Hydrostatic Testing Program in 1985.

## SPECIAL ACTIVITIES/TRAINING

### Organizational Development Activities:

- Developed Control Room Response Organization in support of the Emergency Plan
- Developed and Implemented Operations Department Procedure Organization
- Initiated and Sponsored the development of the five (5) year strategic plan for procedures
- Initiated and Sponsored the development of the Modification Analysis Program (MAP)

Special Activities: Westinghouse Owners Group Operations Subcommittee Primary Representative  
IPE/PRA Independent Review Team - Plant Representative  
DBD Reconstitution Project - Project Engineer - Action Items  
SQUG Task Force Member  
Simulator Task Force Member  
Plant Liaison for Appendix R Audit  
INPO Peer Evaluator-Seqouyah Station 1987  
RHR/Reduced Inventory Task Force (GL 87-12, 88-17)  
Chairman, Operations Department "Code of Excellence" Committee  
Secretary, EOP Engineering Support Group (EOPCOPS)

Training: Licensed Reactor Operator and Senior Reactor Operator at D. C. Cook Nuclear Plant  
Seismic Qualification Utility Group(SQUG): Determination of Safe Shutdown Equipment and Relays  
General Physics-General Motors Project Management Training  
Root Cause Analysis Training  
Basics of Supervision  
Supervisory Job Interview Training  
Supervisory Employee Assistance Program Training  
Supervisory Fitness for Duty Training  
Equal Employment Opportunity/Affirmative Action Training  
INPO Sponsored Team Building Training

## EDUCATION

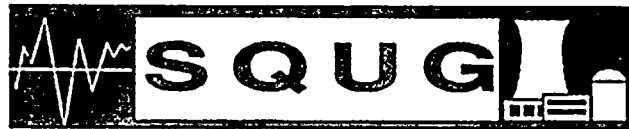
Bachelors of Arts, Business Administration and Bachelors of Applied Science (Nuclear Technology),  
Siena Heights College, April 1995

Senior Reactor Operators License, 1986

Associate Degree Applied Science, Lake Michigan College, May 1987

Diploma, St. Joseph High School, St. Joseph, Michigan, June 1975





# Certificate of Achievement

This is to Certify that

**Gordon Arent**

has Completed the  
**SQUG Equipment Selection and  
Relay Evaluation Training Course**  
Held March 18-20, 1991

Paul W. Hayes, MPR Associates

Richard G. Starck II, MPR Associates

Jess Betlack, MPR Associates



# Certificate of Achievement

This is to Certify that

Gordon Arent

has Completed the

SQUG Relay Evaluation Training Course

held March 18, 1991

  
Jess Betlack, MPR Associates

HAROLD W. YOUNG, III

Senior Mechanical Engineer

Personal:

6988 Ernest Way, Dublin, OH 43017. (615) 761-8144.  
Born January 15, 1952. Married, two children. Height: 5'-11",  
Weight: 175 lbs.

Education:

Stevens Institute of Technology, Hoboken, NJ. BSME, 1974.

Professional Licenses:

Professional Engineer; New Jersey - GE27280;  
Ohio - E-050097.

Professional Societies:

Member ASME, ASHRAE.

Experience:

American Electric Power Service Corporation, 1 Riverside Plaza, Columbus, OH 43215. (614) 223-2000. 1984 - Present.

Currently Cognizant HVAC Engineer for the Cook Nuclear Plant. Responsible for HVAC engineering of this 2,200 megawatt facility. Prior to holding this position, served as a Senior Engineer in the Mechanical Engineering Division. Responsibilities include design, specification writing, construction support and operations support. Total design responsibility for HVAC systems, dust collection systems, chilled water systems, steam piping systems, lab vent systems and HEPA filtration systems. Major projects for which I was lead HVAC engineer include:

- o Cook Training/Simulator Facility - A 100,000 sq. ft. facility including office space, classrooms, labs, a video studio, welding and machine shop areas and a \$40,000,000 simulator facility with associated computer room.
- o A 28,000 sq. ft. office building with an instrument calibration lab.
- o A 12,000 sq. ft. office building and locker room facility.
- o Service buildings for the Cook steam generator replacement project.
- o Tidd PFBC Demonstration Plant - All HVAC design and procurement for a DOE funded experimental coal fired power plant, including five large dust collection systems, miscellaneous HVAC and ventilation systems. Work includes innovative adaption of forty year old existing ventilation systems.

- o Zimmer Conversion Project - Developed all HVAC design changes for converting existing HVAC systems from nuclear plant requirements to coal plant requirements.

Burns & Roe, Inc., 550 Kinderkamack Road, Oradell, NJ 07646. (201) 265-2000. 1974-1984.

Worked as a Senior Building Services Engineer, providing power plant HVAC design, utility retrofit services and designing auxiliary facilities. Designed HVAC systems, ventilation systems, piping systems, fire protection systems and HEPA filtration systems. Was involved with writing technical proposals, developing budgets and schedules, developing specifications, documents and drawings, overall project coordination and field support. Had two years of field construction experience. Major projects included:

- o General Public Utilities, Oyster Creek and Three Mile Island, 1980-1984. Responsible for new, retrofit and replacement HVAC and fire protection systems.
- o TVA - Sequoyah Radwaste Facility, 1982-1984. Responsible for design of all HVAC and fire protection.
- o Nebraska Public Power District - Cooper Station, 1981-1982. Responsible for design of fire protection supply system including pump house, yard piping, fire pumps and storage tanks. Served as project coordinator.
- o Three Mile Island Recovery Effort, 1979.
- o Forked River Station, 1978. Developed HVAC and piping systems.
- o Three Mile Island, 1974-1977. Was Field Engineer for HVAC and fire protection for two years. Worked in home office prior to that assignment.

Additional Courses:

Management of Human Resources (Fairleigh Dickinson University) - 1978.

Practical Fossil Power Plant Technology (Burns and Roe) - 1979.

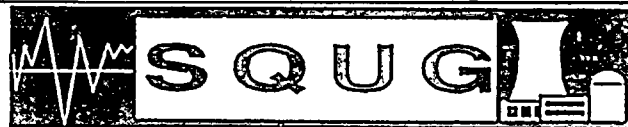
CADD Terminal Training (Intergraph) - 1982.

Principles of Supervision (AEPSC) - 1988.

Computer Courses:

DOS, Enable Spreadsheet, Enable Database - 1989.

OS2, Office Vision, Intermediate Lotus 123 - 1990.

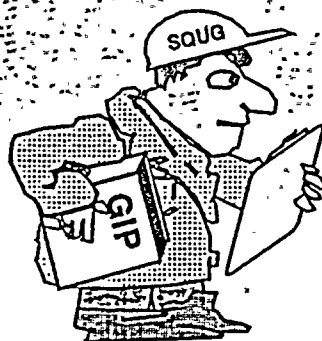


# Certificate of Achievement

This is to Certify that

Harry Young

has Completed the SQUG Walkdown Screening  
and Seismic Evaluation Training Course  
Held August 2-6, 1993



David A. Freed, MPR Associates  
SQUG Training Coordinator

Neil P. Smith, Commonwealth Edison  
SQUG Chairman

Robert P. Kassawara, EPRI  
SQUG Program Manager

## PERSONAL PARTICULARS

**NAME:** Jiten V. Ruparel

**ADDRESS:** 4433 Castleton Road West, Columbus, Ohio, 43220

**PHONE:** Home: 614-457-7710  
Office: 614-223-2544

**FAX:** Home: 614-459-4321

**DUAL CITIZENSHIP:** United States and Canada

**MARITAL STATUS:** Married, two daughters 23 and 19

**SOCAL SECURITY #:** 282-78-9291

**EDUCATION:** 1962: BAsC.: Electrical Engineering, London, U.K.  
1977: MAsC.: Management Science, Waterloo, Canada

**LANGUAGES:** English, Hindi, some French, some German.

**TEACHING:** Mathematics: Sheridan College, Ontario, Canada: 1977, 78  
Electrical Engineering, Franklin University,  
Columbus, Ohio, 1991, 92

**AFFILIATIONS:** Professional Engineer, Ontario, Canada  
President, Columbus Section, ISA, 1995-96  
Vice-President, Society of Professional Engineers of Atomic  
Energy of Canada, 1977  
President, Knolls Arlington Community Association, 1990  
Graduate, Upper Arlington Leadership Program, 1991

## Work Experience

### American Electric Power Service Corporation

- Present                      Project Manager, Design Basis, Nuclear Engineering. Collateral duties: Member: Life Cycle Assurance Task Force. Member: Nuclear Design Oversight Committee: 10CFR50.59 Reviews of all design changes and procedures.
- 1988-1991                    Group Leader, Design Changes- Supervision of I&C Design Changes for the Cook Nuclear Plant. Collateral duties: Representative for Nuclear Engineering on the Design Change Co- ordination Group, Member: SQUG Task Force, Member: EDSFI Response Team.
- 1983-1987                    Lead Electrical Engineer: Responsibility for engineering of design changes for the two unit, 1100MWe Westinghouse PWR Cook Nuclear Plant. Collateral duty: Member: Assessment Team, INPO and industry Operating Experience implementation.

### Ohio State University

- 1982                          Associate Director: Nuclear Services and Training Laboratory. Co-taught Nuclear Safety at the graduate level, developed training material for Shift Technical Advisors and Senior Reactor Operators for the Perry, Davis-Besse and the late Zimmer nuclear power plants.

1968-1971

Engineer, Fuel Handling Controls  
Worked on the design of the controls and instrumentation of the CANDU on-power fuelling machine: logic circuits, electro-hydraulic servo- controls and on-line direct digital control using a blue collar IBM 1800 computer.

The English Electric Co. Limited

1964-1967

Technical Representative: Responsibility for company's business in Nepal. Working through a local agent, handled the sales, contracts, technical liaison of turnkey diesel stations, 11 kV circuit breakers, transformers, small motors etc.

1962-1964

Graduate Engineering Training Program  
The first year was spent in following a control rod system through design, drafting, production, test, site installation and checkout. The second year was spent as an assistant startup engineer at Hinkley Point A nuclear generating station.







## Systems and Relay Evaluation Training Course

This is to Certify that Jiten V. Ruparel has  
Attended the SQUG Systems and Relay Evaluation  
Training Course held on September 26-28, 1989. This includes  
Attendance in the Systems and Relay Workshop(s).  
Systems and/or Relay

Richard G. Starck II

Richard G. Starck, II, MPR Associates  
Systems Instructor

Jess Bellack

Jess Bellack, MPR Associates  
Relay Instructor



1. 2015



2. 2016

3.

4. 2017



JUAN M. NIETO  
1056 Autumn Woods Drive  
Westerville, OH 43081  
(614) 891-5978 (Home)  
(614) 223-2053 (Work)

---

#### EDUCATION

University of Michigan, Ph.D. Nuclear Engineering, 1969

University of Michigan, M.S. Nuclear Engineering, 1963

University of Madrid, M.S. Mining Engineering, 1961

University of Madrid, B.S. Mining Engineering, 1960

#### WORK EXPERIENCE

1986 to Present

Senior Engineer/Engineer, Nuclear Operations, American Electric Power Service Corporation. Duties: Training Coordinator responsible for the implementation of training requirements in NS&L AP-10, and NSL&A AP-10. Trained NS&L/NSL&A staff on Emergency Operating Procedures, UFSAR Chapter 14.0 Safety Analysis, and various Technical Specifications and Systems Descriptions. Assist the manager of the Nuclear Safety Section with the annual training and testing of the NSL&A technical staff on NOD QP-7, Safety Reviews, and 10 CFR 50.59, Changes, Tests and Experiments. Generated and updated a pool of near one hundred questions on NOD QP-7 and 10 CFR 50.59 for the annual test. Serves as Training Coordinator for the NSDRC Subcommittee on Emergency and Security Plans, and have trained that Subcommittee on Emergency Operations Procedures (EOPs), and interface between the EOPs, and the UFSAR Chapter 14.0, the Technical Specifications, and the Emergency Plan. Assist the AEPSC Training Coordinator in his efforts to establish a training program for the Corporation. Have been trained on Root Cause Analysis, PRONET (program to search the UFSAR, the Technical Specifications, and other documents), core design, basis for D. C. Cook Emergency Operating Procedures, and other subjects.

Serve in the NSDRC Subcommittee on Corporate and Plant Occurrences conducting reviews of assigned documents. Serve in the NSDRC subcommittee on Emergency and Security Plans, conducting reviews of assigned documents, and acting as Training Coordinator for the Subcommittee.



Serve as leader of the Emergency Operating Procedures Multidisciplinary Task Force, and as interface between Cook Nuclear Plant and AEPSC on EOP related issues. Was the lead engineer on the update of the EOPs as a result of reducing the boron concentration in the Boron Injection Tanks to 0 PPM.

Served as Independent Safety Reviewer for the Nuclear Safety and Licensing Section (NSL&A). Serve as alternate Independent Safety Reviewer for NSL&A. Qualified Safety Reviewer in NSL&A. Have performed safety reviews of numerous RFC's, MM's, PM's, Specifications, Generic Procedures, and other miscellaneous items, under 10 CFR 50.59. Have performed Reportability Reviews of numerous Problem Reports/Condition Reports under 10 CFR 21, 10 CFR 50.72 and 10 CFR 50.73. Have provided input for the preparation of several Licensee Event Reports.

Serve as a member of the AEPSC SQUG Task Force since its inception. Main author of the SQUG Report to be submitted to the NRC as part of our response to Generic Letter 87-02. Have trained the members of the SQUG Task Force on Safe Shutdown paths and other aspects of the Generic Implementation Procedure (GIP). Recording Secretary of the AEPSC SQUG Task Force. Have participated in the initial seismic walkdown of Cook Nuclear Plant (Units 1 and 2). Have been trained by SQUG on the determination of the Safe Shutdown Paths for each Safe Shutdown Function as defined in the GIP.

Have coordinated numerous responses (non-submittals), to NRC's information notices. Was the lead engineer for the submittal on Cook Nuclear Plant Unit 2, Cycles 8 and 9. Made a successful presentation to the NRC to request changes in Chapter 14.0 of the UFSAR to reflect the safety analysis in Chapter 14.0 of the original FSAR. Was the lead engineer for the submittal in response to GL 90-06. Was the lead engineer for the submittal on proposed changes to the Technical Specifications as a result of the new spent fuel criticality analysis for Unit 2, Cycle 9. Was the author of the Restart Report for Unit 2, Cycle 8. Prepared a submittal to the NRC on status of our commitments regarding increased pressurizer PORV reliability in response to GL 90-06.

Has provided technical assistance on a variety of subjects, such as: a) Impact of potentially deficient card in AMSAC; b) Potential problems in the OT  $\Delta$ T and OP  $\Delta$ T instrumentation; c) RVLIS not environmentally qualified; d) Inadequate emergency lighting; e) Separation between safety related and non-safety related portions of the Reactor Protection System; f) Potential for inadequate core cooling during transfer to hot-leg recirculation during a LOCA, and others.

1973-1986

Nuclear Consultant, NUS Corporation. Duties: Performed activities associated with accident analysis, licensing and safety, high level waste disposal, and liquid metal fast breeder reactors.

1969-1973

Nuclear Engineer, NUCLENOR (Spain), Involved in pre-operational and start-up testing; prepared final safety analysis report; worked in fuel management.



# Certificate of Achievement

This is to Certify that

**Juan M. Nieto**

has Completed the SQUG Walkdown Screening  
and Seismic Evaluation Training Course

Held May 3-7, 1993



David A. Freed, MPR Associates  
SQUG Training Coordinator

Neil P. Smith, Commonwealth Edison  
SQUG Chairman

Robert P. Kassawara, EPRI  
SQUG Program Manager



Randall C. Steele

Professional Experience

|                 |  |
|-----------------|--|
| 6/87 to Present | American Electric Power<br>Columbus, Ohio  |
| 3/94 to Present | USI A-46 Lead Relay Reviewer,<br>Instrumentation and Controls Design<br>Section, Nuclear Engineering Department.<br>Responsible for USI A-46 Relay Evaluation<br>for Donald C. Cook Nuclear Plant.   |
| 5/91 to 3/94    | Low Voltage A.C. Distribution System<br>Engineer, Nuclear Engineering Department.<br>Responsible for 120 Volt A.C. Vital Bus<br>System. Prepared for and participated in<br>the Nuclear Regulatory Commission's<br>Electrical Distribution System Functional<br>Inspection at the Donald C. Cook Nuclear<br>Plant. |
| 6/90 to 5/91    | Electrical Verification Engineer, Wm. H.<br>Zimmer Generating Station, Moscow, Ohio.<br>Responsible for onsite electrical control<br>circuit design review, field design<br>modifications, and equipment check-out<br>and start-up during the construction of<br>the plant.  |
| 11/89 to 6/90   | Electrical Engineer, Fossil Plant<br>Engineering Department. Responsible for<br>various design modifications on fossil<br>plant auxiliary power and control systems<br>throughout the AEP system.  |
| 6/87 to 11/89   | Electrical Engineer, Nuclear Engineering<br>Department. Responsible for Environmental<br>Qualification of Electrical Equipment and<br>various design modifications involving<br>the auxiliary power and control systems<br>at Cook Nuclear Plant.  |

Education

B.S.E.E., University of Illinois at Urbana/Champaign, May 1987.

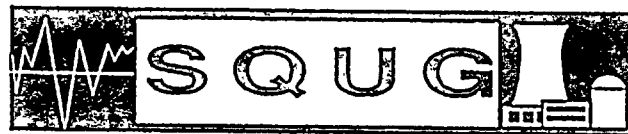
E.I.T.- Engineer in Training, State of Illinois.

SQUG Training

SQUG Equipment Selection Training Course, November 17-19, 1992

SQUG Relay Evaluation Training Course, November 17-19, 1992

SQUG Walkdown Screening and Seismic Evaluation Training Course,  
February 1-5, 1993



# Certificate of Achievement

This is to Certify that

R. C. Steele

has Completed the  
SQUG Relay Evaluation Training Course  
Held November 17-19, 1992

*Jess O. Bellack*  
Jess O. Bellack, MPR Associates

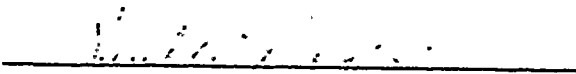



# Certificate of Achievement

This is to Certify that

**Randy Steele**

has Completed the  
**SQUG Equipment Selection Training Course**  
Held November 17-19, 1992

  
Paul W. Hayes, MPR Associates

  
Richard G. Starck II, MPR Associates

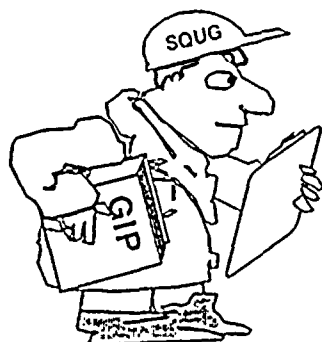


# Certificate of Achievement

This is to Certify that

**Randall C. Steele**

has Completed the SQUG Walkdown Screening  
and Seismic Evaluation Training Course  
Held February 1-5, 1993



David A. Freed, MPR Associates  
SQUG Training Coordinator

Neil P. Smith, Commonwealth Edison  
SQUG Chairman

Robert P. Kassawara, EPRI  
SQUG Program Manager

**RICHARD P. LEONARD, P.E.**

9296 Gast Road  
Bridgman, Mi 49106  
(616) 465-5329

Engineer with more than 20 years of experience in various facets of nuclear power plant operation. Areas of strength include Instrumentation & Control, general power plant operation, ability to integrate and benefit from a broad experience base to resolve problems and accomplish goals, and a willingness to pursue new opportunities and challenges. Able to work well with diverse groups and individuals.

**SIGNIFICANT EXPERIENCE**

7/90 to Present: Senior System Engineer at Donald C. Cook Nuclear Plant responsible for the Chemical and Volume Control System (CVCS). Duties include coordination of large or complicated maintenance activities, tracking and trending of system operation, review and initiate design changes, recommend maintenance priorities, provide information and assistance to other departments, and provide a monthly report to plant and corporate management. A recent significant accomplishment was the direction and management of a major effort to clean and refurbish the Boric Acid Storage Tank room. This project included several design changes, the coordination of work by different departments, and development of innovative approaches to minimize future contamination.

7/85 to 7/90: Associate Engineer in the Nuclear Fuel and Analysis section of American Electric Power Service Corporation. Primary duties consisted of assessing safety analyses and operational problems in consideration of instruments and instrument uncertainties. Involved in providing inputs to and reviewing safety analyses provided by fuel vendor. Responsible for developing the RTD Cross-Calibration procedure in coordination with Westinghouse and the Cook Nuclear Plant I&C section. Assisted in developing and implementing the Reduced Temperature and Pressure program to minimize steam generator tube degradation in Unit 1. Dealt directly with fuel vendors and NRC personnel.

1975 to 1983: Salem and Hope Creek Nuclear Power Plants--I&C Technician and Training Instructor. As I&C Technician was responsible for calibration and maintenance of usual Westinghouse PWR instrumentation. Notable achievements included initial checkout and placing into service of the SSPS, Rod Control System, NIS, and much of the Reactor Protection System. Designed and implemented a change to the SSPS which provided protection to the Source Range detectors. Developed training/qualification programs for I&C technicians and trained I&C technicians prior to Training Department developing training programs.

1969 to 1975: US Navy--Electrical Operator and Engineering Watch Supervisor on submarine. As Leading First Class Petty Officer, was responsible for conduct and scheduling of Electrical Section and approximately 10 subordinates.

**EDUCATION:** BSME, University of Delaware, 1985, with a concentration in power generation.

**PROFESSIONAL:** Member of American Society of Mechanical Engineers  
Licensed Professional Engineer  
Ohio: License # E53312  
Michigan: License # 38856



# Certificate of Achievement

This is to Certify that

**Richard P. Leonard**

has Completed the  
**SQUG Equipment Selection and  
Relay Evaluation Training Course**  
Held November 17-19, 1992

Paul W. Hayes, MPR Associates

Richard G. Starck II, MPR Associates

Jess Betlack, MPR Associates



# Certificate of Achievement

This is to Certify that

Richard B. Leonard

has Completed the

SQUG Relay Evaluation Training Course

held November 17, 1992

  
Jess Betlack, MPR Associates



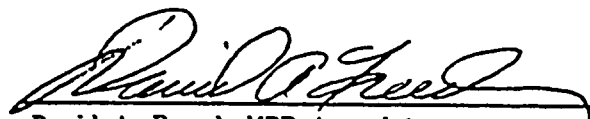
# Certificate of Achievement


This is to Certify that

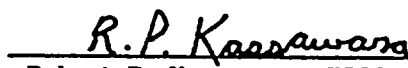
**Richard P. Leonard**

has Completed the SQUG Walkdown Screening  
and Seismic Evaluation Training Course  
Held May 3-7, 1993



  
David A. Freed, MPR Associates  
SQUG Training Coordinator

  
Neil P. Smith, Commonwealth Edison  
SQUG Chairman

  
Robert P. Kassawara, EPRI  
SQUG Program Manager



KAILASH C. MAHAJAN

1925 Laramie Drive

Powell, Ohio 43065

Tel: (614) 791-0304

Objective To work as an Electrical, Instrumentation and Controls Engineer

Education

1972 B.S. Electrical Engineering from the University of Indore, India

1978 M.S. Electrical Engineering from M.S. the University of Baroda, India

Accreditation

Registered Professional Engineer in the states of OH, MI & PA.

Professional Experience

7/85 to 12/94

American Electric Power, Service Corporation, Columbus, OH

Electrical and I&C Engineer for Cook Nuclear Plant (on contract).

Prepared design change packages including 10 CFR 50.59 safety evaluations, Appendix-R (Fire Protection), environmental/seismic qualification, engineering calculations, specifications and cost estimate. Reviewed and re-designed one-line diagrams.

Investigated existing Post Accident Monitoring System Compliances with and prepared modification scope based on NRC Reg. Guide 1.97. Worked on the resolution of USI A-46 (GL 87-02) safe seismic shutdown of existing plants.

7/84 to 7/85

Maine Yankee & Clinton Nuclear Stations

Plant Electrical Engineer - Consultant

Involved in various assignments including to ensure a comprehensive approach to human engineering deficiency corrections per NUREG-700, equipment qualifications per IE Bulletin 79-01B, QA audit and surveillance, etc.

9/79 to 7/84

Bechtel Power Corporation

Control Systems Engineer & Resident Engineer

Reviewed and approved project design drawings. Resolved field problems and non-conforming reports. Prepared ladder diagrams for solid radwaste logic. Performed engineering calculations and prepared specifications for transmission systems.

1/75 to 7/78

Madhya Pradesh State Electricity Board, Karba, India

Electrical Engineer

Prepared design calculations and specifications for sub-stations. Involved in operation and maintenance of Thermal Power Plants.

NAME & ADDRESS: PAUL R. KRUGH  
2075 Belltree Drive  
Reynoldsburg, OH 43068

COMPANY POSITION: Engineer (Civil), Senior

COMPANY: American Electric Power (AEP)  
1 Riverside Plaza  
Columbus, OH 43215

KEY QUALIFICATIONS: Civil & structural; seismic and structural dynamics.

EDUCATION: B.S., Civil Engineering, Tri-State University, Angola,  
IN, 1962.

EXPERIENCE:

1983-1995 - NUCLEAR SEISMIC

AEP (Columbus, OH); Civil/Seismic Engineer:

- Served as an in-house consultant to the AEP Nuclear Organization (AEPNO) concerning ongoing seismic design, evaluation and qualification of equipment and structures at Cook Nuclear Plant.
- Participated as a Seismic Capability Engineer [certified by the Seismic Qualification Utility Group (SQUG)] in the implementation of USNRC USI A-46 (GL 87-02) at Cook Nuclear Plant.
- Performed in-situ modal testing of cabinets, panels, racks, etc. at Cook Nuclear Plant.
- Performed preliminary studies related to future renewal of seismic sensors and instrumentation at Cook Nuclear Plant.
- Maintained liaison with other seismic consultants and seismic test laboratories.

1964-1983 - ELECTRIC POWER TRANSMISSION LINES

AEP (New York City & Columbus, OH); Civil/Transmission Line Engineer; Senior:

- Served as lead engineer/consultant for 138Kv, 345kv and 765Kv transmission line projects and affairs of Appalachian Power and Kentucky Power combined and later Indiana-Michigan Power.

- Served as chairman of various task forces and committees, e.g., the AEP transmission line design criteria including loadings and electrical clearances; AEP T&D line and station conductor normal and emergency ampacity ratings; AEP right-of-way vegetation control, etc..
- Served as expert in the structural analysis and design of 34.5Kv through 138Kv wood-pole transmission line structures and the formulation of related hardware and material standards. Also expert in transmission line conductor vibration control (aeolian, wake-induced oscillation, ice-galloping).
- Served as a project and/or test engineer on a large number of test projects, e.g., ice dumping and unloading of 765Kv multi-conductor bundle, maintaining electrical clearances of 765Kv jumper loops through deadend tower windows, pile and foundation load tests, insulator hardware assembly proof load tests, conductor and static wire hardware proof load tests, guy cable and anchor rod hardware proof load tests, dynamic tests of hardware, etc.; in some cases as part of the project, also designed the test equipment and rigging, e.g., for testing piling, hardware, etc..
- Heavily involved in the development, design and construction of the AEP 2000-mile 765Kv transmission line system (highest operating AC voltage transmission line system in the world) from its inception to near end of construction.
- Contributed to implementing ongoing research, development, design, testing, etc. of 138Kv, 345Kv and 765Kv transmission line structures, foundations, anchorage and hardware.
- Contributed to implementing special and unique research, conceptual development and cost studies for future 1000Kv+ (ultra high-voltage) transmission lines including joint research, testing and studies between AEP and Hydro Quebec. Testing involved verification of multi-conductor bundle wake-induced oscillation control (full-scale testing) and dynamic model verification load tests on structural configurations of new conceptual type structures.
- Served as on-site field engineer assisting AEP operating companies during major emergencies, e.g., the 1974 tornadoes with many towers and lines down.

#### 1962-1964 - ELECTRIC POWER TRANSMISSION LINES

AEP - Ohio Power (Canton, OH); Civil/Transmission Line Engineer:

- Served in Canton general office as engineer laying out, designing and upgrading electric power subtransmission and transmission lines throughout Ohio.

- Prepared construction specifications and drawings for field crews and contractors to follow.

PRIOR to 1962 - SURVEYING AND CONSTRUCTION

Gwin Consulting Engineers (Altoona, PA) and various private engineers and surveyors including father; Surveyor:

- Participated part time as survey party member in a substantial amount of land, municipal and highway surveying including being a chainman, rodman and transit and level operator over a period of about 10 years.

Reese Construction Company (Pittsburgh, PA); Laborer and Equipment Operator:

- Involved part-time as a laborer, truck driver, welder's assistant, etc. in project of laying 15 miles of 10-inch diameter medium-pressure natural gas pipe line between Altoona and Tyrone, PA for The People's Natural Gas Company.

OTHER BACKGROUND, EXPERIENCE, TRAINING AND QUALIFICATIONS:

- Nuclear quality assurance - author of the AEPNO seismic procedures, various seismic specifications and seismic engineering guide materials, etc.. Also trained other engineers in seismic subject matter, e.g., SSFI 90/11.
- Trained in implementing in-situ transfer function method of modal testing, dynamic modeling and seismic dynamic analyses of equipment and structures. Performed modal testing of cabinets, panels, racks, etc. at Cook Nuclear Plant in 1985-1986 time frame.
- Originator of idea and suggestion for SQUG to adopt and use GENRS software method (as a derivative of EDASP software) for calculating in-cabinet and panel amplified response spectra related to SQUG seismic adequacy screening of electrical relays.
- Participated in SQUG walkdowns to verify seismic adequacy of electrical and mechanical equipment at Cook Nuclear Plant.
- Trained in numerous subjects, e.g., quality assurance, root cause analysis, leadership and teambuilding, etc..
- Acquired and maintained certifications for full authorized access and as radiation worker at Cook Nuclear Plant (involved annual examinations for re-certifications including mandated participation in fitness-for-duty program and ongoing random drug tests).

- Knowledgeable of computer applications, usage and programming (largely self taught and ongoing since about 1965); expert programmer in BASIC language including graphics.
- Knowledgeable of electricity, electronics, radio communications, antenna design, antenna transmission line theory, calculation of antenna radiation patterns, etc.; have FCC Amateur 'Extra' Class radio operator and station license with present FCC-assigned call letters of N2NS; have been a FCC-licensed amateur radio operator since 1955 with former call letters WN3BVE, W3BVE, W8EOE and WB2PBO.
- Eagle Scout, woodsman and fisherman.





# Certificate of Achievement

This is to Certify that

**Paul R. Krugh**

has Completed the SQUG Walkdown Screening  
and Seismic Evaluation Training Course  
Held May 3-7, 1993



David A. Freed, MPR Associates  
SQUG Training Coordinator

Neil P. Smith, Commonwealth Edison  
SQUG Chairman

Robert P. Kassawara, EPRI  
SQUG Program Manager

I-Chen Huang - Senior Engineer, Structural & Analytical Design Section

EXPERIENCE SUMMARY

Engineering and design of various nuclear power plant steel and reinforced concrete structures for static and dynamic loads. Seismic analysis of buildings and equipment for generation of in-structure response spectra.

EDUCATION

1970 M.S.C.E., Worcester Polytechnic Institute, Worcester. Mass.  
1966 B.S.C.E., Cheng-Kung University, Taiwan

TRAINING

1992 SQUG Walkdown Screening and Seismic Evaluation Training Course  
1978 Westinghouse PWR Information Course  
1977 Introduction to Plant Operation - PWR Simulator Program

EXPERIENCE SUMMARY

1984 to Present American Electric Power Service Corporation

1990 to Present Senior Engineer

- Responsible for seismic evaluation of design changes
- Conducted site-specific qualification tests for the Hilti Kwik-II anchor bolts and the Drillco Maxi-Bolts

1984 to 1990 Design Engineer

- Designed various steel and reinforced concrete structures for both nuclear and fossil power plants.

1979 to 1984 Associated Technologies Inc., Clifton, NJ

Senior Design Engineer, worked as consultant to Duke Power Company on Catawba Nuclear Project - Responsible for analysis and design of safety related pipe supports and restraints.

1976 to 1979 Power Authority of the State of New York

Civil Structural Engineer on Indian Point 3 Nuclear Power Project - Responsible for coordination of design and construction of a four story Administration Building and a Receiving Warehouse.

1973 to 1976 Ebasco Services, Inc., New York, NY

Structural Engineer - Performed dynamic and static analyses for the foundation mat, the containment building and the auxiliary building for WPPSS No. 3 and 5 Nuclear Project and generated floor response spectra for use by other disciplines.



1970 to 1973

Wolchuk and Mayrbaurl Consulting Engineers, New York, NY

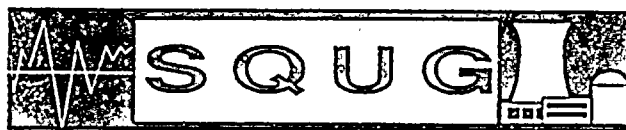
Structural Engineer - Performed analysis and design of the Cook Nuclear Plant main steam line rupture restraints which cantilevered off the outside of the concrete containment wall.

REGISTRATION

Registered professional engineer (No. 51419) in the state of New York, 1974

PUBLICATION

Discussion on Approximate Stiffness and Bending Strength for Compact-Rolled Sections - AISC engineering Journal 3rd quarter, 1986



# Certificate of Achievement

This is to Certify that

J - Chen Huang

has Completed the SQUG Walkdown Screening  
and Seismic Evaluation Training Course  
Held June 22-26, 1992



David A. Freed, MPR Associates  
SQUG Training Coordinator

Neil P. Smith, Commonwealth Edison  
SQUG Chairman

Robert P. Kassawara, EPRI  
SQUG Program Manager

MELVIN J. BASKERVILLE  
4111 Sundance Drive  
Columbus, Ohio 43224  
Home: (614) 475-2561  
Office: (614) 223-1480

## EXPERIENCE

June 1979  
to present

Electrical/Physical Designer  
AMERICAN ELECTRIC POWER SERVICE CORPORATION  
COLUMBUS, OHIO

- \* Designed equipment locations and raceways for control, power, and instrumentation circuits for Donald C. Cook Nuclear Power Plant and miscellaneous coal-fired boiler power plants.
- \* Coordinated electrical design department activities during seismic qualification of raceway supports.
- \* Designed assignments per Appendix R criteria.
- \* Participated in engineering investigations.
- \* Performed quality assurance audits of in-progress equipment installation and maintenance.
- \* Ordered nuclear grade equipment.
- \* Designed electrical substations.
- \* Used computerized information systems to perform design and investigations.
- \* Created drawings using computer aided drafting and design (CADD).

## EDUCATION

FRANKLIN UNIVERSITY COLUMBUS, OHIO  
Bachelor of Science Degree, majored in Business Management. Graduated April 1995.

COLUMBUS STATE COMMUNITY COLLEGE COLUMBUS, OHIO  
Associate of Science Degree, majored in Business Management. Graduated March 1994.

## REFERENCES

Available upon request.



# Certificate of Achievement

This is to Certify that

**Melvin Baskerville**

has Completed the Cable Tray and Conduit Raceway  
Portion of the SQUG Walkdown Screening  
and Seismic Evaluation Training Course  
Held June 22-26, 1992



**Cable Tray and  
Conduit Raceway Only**

David A. Freed, MPR Associates  
SQUG Training Coordinator

Neil P. Smith, Commonwealth Edison  
SQUG Chairman

Robert P. Kassawara, EPRI  
SQUG Program Manager



•

1999  
1999-2000



1999  
1999-2000  
1999-2000



*Jey T. Sekaran*

2369 Ridgewood Dr.  
Stevensville, MI 49127

Home (616)-428-2912  
Work (616)-465-5901 x1777

**OBJECTIVE:**

To obtain a Senior Civil or Structural engineer position which offers opportunity for advancement..

**EDUCATION :**

MS Civil Engineering, South Dakota School of Mines and Technology,  
Rapid City, South Dakota, 1983.

MS Structural Engineering, University of Madras, India, 1978.

BS Civil Engineering, University of Madras, India, 1976.

**SPECIALTIES :**

Industrial and power plant structures. Seismic analysis of nuclear safety related structures, conduit and mechanical pipe supports, stress analysis of small bore piping, field walk down and design of conduit system, pipe supports and structural steel frames and concrete structures, stress analysis using finite element techniques.

**EXPERIENCE :**

**1986 to Present**

American Nuclear Resources, St. Joseph, Michigan

American Electric Power, Columbus, Ohio

Lead engineer for SQUG (Seismic Qualification Utility Group) at D.C. Cook Nuclear Power plant.

Responsible for the team performing visual and technical evaluation of the anchorage of the major plant components required for the safe plant shut down.

Civil/Structural Engineer, D.C. Cook Nuclear Power plant.

Performed field walk down, design, and qualification of conduit system, structural steel frames and platforms. Interfaced with contractor and other Indiana & Michigan Power disciplines in solving field problems related to electrical conduit supports, installation of Structural steel frames and platforms and repairs in reinforced concrete structures. Prepared maps for conduit installation and evaluation and disposition of Problem Reports and Condition Reports. Designed minor reinforced concrete structures, temporary structures such as scaffolding and tie downs.

**1983 to 1986**

Sargent & Lundy Engineers, Chicago, Illinois.

Structural Engineer at Clinton, Fermi, Byron and Braidwood Nuclear Power Plants.

Interfaced with client, contractor and other Sargent & Lundy disciplines in solving field problems related to small and large bore safety related mechanical piping systems.

Performed stress analysis of small bore piping using hand calculations. Qualified frames, base plates and embedment plates by hand calculations and computer programs.

Responsibilities included generation of Field Engineering Change Notices, evaluation and disposition of Field Change Requests and Non-conformance Reports. Qualified structural steel members and connections in containment and other buildings and modified over stressed beams and connections .Designed concrete floor slabs with composite beams.

1978 to 1982

· Larsen & Tubro Engineers (Nuclear Reactor suppliers and contractors of Industrial and Power plant structures, Madras, India.)

Civil/Structural engineer in various projects.

Analyzed and designed the following Industrial and power plant structures for seismic and wind loads.

Equipment foundations, Reinforced concrete framed structures, chimneys, hoppers, conveyor structures & stock pile buildings, Reinforced and pre stressed concrete silos, Precast floor beams and floor elements.

PUBLICATIONS :

co-author - "Development of optimized Epoxy graphite implant for the Total Hip Joints" Proceeding of the Twentieth Annual Rocky Mountain International Bioengineering Symposium held at Mayo Clinic, Rochester, Minnesota (1983) pp. 57-70. (Contributed three-dimensional analysis using finite element techniques.)

co-author - "Dynamic Loads on Transmission Line Towers", Proceedings of International Symposium on Earthquake Engineering held at university of Roorkee, India (1978)pp. 445-460

PERSONAL :

Male 39 years old, excellent health, willing to relocate.

REFERENCES :

Will be furnished upon request.

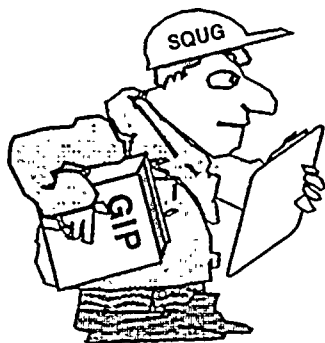
# Certificate of Achievement

This is to Certify that

Thangavelu Jeyasekaran

has Completed the SQUG Walkdown Screening  
and Seismic Evaluation Training Course

Held May 3-7, 1993



David A. Freed, MPR Associates  
SQUG Training Coordinator

Neil P. Smith, Commonwealth Edison  
SQUG Chairman

Robert P. Kassawara, EPRI  
SQUG Program Manager



## **APPENDIX C**

**DONALD C. COOK NUCLEAR PLANT - UNIT 1**

**SCREENING VERIFICATION  
DATA SHEETS (SVDS)**

**(AS PER SQUG GENERIC IMPLEMENTATION  
PROCEDURE, SECTION 4)**

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No. | System/Equipment Description  | Building    | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs Demand Basis                                     | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|---------|---|-------------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 1    | 0      | 1-MRV-210     | 0       | MAIN STEAM / STEAM GENERATOR OME-3-1 STOP VALVE                               | AUXILIARY   | 633.00      | E MAIN STEAM STOP ENCLOSURE, IN THE MIDDLE SW REGN OF THE RM.  | 633.00     | N/A  | Judgment vs Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 2    | 0      | 1-MRV-220     | 0       | MAIN STEAM / STEAM GENERATOR OME3-2 STOP VALVE                                | AUXILIARY   | 633.00      | W MAIN STEAM STOP ENCLOSURE, IN THE MIDDLE S REGN OF THE RM.   | 633.00     | N/A  | Judgment vs Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 3    | 0      | 1-MRV-230     | 0       | MAIN STEAM / STEAM GENERATOR OME-3-3 STOP VALVE                               | AUXILIARY   | 633.00      | W MAIN STEAM STOP ENCLOSURE, ON MIDDLE N REGN OF RM.   | 633.00     | N/A  | Judgment vs Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 4    | 0      | 1-MRV-240     | 0       | MAIN STEAM / STEAM GENERATOR OME-3-4 STOP VALVE                               | AUXILIARY   | 633.00      | E MAIN STEAM STOP ENCLOSURE, IN THE MIDDLE NW REGN OF THE RM, 13' NW OF 639 EL. PLATFORM ENTRANCE LADDER, NEAR THE CONT WALL.                        | 633.00     | N/A  | Judgment vs Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | No           | No        |
| 5    | 0      | 1-OME-34E     | 0       | ESW / EAST ESW PUMP PP-7E DISCHARGE STRAINER                                  | SCREENHOUSE | 591.00      | E ESW PUMP RM,   | 587.00     | N/A  | Judgment vs Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 6    | 0      | 1-OME-34W     | 0       | ESW / WEST ESW PUMP PP-7W DISCHARGE STRAINER                                  | SCREENHOUSE | 591.00      | W ESW PUMP RM,   | 587.00     | N/A  | Judgment vs Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 7    | 0      | 1-OME-39      | 0       | MAIN STEAM / AUXILIARY FEED PUMP TURBINE AND GOVERNOR VALVE                   | AUXILIARY   | 591.00      | TB DRIVEN AUX FOWTR PMP, IN THE SW CORNER OF THE RM, 3 FT WEST OF TDAFP #1-PP-4  | 609.00     | N/A  | Judgment vs Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 8    | 0      | 1-QC-12       | 0       | BORON MAKEUP (CVCS) / NORTH BORIC ACID FILTER                                 | AUXILIARY   | 587.00      | BORIC ACID STORAGE TANK AREA, IN THE NE REGN OF THE RM, 4' E OF N BORIC ACID STORAGE TANK # 1-TK-12N, 4' ABOVE FLR                                   | 587.00     | N/A  | Judgment vs Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 9    | 0      | 1-QT-100-AB   | 0       | DIESEL COMBUSTION AI / AB EMERG DIESEL AIR INTAKE FILTER                      | GROUND      | 609.00      | INNER PLANT GROUND, 20 NW OF UNIT 1 CONT DOME  | 608.00     | N/A  | Judgment vs Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 10   | 0      | 1-QT-100-CD   | 0       | DIESEL COMBUSTION AI / CD EMERG DIESEL AIR INTAKE FILTER                      | GROUND      | 609.00      | INNER PLANT GROUND, 50' SW OF REFUELING WATER STORAGE TANK   | 608.00     | N/A  | Judgment vs Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 11   | 0      | 1-QT-104-AB   | 0       | DIESEL COMBUSTION AI / AB EMERG DIESEL EXHAUST SILENCER                       | GROUND      | 609.00      | INNER PLANT GROUND, 20' NW OF UNIT-1 CONT DOME   | 608.00     | N/A  | Judgment vs Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 12   | 0      | 1-QT-104-CD   | 0       | DIESEL COMBUSTION AI / CD EMERG DIESEL EXHAUST SILENCER                       | GROUND      | 609.00      | INNER PLANT GROUND, 50' SW OF REFUELING WATER STORAGE TANK   | 608.00     | N/A  | Judgment vs Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 13   | 0      | 12-HE-19N     | 0       | CVCS (BORON RECOVERY / NORTH BORIC ACID CONCENTRATOR UNIT SKID AND FRAMING    | AUXILIARY   | 587.00      | N BORIC ACID EVAPORATOR RM, IN THE CENTER OF THE RM  | 587.00     | N/A  | Judgment vs Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 14   | 0      | 12-QC-3       | 0       | SPENT FUEL PIT COOLI / SPENT FUEL PIT FILTER                                  | AUXILIARY   | 609.00      | SPENT FUEL PIT FILTER RM, IN THE CENTER OF THE CUBICLE IN THE NE CORNER OF THE SPENT FUEL PIT HEAT EXCHANGER RM                                      | 609.00     | N/A  | Judgment vs Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | No           | No        |
| 15   | 0      | 12-TK-207     | 0       | NITROGEN (REACTOR PL / REACTOR PLANT NITROGEN BULK STORAGE TANKS #3,4,5,6,7,8 | GROUND      | 609.00      | REACTOR GAS BOTTLE STORAGE AREA, IN THE MIDDLE OF THE SOUTH REGION OF THE ROOM, 35 FEET NORTHWEST OF THE AUX 609 CRANE BAY ROLLUP DOOR, 6 FEET ABOVE | 608.00     | N/A  | Judgment vs Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

John D. Stevenson

*John D. Stevenson*

12/11/95

Paul R. Wilson

*Paul R. Wilson*

12/11/95

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description               | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|--|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 1    | 1      | 1-AB-A        | 0      | ELECTRICAL DISTRIBUT / 600VAC MCC AB-A     | AUXILIARY | 587.00      | HALLWAY, IN THE NE END OF THE HALLWAY, 10FT S OF STARTUP BLOWDOWN FLASHTANK RM ENTRANCE DOORS, NEAR THE E WALL        | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 2    | 1      | 1-AB-D        | 0      | ELECTRICAL DISTRIBUT / 600VAC MCC AB-D     | AUXILIARY | 587.00      | HALLWAY, IN THE NE REGN OF THE HALLWAY, 20 FEET S OF THE STARTUP BLOWDOWN FLASHTANK RM DOOR, NEAR THE E WALL          | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 3    | 1      | 1-AB-N        | 0      | 250 VDC CONTROL AND / CONTROL CENTER VALVE | AUXILIARY | 587.00      | HALLWAY, 2 FEET E OF THE N STAIRWAY, IN THE N END OF THE HALLWAY  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 4    | 1      | 1-ABD-A       | 0      | ELECTRICAL DISTRIBUT / 600VAC MCC ABD-A    | AUXILIARY | 587.00      | AB EDG RM, IN THE NW REGN OF THE RM, NEAR THE N WALL  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 5    | 1      | 1-ABD-B       | 0      | ELECTRICAL DISTRIBUT / 600VAC MCC ABD-B    | AUXILIARY | 587.00      | AB EDG RM, IN THE NW REGN OF THE RM, NEAR THE N WALL  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 6    | 1      | 1-ABD-C       | 0      | ELECTRICAL DISTRIBUT / 600VAC MCC ABD-C    | AUXILIARY | 609.00      | , IN THE SW CORNER OF THE RM, ON THE S WALL, 10FT SW OF CD EMERGENCY DIESEL GENERATOR #1-OME-150-CD                   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 7    | 1      | 1-ABD-D       | 0      | ELECTRICAL DISTRIBUT / 600VAC MCC ABD-D    | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SW CORNER OF THE RM, ON THE SO. WALL, 10FT SW OF CD EMERG. DIESEL GENERATOR #1-OME-150-CD  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 8    | 1      | 1-ABV-A       | 0      | ELECTRICAL DISTRIBUT / 600VAC VCC ABV-A    | AUXILIARY | 587.00      | HALLWAY, IN THE NE END OF THE HALLWAY, 8FT NE OF N BORIC ACID EVAPORATOR SUBPANEL #12-BAEN, NEAR N WALL               | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 9    | 1      | 1-ABV-D       | 0      | 600V AC DISTR / MCC 1-ABV-D                | AUXILIARY | 587.00      | HALLWAY, IN N REGN OF HALLWAY, 20 FEET S OF RADIOCHEMICAL DRAIN TK-12-TK-6 NEAR THE W WALL                            | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 10   | 1      | 1-AM-A        | 0      | ELECTRICAL DISTRIBUT / 600VAC MCC AM-A     | AUXILIARY | 633.00      | HALLWAY, NEAR THE W WALL OF THE HALLWAY, 9FT S OF CONT AUX SUB PNL# 1-CAS   | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 11   | 1      | 1-AM-D        | 0      | ELECTRICAL DISTRIBUT / 600VAC MCC AM-D     | AUXILIARY | 633.00      | HALLWAY, IN THE MIDDLE N SECTION OF THE HALLWAY, 12FT S OF THE UNIT 1 CONTROL RM EMERGENCY EXIT DOOR, NEAR THE W WALL | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 12   | 1      | 1-AZ-BC       | 0      | ELECTRICAL DISTRIBUT / 600VAC MCC AZ-BC    | AUXILIARY | 609.00      | HALLWAY, 20 FT. SE OF CONTROLLED AREA ENTRANCE FIRE DOOR #12-DR-AUX391, 5 FEET E OF THE N STAIRWAY, NEAR THE N WALL   | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 13   | 1      | 1-AZV-A       | 0      | ELECTRICAL DISTRIBUT / 600VAC VCC AZV-A    | AUXILIARY | 587.00      | HALLWAY, 10 FT NW OF BORIC ACID BATCHING TANK #12-TK-13, NEAR THE N WALL  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 14   | 1      | 1-EZC-A       | 0      | ELECTRICAL DISTRIBUT / 600VAC MCC EZC-A    | AUXILIARY | 613.00      | 4KV RM, Mezzanine Area, IN THE NW AREA OF THE RM, 10FT S OF THE N WALL  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 15   | 1      | 1-EZC-B       | 0      | ELECTRICAL DISTRIBUT / 600VAC MCC EZC-B    | AUXILIARY | 613.00      | 4KV RM, Mezzanine Area, IN THE NW AREA OF THE RM, 4 FEET S OF THE N WALL  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 16   | 1      | 1-EZC-C       | 0      | ELECTRICAL DISTRIBUT / 600VAC MCC EZC-C    | AUXILIARY | 613.00      | 4KV RM, Mezzanine Area, IN THE SW REGN OF THE RM, 4 FEET N OF HTE S WALL  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/16/95  
Date

T.R. Satyan Sharma  
Print or Type Name

*T.R. Satyan Sharma*  
Signature

12/18/95  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description   | Building    | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|--|-------------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 17   | 1      | 1-EZC-D       | 0      | ELECTRICAL DISTRIBUT / 600VAC MCC EZC-D  | AUXILIARY   | 613.00      | 4KV RM, Mezzanine Area, IN THE SW REGN OF THE RM, 8 FT E OF THE WALL, 2 FT S OF 480V AC MCC 1-PHC-2        | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 18   | 1      | 1-PS-A        | 0      | ELECTRICAL DISTRIBUT / 600 VAC MCC 1-PS-A  | SCREENHOUSE | 594.00      | TRAVELING SCREEN MCC UPPER RM, 10 FEET SW OF THE RMS ENTRANCE DOORWAY, ON THE W WALL                       | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 19   | 1      | 1-PS-D        | 0      | ELECTRICAL DISTRIBUT / 600 VAC MCC 1-PS-D  | SCREENHOUSE | 594.00      | TRAVELING SCREEN MCC UPPER RM, ON W WALL, 2 FEET S OF THE RMS ENTRANCE DOOR                                | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 20   | 2      | 1-11A         | 0      | ELECTRICAL DISTRIBUT / 600VAC BUS 11A SWITCHGEAR   | AUXILIARY   | 609.00      | 4KV RM - 600V SWGR, IN THE SW REGION OF THE RM, 7 FT WEST OF NORTH PLANT LIGHTING TRANSFORMER #1-TR-LTG-9N | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 21   | 2      | 1-11A1        | 0      | ELECTRICAL DISTRIBUT / REACTOR ROD CONTROL SOUTH MOTOR-GENERATOR SET CRDMG-1S SUPPLY BREAKER | AUXILIARY   | 609.00      | 4KV RM - 600V SWGR, IN THE SW REGION OF THE RM, ON 600VAC SWGR #1-11A, 6 FT ABOVE THE FLR                  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 22   | 2      | 1-11A10       | 0      | ELECTRICAL DISTRIBUT / WEST TURBINE AUXILIARY COOLING WATER PUMP PP-14W SUPPLY BREAKER       | AUXILIARY   | 609.00      | 4KV RM - 600V SWGR, IN THE SW REGION OF THE RM, IN 600VAC SWGR #1-11A, 1 FT ABOVE THE FLR                  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 23   | 2      | 1-11A11       | 0      | ESW / 600VAC BUS 11A SUPPLY BREAKER  | AUXILIARY   | 609.00      | 4KV RM, 600V SWGR Area, IN THE SW REGN OF THE RM, IN 600V AC SWGR #1-11A, 6 FT ABOVE THE FLR               | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 24   | 2      | 1-11A12       | 0      | ELECTRICAL DISTRIBUT / 600VAC BUS 11A SPARE CIRCUIT BREAKER                                  | AUXILIARY   | 609.00      | 4KV RM - 600V SWGR, IN THE SW REGION OF THE RM, IN 600VAC SWGR #1-11A, 5 FT ABOVE THE FLR                  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 25   | 2      | 1-11A13       | 0      | ELECTRICAL DISTRIBUT / 600VAC MOTOR CONTROL CENTER AM-A1 SUPPLY BREAKER                      | AUXILIARY   | 609.00      | 4KV RM - 600V SWGR, IN THE SW REGION OF THE RM, IN 600VAC SWGR #1-11A, 3 FT ABOVE THE FLR                  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 26   | 2      | 1-11A2        | 0      | ELECTRICAL DISTRIBUT / 600VAC MCC AM-A SUPPLY BREAKER  | AUXILIARY   | 609.00      | 4KV RM, 600V SWGR Area, IN THE SW REGN OF THE RM, ON 600V AC SWGR #1-11A, 5 FT ABOVE THE FLR               | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 27   | 2      | 1-11A3        | 0      | ELECTRICAL DISTRIBUT / 600VAC MCC EZC-A SUPPLY BREAKER                                       | AUXILIARY   | 609.00      | 4KV RM, 600V SWGR Area, IN THE SW REGN OF THE RM, ON 600V AC SWGR #1-11A, 1 FT ABOVE THE FLR               | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 28   | 2      | 1-11A4        | 0      | ELECTRICAL DISTRIBUT / SOUTH PLANT LIGHTING TRANSFORMER TR-LTG-9S SUPPLY BREAKER             | AUXILIARY   | 609.00      | 4KV RM - 600V SWGR, IN THE SW REGION OF THE RM, ON 600VAC SWGR #1-11A, 5 FT ABOVE THE FLR                  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 29   | 2      | 1-11A5        | 0      | ELECTRICAL DISTRIBUT / 600VAC MCC ABD-A SUPPLY BREAKER                                       | AUXILIARY   | 609.00      | 4KV RM, 600V SWGR Area, IN THE SW REGN OF THE RM, ON 600V AC SWGR #1-11A, 3 FT ABOVE THE FLR               | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 30   | 2      | 1-11A6        | 0      | ELECTRICAL DISTRIBUT / 600VAC MCCS AB-A, PS-A, TPP-A, AND VCCS ABV-A, AZV-A SUPPLY BREAKER   | AUXILIARY   | 609.00      | 4KV RM, 600V SWGR Area, IN THE SW REGN OF THE RM, ON 600V AC SWGR #1-11A, 1 FT ABOVE THE FLR               | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 31   | 2      | 1-11A7        | 0      | ELECTRICAL DISTRIBUT / SERVICE BUILDING LIGHTING TRANSFORMER 12-TR-LTG-14 SUPPLY BREAKER     | AUXILIARY   | 609.00      | 4KV RM - 600V SWGR, IN THE SW REGION OF THE RM, ON 600VAC SWGR #1-11A, 6 FT ABOVE THE FLR                  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

Signature

Date

T.R. Satyan Sharma  
Print or Type Name

Signature

Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip.ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|--------------|--------|--|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 32   | 2      | 1-11A8       | 0      | ELECTRICAL DISTRIBUT / 600VAC BORIC ACID HEAT TRACE CONTROL CENTER BHT-A SUPPLY BREAKER                                    | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SW REGION OF THE RM, IN 600VAC SWGR #1-11A, 5 FT ABOVE THE FLR         | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 33   | 2      | 1-11A9       | 0      | ELECTRICAL DISTRIBUT / TSC UNINTERRUPTABLE PWR SOURCE EMER FEED CONSTANT VOLTAGE TRANSFORMER 12-TSC-UPS-CVT SUPPLY BREAKER | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SW REGION OF THE RM, IN 600VAC SWGR #1-11A, 3 FT ABOVE THE FLR         | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 34   | 2      | 1-11AC       | 0      | ELECTRICAL DISTRIBUT / 600 VAC. BUS 11A TO 600VAC. BUS 11C TIE BREAKER   | AUXILIARY | 609.00      | 4KV RM, 600V SWGR Area, IN THE S W REGN OF THE RM, ON 600VAC. SWGR #1-11A, 5FT. ABOVE THE FLR     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 35   | 2      | 1-11B        | 0      | ELECTRICAL DISTRIBUT / 600VAC BUS 11B SWITCHGEAR   | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SE REGION OF THE RM  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 36   | 2      | 1-11B1       | 0      | ELECTRICAL DISTRIBUT / 600VAC MCC ABD-B SUPPLY BREAKER (1-ELSC)  | AUXILIARY | 609.00      | 4KV RM, 600V SWGR Area, IN THE SW REGN OF THE RM, 6FT ABOVE THE FLR                               | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 37   | 2      | 1-11B10      | 0      | ELECTRICAL DISTRIBUT / PLANT AIR COMPRESSOR OME-41 SUPPLY BREAKER  | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SE REGION OF THE RM, ON 600VAC SWGR #1-11B, 1 FT ABOVE THE FLR         | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 38   | 2      | 1-11B11      | 0      | ELECTRICAL DISTRIBUT / 600VAC BUS 11B SUPPLY BREAKER   | AUXILIARY | 609.00      | 4KV RM, 600V SWGR Area, IN THE SE REGN OF THE RM, ON 600V AC SWGR #1-11B, 6FT ABOVE THE FLR       | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 39   | 2      | 1-11B12      | 0      | ELECTRICAL DISTRIBUT / SOUTH NON-ESSENTIAL SERVICE WATER PUMP PP-8S SUPPLY BREAKER   | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SE REGION OF THE RM, ON 600VAC SWGR #1-11B, 5 FT ABOVE THE FLR         | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 40   | 2      | 1-11B13      | 0      | ELECTRICAL DISTRIBUT / TURBINE ROOM INDUCTION HEATING, STRESS RELIEF AND BOLT HEATERS SUPPLY BREAKER                       | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SE REGION OF THE RM, ON 600VAC SWGR #1-11B, 3 FT ABOVE THE FLR         | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 41   | 2      | 1-11B2       | 0      | ELECTRICAL DISTRIBUT / 600VAC MCC EZC-B SUPPLY BREAKER   | AUXILIARY | 609.00      | 4KV RM, 600V SWGR Area, IN THE SW REGN OF THE RM, IN 600V AC SWGR #8, 5FT ABOVE THE FLR           | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 42   | 2      | 1-11B3       | 0      | ELECTRICAL DISTRIBUT / EAST AND WEST AUXILIARY BUILDING CRANES 12-QM-3E AND 12-QM-3W SUPPLY BREAKER                        | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SE REGION OF THE RM, ON 600VAC SWGR #1-11B, 1 FT ABOVE THE FLR         | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 43   | 2      | 1-11B4       | 0      | ELECTRICAL DISTRIBUT / 600VAC MCC AZ-BC SUPPLY BREAKER   | AUXILIARY | 609.00      | 4KV RM, 600V SWGR Area, IN THE SE REGN OF THE RM, ON THE 600VAC SWGR #1-11B, 5 FEET ABOVE THE FLR | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 44   | 2      | 1-11B5       | 0      | ELECTRICAL DISTRIBUT / 600VAC MOTOR CONTROL CENTERS TBG-BE AND TBP-BW SUPPLY BREAKER                                       | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SE REGION OF THE RM, ON 600VAC SWGR #1-11B, 3 FT ABOVE THE FLR         | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 45   | 2      | 1-11B6       | 0      | ELECTRICAL DISTRIBUT / EAST TURBINE AUXILIARY COOLING WATER PUMP PP-14E SUPPLY BREAKER                                     | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SE REGION OF THE RM, ON 600VAC SWGR #1-11B, 1 FT ABOVE THE FLR         | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 46   | 2      | 1-11B7       | 0      | ELECTRICAL DISTRIBUT / PLANT HEATING BOILER FORCED DRAFT FAN 12-OME-10-FAN SUPPLY BREAKER                                  | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SE REGION OF THE RM, IN 600VAC SWGR COMPARTMENT #1-11B                 | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/16/95  
Date

T.R. Satyan Sharma  
Print or Type Name

*T.R. Satyan Sharma*  
Signature

12/20/95  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|--|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 47   | 2      | 1-11B8        | 0      | ELECTRICAL DISTRIBUT / MAKEUP PLANT VACUUM DEGASIFIER 2ND STAGE VACUUM PUMP 12-PP-44M SUPPLY BREAKER | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SE REGION OF THE RM, ON 600VAC SWGR #1-11B, 5 FT ABOVE THE FLR     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 48   | 2      | 1-11B9        | 0      | ELECTRICAL DISTRIBUT / 600VAC BUS 11B SPARE CIRCUIT BREAKER  | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SE REGION OF THE RM, ON 600VAC SWGR #1-11B, 3 FT ABOVE THE FLR     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 49   | 2      | 1-11BD        | 0      | ELECTRICAL DISTRIBUT / TIE CIRCUIT BREAKER BETWEEN BUS 11B AND 11D                                   | AUXILIARY | 609.00      | 4KV RM, 600V SWGR Area, IN THE SE REGN OF THE RM, ON 600VAC SWGR #1-11B, 5 FEET ABOVE THE FLR | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 50   | 2      | 1-11C         | 0      | ELECTRICAL DISTRIBUT / 600V BUS 11C SWITCHGEAR   | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SW REGION OF THE RM  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 51   | 2      | 1-11C1        | 0      | ELECTRICAL DISTRIBUT / 600VAC BUS 11C SUPPLY BREAKER   | AUXILIARY | 609.00      | 4KV RM, 600V SWGR Area, IN THE SW REGN OF THE RM, ON 600VAC SWGR #1-11C, 6 FT ABOVE THE FLR   | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 52   | 2      | 1-11C10       | 0      | ELECTRICAL DISTRIBUT / 600VAC MCCS ABD-C AND TSC-S SUPPLY BREAKER                                    | AUXILIARY | 609.00      | 4KV RM, 600V SWGR Area, IN THE SW REGN OF THE RM, IN 600VAC SWGR #1-11C, 1 FT ABOVE THE FLR   | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 53   | 2      | 1-11C11       | 0      | ELECTRICAL DISTRIBUT / 600VAC BUS 11C SPARE CIRCUIT BREAKER  | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SW REGION OF THE RM, IN 600VAC SWGR #1-11C, 6 FT ABOVE THE FLR     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 54   | 2      | 1-11C12       | 0      | ELECTRICAL DISTRIBUT / NORTH SPENT FUEL PIT PUMP 12-PP-31N SUPPLY BREAKER                            | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SW REGION OF THE RM, IN 600VAC SWGR #1-11C, 5 FT ABOVE THE FLR     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 55   | 2      | 1-11C13       | 0      | ELECTRICAL DISTRIBUT / CIRCUIT BREAKER-600V FOR RECIPROCATING CHARGING PUMP 1-PP-49                  | AUXILIARY | 609.00      | SWGR RM, IN THE SW REGN OF THE RM   | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 56   | 2      | 1-11C14       | 0      | ELECTRICAL DISTRIBUT / FIRE PROTECTION WATER HIGH DEMAND PUMP PP-11 SUPPLY BREAKER                   | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SW REGION OF THE RM, IN 600VAC SWGR #1-11C, 1 FT ABOVE THE FLR     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 57   | 2      | 1-11C15       | 0      | ELECTRICAL DISTRIBUT / TECHNICAL SUPPORT CENTER UNINTERRUPTABLE POWER SUPPLY NORMAL SUPPLY BREAKER   | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SW REGION OF THE RM, IN 600VAC SWGR #1-11C, 6 FT ABOVE THE FLR     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 58   | 2      | 1-11C16       | 0      | ELECTRICAL DISTRIBUT / 600VAC MOTOR CONTROL CENTERS TBC-CS AND TBG-CW SUPPLY BREAKER                 | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SW REGION OF THE RM, IN 600VAC SWGR #1-11C, 5 FT ABOVE THE FLR     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 59   | 2      | 1-11C17       | 0      | ELECTRICAL DISTRIBUT / NORTH NON-ESSENTIAL SERVICE WATER PUMP PP-8N SUPPLY BREAKER                   | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SW REGION OF THE RM, IN 600VAC SWGR #1-11C, 3 FT ABOVE THE FLR     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 60   | 2      | 1-11C18       | 0      | ELECTRICAL DISTRIBUT / TURBINE BUILDING 240/50 TON OVERHEAD CRANE 12-QM-1 SUPPLY BREAKER             | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SW REGION OF THE RM, IN 600VAC SWGR #1-11C, 1 FT ABOVE THE FLR     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 61   | 2      | 1-11C2        | 0      | ELECTRICAL DISTRIBUT / CONTAINMENT POLAR CRANE QM-4 SUPPLY BREAKER                                   | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SW REGION OF THE RM, ON 600VAC SWGR #1-11C, 5 FT ABOVE THE FLR     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/16/95  
Date

T.R. Satyan Sharma  
Print or Type Name

*T.R. Satyan Sharma*  
Signature

12/20/95  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|---|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 62   | 2      | 1-11C3        | 0      | ELECTRICAL DISTRIBUT / 600VAC MOTOR CONTROL CENTER AM-C1 SUPPLY BREAKER                                       | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SW REGION OF THE RM, ON 600VAC SWGR #1-11C, 1 FT ABOVE THE FLR          | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 63   | 2      | 1-11C4        | 0      | ELECTRICAL DISTRIBUT / CIRCULATING WATER TRAVELING SCREENS NORTH WASH PUMP 12-PP-15N SUPPLY BREAKER           | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SW REGION OF THE RM, ON 600VAC SWGR #1-11C, 5 FT ABOVE THE FLR          | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 64   | 2      | 1-11C5        | 0      | ELECTRICAL DISTRIBUT / MAKEUP PLANT VACUUM DEGASIFIER STANDBY VACUUM PUMP 12-PP-44W SUPPLY BREAKER            | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SW REGION OF THE RM, ON 600VAC SWGR #1-11C, 3 FT ABOVE THE FLR          | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 65   | 2      | 1-11C6        | 0      | ELECTRICAL DISTRIBUT / 600VAC MCC E2C-C SUPPLY BREAKER  | AUXILIARY | 609.00      | 4KV RM, 600V SWGR Area, IN THE SW REGN OF THE RM, ON THE 600VAC. SWGR #1-11C, 1 FOOT ABOVE THE FLR | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 66   | 2      | 1-11C7        | 0      | ELECTRICAL DISTRIBUT / 600VAC BUS 11C SPARE CIRCUIT BREAKER   | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SW REGION OF THE RM, IN 600VAC SWGR #1-11C, 6 FT ABOVE THE FLR          | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 67   | 2      | 1-11C8        | 0      | ELECTRICAL DISTRIBUT / SERVICE BUILDING AND CONTAINMENT STANDBY LIGHTING TRANSFORMER TR-LTG-8 SUPPLY BREAKER  | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SW REGION OF THE RM, IN 600VAC SWGR #1-11C, 5 FT ABOVE THE FLR          | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 68   | 2      | 1-11C9        | 0      | ELECTRICAL DISTRIBUT / MAIN AND SPARE TRANSFORMER AUXILIARIES NORMAL DISTRIBUTION CABINET TCSN SUPPLY BREAKER | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SW REGION OF THE RM, IN 600VAC SWGR #1-11C, 3 FT ABOVE THE FLR          | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 69   | 2      | 1-11D         | 0      | ELECTRICAL DISTRIBUT / 600VAC BUS 11D SWITCHGEAR  | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SE REGION OF THE RM   | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 70   | 2      | 1-11D1        | 0      | ELECTRICAL DISTRIBUT / 600VAC BUS 11D SUPPLY BREAKER  | AUXILIARY | 609.00      | 4KV RM, 600V SWGR Area, IN THE SE REGN OF THE RM, ON 600VAC. SWGR #1-11D, 5 FEET ABOVE THE FLR     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 71   | 2      | 1-11D10       | 0      | ELECTRICAL DISTRIBUT / NORTH PLANT LIGHTING TRANSFORMER TR-LTG-9N SUPPLY BREAKER                              | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SE REGION OF THE RM, ON 600VAC SWGR #1-11D, 1 FT ABOVE THE FLR          | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 72   | 2      | 1-11D11       | 0      | ELECTRICAL DISTRIBUT / 600VAC BORIC ACID HEAT TRACE CONTROL CENTER BHT-D SUPPLY BREAKER                       | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SE REGION OF THE RM, ON 600VAC SWGR #1-11D, 6 FT ABOVE THE FLR          | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 73   | 2      | 1-11D13       | 0      | ELECTRICAL DISTRIBUT / REACTOR ROD CONTROL NORTH MOTOR-GENERATOR SET CRDMG-1N SUPPLY BREAKER                  | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SE REGION OF THE RM, ON 600VAC SWGR #1-11D, 3 FT ABOVE THE FLR          | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 74   | 2      | 1-11D14       | 0      | 600V AC DISTR / 600VAC MCC 1-AB-D, VCC 1-ABV-D, MCC 1-PS-D SUPPLY BREAKER                                     | AUXILIARY | 609.00      | 4KV RM, 600V SWGR Area, IN SE REGN OF THE RM, ON 600V AC SWGR 1-11D, 1 FT ABOVE THE FLR            | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 75   | 2      | 1-11D3        | 0      | ELECTRICAL DISTRIBUT / CONTAINMENT LIGHTING TRANSFORMER TR-LTG-10 SUPPLY BREAKER                              | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SE REGION OF THE RM, ON 600VAC SWGR #1-11D, 1 FT ABOVE THE FLR          | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/16/95  
Date

T.R. Satyan Sharma  
Print or Type Name

*T.R. Satyan Sharma*  
Signature

12/20/95  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|--|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 76   | 2      | 1-11D4        | 0      | ELECTRICAL DISTRIBUT / 600VAC BUS 11D SPARE CIRCUIT BREAKER  | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SE REGION OF THE RM, ON 600VAC SWGR #1-11D, 5 FT ABOVE THE FLR                              | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 77   | 2      | 1-11D5        | 0      | ELECTRICAL DISTRIBUT / 600VAC MCC ABD-D SUPPLY BREAKER   | AUXILIARY | 609.00      | 4KV RM, 600V SWGR Area, IN THE SE REGN OF THE RM, IN 600VAC SWGR #1-11D, 3 FEET ABOVE THE FLR                          | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 78   | 2      | 1-11D6        | 0      | ELECTRICAL DISTRIBUT / 600VAC MCC EZC-D SUPPLY BREAKER   | AUXILIARY | 609.00      | 4KV RM, 600V SWGR Area, IN THE SE REGN OF THE RM, IN 600VAC SWGR #1-11D, 1 FOOT ABOVE THE FLR                          | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 79   | 2      | 1-11D8        | 0      | ELECTRICAL DISTRIBUT / 600VAC MCC AM-D SUPPLY BREAKER  | AUXILIARY | 609.00      | 4KV RM, 600V SWGR Area, IN THE SE REGN OF THE RM, IN 600VAC SWGR #1-11D, 5 FT ABOVE THE FLR                            | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 80   | 2      | 1-11D9        | 0      | ELECTRICAL DISTRIBUT / MAIN AND SPARE TRANSFORMER AUXILIARIES EMERGENCY DISTRIBUTION CABINET TCSE SUPPLY BREAKER | AUXILIARY | 609.00      | 4KV RM - 600V SWGR, IN THE SE REGION OF THE RM, ON 600VAC SWGR #1-11D, 3 FT ABOVE THE FLR                              | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 81   | 2      | 1-52-BYA      | 0      | REACTOR TRIP BREAKER / REACTOR ROD CONTROL TRAIN 'A' REACTOR TRIP BYPASS CIRCUIT BREAKER                         | AUXILIARY | 609.00      | CRD EQUIP RM, IN THE MIDDLE WEST REGION OF THE RM, ON 260/150VAC ROD CONTROL MOTOR-GENERATOR SET SWGR #1-CRDSWGR, 3 FT | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 82   | 2      | 1-52-BYB      | 0      | ROD CONTROL AND INST / REACTOR ROD CONTROL TRAIN 'B' REACTOR TRIP BYPASS CIRCUIT BREAKER                         | AUXILIARY | 609.00      | CRD EQUIP RM, ON 260/150 VAC ROD CONTROL MOTOR-GENERATOR SET SWGR #1-CRDSWGR, NEAR THE FLR                             | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 83   | 2      | 1-52-RTA      | 0      | ROD CONTROL AND INST / REACTOR ROD CONTROL TRAIN 'A' REACTOR TRIP CIRCUIT BREAKER                                | AUXILIARY | 609.00      | CRD EQUIP RM, IN THE MIDDLE WEST REGION OF THE RM, IN BREAKER COMPARTMENT #1-52-RTA, 3 FT ABOVE THE FLR                | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 84   | 2      | 1-52-RTB      | 0      | ROD CONTROL AND INST / REACTOR ROD CONTROL TRAIN 'B' REACTOR TRIP CIRCUIT BREAKER                                | AUXILIARY | 609.00      | CRD EQUIP RM, IN THE MIDDLE WEST REGION OF THE RM, IN BREAKER COMPARTMENT #1-52-RTB, NEAR THE FLR                      | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 85   | 3      | 1-T11A        | 0      | ELECTRICAL DISTRIBUT / 4KV BUS T11A SWITCHGEAR   | AUXILIARY | 609.00      | 4KV RM - AB 4KV SWGR, IN THE SE REGION OF THE RM, 5 FT NE OF THE RM'S ENTRANCE DOORWAY                                 | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 86   | 3      | 1-T11A1       | 0      | ELECTRICAL DISTRIBUT / SOUTH SAFETY INJECTION PUMP PP-26S SUPPLY BREAKER   | AUXILIARY | 609.00      | 4KV RM - AB 4KV SWGR, IN THE SE REGION OF THE RM, IN 4KV SWGR #1-T11A, NEAR THE FLR                                    | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 87   | 3      | 1-T11A10      | 0      | ELECTRICAL DISTRIBUT / 600V BUS 11A SUPPLY TRANSFORMER TR11A SUPPLY BREAKER                                      | AUXILIARY | 609.00      | 4KV RM, AB 4KV SWGR RM, IN THE SE REGN OF THE RM, IN 4KV SWGR #1-T11A, NEAR THE FLR                                    | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 88   | 3      | 1-T11A11      | 0      | ELECTRICAL DISTRIBUT / AB EMERG DIESEL GENERATOR TO 4KV BUS T11A SUPPLY BREAKER                                  | AUXILIARY | 609.00      | 4KV RM, AB 4KV SWGR RM, IN THE SE REGN OF THE RM, IN 4KV SWGR #1-T11A, NEAR THE FLR                                    | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 89   | 3      | 1-T11A12      | 0      | ELECTRICAL DISTRIBUT / CIRCUIT BREAKER FROM 69KV TO BUS T11A   | AUXILIARY | 609.00      | 4KV RM, IN THE NE REGN OF THE RM   | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 90   | 3      | 1-T11A2       | 0      | ELECTRICAL DISTRIBUT / WEST MOTOR DRIV AUX FEEDWATER PUMP PP-3W SUPPLY BREAKER                                   | AUXILIARY | 609.00      | 4KV RM, AB 4KV SWGR RM, IN THE SE REGN OF THE RM, IN 4KV SWGR #1-T11A, NEAR THE FLR                                    | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 91   | 3      | 1-T11A3       | 0      | ELECTRICAL DISTRIBUT / WEST CONTAINMENT SPRAY PUMP PP-9W SUPPLY BREAKER  | AUXILIARY | 609.00      | 4KV RM - AB 4KV SWGR, IN THE SE REGION OF THE RM, IN 4KV SWGR #1-T11A, NEAR THE FLR                                    | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/16/95  
Date

T.R. Satyan Sharma  
Print or Type Name

*T.R. Satyan Sharma*  
Signature

12/20/95  
Date



## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|--|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 92   | 3      | 1-T11A4       | 0      | ELECTRICAL DISTRIBUT / WEST RHR PUMP PP-35W SUPPLY BREAKER   | AUXILIARY | 609.00      | 4KV RM, AB 4KV SWGR RM, IN THE SE REGN OF THE RM, IN 4KV SWGR #1-T11A, NEAR THE FLR     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 93   | 3      | 1-T11A5       | 0      | ELECTRICAL DISTRIBUT / WEST ESW PUMP PP-7W SUPPLY BREAKER  | AUXILIARY | 609.00      | 4KV RM, AB 4KV SWGR RM, IN THE SE REGN OF THE RM, IN 4KV SWGR #1-T11A, NEAR THE FLR     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 94   | 3      | 1-T11A6       | 0      | ELECTRICAL DISTRIBUT / 4KV BUS T11A TO 480V PRESSURIZER HEATER BUS SUPPLY XFMR TR11A PHA SUPPLY BRKR | AUXILIARY | 609.00      | 4KV RM - AB 4KV SWGR, IN THE SE REGION OF THE RM, IN 4KV SWGR #1-T11A, NEAR THE FLR     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 95   | 3      | 1-T11A7       | 0      | ELECTRICAL DISTRIBUT / WEST CCW PUMP PP-10W SUPPLY BREAKER   | AUXILIARY | 609.00      | 4KV RM, AB 4KV SWGR RM, IN THE SE REGN OF THE RM, IN 4KV SWGR #1-T11A, NEAR THE FLR     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 96   | 3      | 1-T11A8       | 0      | ELECTRICAL DISTRIBUT / WEST CENTRIFUGAL CHARGING PUMP PP-50W SUPPLY BREAKER                          | AUXILIARY | 609.00      | 4KV RM, AB 4KV SWGR RM, IN THE SE REGN OF THE RM  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 97   | 3      | 1-T11A9       | 0      | ELECTRICAL DISTRIBUT / 4KV BUS 1A TO 4KV BUS T11A TIE BREAKER  | AUXILIARY | 609.00      | 4KV RM - AB 4KV SWGR, IN THE SE REGION OF THE RM, IN 4KV SWGR #1-T11A, NEAR THE FLR     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 98   | 3      | 1-T11B        | 0      | ELECTRICAL DISTRIBUT / 4KV BUS T11B SWITCHGEAR   | AUXILIARY | 609.00      | 4KV RM - AB 4KV SWGR, IN THE NW REGION OF THE RM, 20 FT NORTH OF THE RM'S ENTRANCE DOOR | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 99   | 3      | 1-T11B1       | 0      | ELECTRICAL DISTRIBUT / 4KV BUS 1B TO 4KV BUS T11B TIE BREAKER  | AUXILIARY | 609.00      | 4KV RM - AB 4KV SWGR, IN THE NW REGION OF THE RM, IN 4KV SWGR #1-T11B, NEAR THE FLR     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 100  | 3      | 1-T11B2       | 0      | ELECTRICAL DISTRIBUT / CIRCUIT BREAKER FROM 69KV BUS TO BUS T11B                                     | AUXILIARY | 609.00      | 4KV RM, AB 4KV SWGR RM, IN THE NW REGN OF THE RM, IN 4KV SWGR #1-T11B, NEAR THE FLR     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 101  | 3      | 1-T11B4       | 0      | ELECTRICAL DISTRIBUT / AB EMERG DIESEL GENERATOR TO 4KV BUS T11 SUPPLY BREAKER                       | AUXILIARY | 609.00      | 4KV RM, AB 4KV SWGR RM, IN THE NW REGN OF THE RM, IN 4KV SWGR #1-T11B, NEAR THE FLR     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 102  | 3      | 1-T11C        | 0      | ELECTRICAL DISTRIBUT / 4KV BUS T11C SWITCHGEAR   | AUXILIARY | 609.00      | 4KV RM - CD 4KV SWGR, IN THE NE REGION OF THE RM, 25 FT NE OF THE RM'S ENTRANCE DOOR    | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 103  | 3      | 1-T11C1       | 0      | ELECTRICAL DISTRIBUT / 4KV BUS 1C TO 4KV BUS T11C TIE BREAKER  | AUXILIARY | 609.00      | 4KV RM - CD 4KV SWGR, IN THE NE REGION OF THE RM, IN 4KV SWGR #1-T11C, NEAR THE FLR     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 104  | 3      | 1-T11C2       | 0      | ELECTRICAL DISTRIBUT / CIRCUIT BREAKER-4KV FROM 69KV TO BUS T11C                                     | AUXILIARY | 609.00      | 4KV RM, IN THE SW REGN OF THE RM  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 105  | 3      | 1-T11C3       | 0      | ELECTRICAL DISTRIBUT / CD EMERG DIESEL GENERATOR TO 4KV BUS T11C SUPPLY BREAKER                      | AUXILIARY | 587.00      | 4KV RM, CD 4KV SWGR RM, IN THE NE REGN OF THE RM, IN 4KV SWGR #1-T11C, NEAR THE FLR     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 106  | 3      | 1-T11D        | 0      | ELECTRICAL DISTRIBUT / 4KV BUS T11D SWITCHGEAR   | AUXILIARY | 609.00      | 4KV RM - CD 4KV SWGR, IN THE SW REGION OF THE RM, 20 FT SE OF THE RM'S ENTRANCE DOOR    | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 107  | 3      | 1-T11D1       | 0      | ELECTRICAL DISTRIBUT / CIRCUIT BREAKER 4KV FROM 69KV FEED TO BUS T11D                                | AUXILIARY | 609.00      | 4KV RM, CD 4KV SWGR RM, IN THE SW REGN OF THE RM, NEAR THE FLR                          | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 108  | 3      | 1-T11D10      | 0      | ELECTRICAL DISTRIBUT / EAST ESS SERVICE WATER PUMP 1-PP-7E SUPPLY BREAKER                            | AUXILIARY | 609.00      | 4KV RM, CD 4KV SWGR RM, IN THE SW REGN OF THE RM  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/16/95  
Date

T.R. Satyan Sharma  
Print or Type Name

*T.R. Satyan Sharma*  
Signature

12/20/95  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No.  | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|----------------|--------|--|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 109  | 3      | 1-T11D11       | 0      | ELECTRICAL DISTRIBUT / EAST MOTOR DRIVEN AUXILIARY FEED WATER PUMP PP-3E SUPPLY BREAKER            | AUXILIARY | 609.00      | 4KV RM, CD 4KV SWGR RM, IN THE SW REGN OF THE RM, IN THE 4KV SWGR #1-T11D, NEAR THE FLR  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 110  | 3      | 1-T11D12       | 0      | ELECTRICAL DISTRIBUT / 4KV BUS 1D TO 4KV BUS T11D TIE BREAKER                                      | AUXILIARY | 609.00      | 4KV RM - CD 4KV SWGR, IN THE SW REGION OF THE RM, IN 4KV SWGR #1-T11D, NEAR THE FLR  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 111  | 3      | 1-T11D2        | 0      | ELECTRICAL DISTRIBUT / 600V BUS 11D SUPPLY TRANSFORMER TR11D SUPPLY BREAKER                        | AUXILIARY | 609.00      | 4KV RM, CD 4KV SWGR RM, IN THE SW REGN OF THE RM, IN 4KV SWGR #1-T11D, NEAR THE FLR  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 112  | 3      | 1-T11D3        | 0      | ELECTRICAL DISTRIBUT / CIRCUIT BREAKER-4KV CCW PUMP-1-EAST SUPPLY BREAKER                          | AUXILIARY | 609.00      | 4KV RM, IN SW REGN OF THE RM, IN 4KV SWGR #1-T11D, NEAR THE FLR  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 113  | 3      | 1-T11D4        | 0      | ELECTRICAL DISTRIBUT / EAST CONTAINMENT SPRAY PUMP PP-9E SUPPLY BREAKER                            | AUXILIARY | 609.00      | 4KV RM - CD 4KV SWGR, IN THE SW REGION OF THE RM, IN 4KV SWGR #1-T11D, NEAR THE FLR  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 114  | 3      | 1-T11D5        | 0      | ELECTRICAL DISTRIBUT / NORTH SAFETY INJECTION PUMP PP-26N SUPPLY BREAKER                           | AUXILIARY | 609.00      | 4KV RM - CD 4KV SWGR, IN THE SW REGION OF THE RM, IN 4KV SWGR #1-T11D, NEAR THE FLR  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 115  | 3      | 1-T11D6        | 0      | ELECTRICAL DISTRIBUT / EAST RHR PUMP PP-3SE SUPPLY BKR   | AUXILIARY | 609.00      | 4KV RM, IN THE SW REGN OF THE RM   | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 116  | 3      | 1-T11D7        | 0      | ELECTRICAL DISTRIBUT / EAST CENTRIFUGAL CHARGING PUMP 1-PP-50E SUPPLY BREAKER                      | AUXILIARY | 609.00      | 4KV RM, IN THE NE CORNER OF THE RM, NEAR THE CEILING.  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 117  | 3      | 1-T11D8        | 0      | ELECTRICAL DISTRIBUT / CD EMERG DIESEL GENERATOR TO 4KV BUS T11D SUPPLY BREAKER                    | AUXILIARY | 609.00      | 4KV RM, CD 4KV SWGR RM, IN THE SW REGN OF THE RM, IN 4KV SWGR #1-T11D, NEAR THE FLR  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 118  | 3      | 1-T11D9        | 0      | ELECTRICAL DISTRIBUT / 4KV BUS T11D TO 480V PRESSURIZER HEATER BUS SUPPLY XFMR TR11PHC SUPPLY BRKR | AUXILIARY | 609.00      | 4KV RM - CD 4KV SWGR, IN THE SW REGION OF THE RM, IN 4KV SWGR #1-T11D, NEAR THE FLR  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 119  | 4      | 1-CRID-4-CVT   | 0      | 120V CONTROL ROOM IN / 10KVA TRANSFORMER-CONSTANT VOLTAGE  | AUXILIARY | 609.00      | 4KV RM, 600V SWGR Area, IN THE SE REGN OF THE RM, 7 FEET S OF 600VAC BUS 11B SUPPLY TRANSFORMER #1-TR11B                           | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 120  | 4      | 1-CRID-II-CVT  | 0      | 120VAC DISTRIBUTION / 120V AC CR INST DISTR CH-II ISOL. CONT. VOLT TRANSF                          | AUXILIARY | 609.00      | 4KV RM, 600V SWGR Area, IN SE REGN OF RM, 7' SW OF 600V AC BUS 11B SUPPLY TRANS# 1-TR11B   | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 121  | 4      | 1-CRID-III-CVT | 0      | 120V CONTROL ROOM IN / 10 KVA ISOLIMETER-CONSTANT VOLTAGE-TRANSFORMER                              | AUXILIARY | 609.00      | 4KV RM, 600V SWGR Area, IN THE SE REGN OF THE RM, 7 FEET SE OF 600VAC BUS 11B SUPPLY TRANSFORMER #1-TR11B                          | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 122  | 4      | 1-CRID-IV-CVT  | 0      | 120V CONTROL ROOM IN / 10KVA ISOLIMETER-CONSTANT VOLTAGE-TRANSFORMER                               | AUXILIARY | 609.00      | 4KV RM, 600V SWGR Area, IN SE REGN OF THE RM, 7 FEET SE OF 600 VAC BUS 11B SUPPLY TRANSFORMER #1-TR11B                             | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 123  | 4      | 1-DGAB-FFCKT   | 0      | DIESEL GENERATION, C / AB EMERGENCY DIESEL GENERATOR OME-150-AB FIELD FLASH CIRCUIT TRANSFORMER    | AUXILIARY | 587.00      | AB EDG RM, IN MIDDLE N REGN OF RM, 5 FT. E OF RM'S DOORWAY, INSIDE N SIDE OF AB EMERG DIESEL GEN CONT SUBPANEL 1-DGAB, 2' ABV FLOO | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 124  | 4      | 1-DGCD-FFCKT   | 0      | DIESEL GENERATION, C / CD EMERGENCY DIESEL GENERATOR OME-150-CD FIELD FLASH CKT TRANSFORMER        | AUXILIARY | 587.00      | CD EDG RM, IN MIDDLE S REGN OF RM, 5' W OF CD EMERG. DSL GEN RM DOORWAY, INSIDE CD EMERG DSL CTRL SUBPNL 1-DGCD, NEAR FLR          | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/16/95  
Date

T.R. Satyan Sharma  
Print or Type Name

*T.R. Satyan Sharma*  
Signature

12/20/95  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No.  | Rev No | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|----------------|--------|---|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 125  | 4      | 1-TR-AFW       | 0      | 120/220V CONTROL AND / AUXILIARY FEEDWATER 120/208VAC DIST PNL AFW SUPPLY TRANSFORMER     | AUXILIARY | 587.00      | CD EDG RM, IN MIDDLE NE REGN OF RM, 10 FT. NW OF CD EMERG DIESEL GEN #1-OME-150-CD, NEAR N WALL  | 587.00     | Yes  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 126  | 4      | 1-TR-ELSC      | 0      | 120V/220 CONTROL AND / 120/208 VAC EMERGENCY LOCAL SHUTDOWN DISTRIBUTION TRANSFORMER      | AUXILIARY | 587.00      | AB EDG RM, IN THE NE CORNER OF THE RM, ON THE E WALL, 4 FEET ABOVE THE FLR                       | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 127  | 4      | 1-TR11A        | 0      | ELECTRICAL DISTRIBUT / 600VAC BUS 11A SUPPLY TRANSFORMER                                  | AUXILIARY | 609.00      | 4KV RM, 600V SWGR Area, IN THE NW REGN OF THE RM   | 609.00     | No   | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 128  | 4      | 1-TR11B        | 0      | ELECTRICAL DISTRIBUT / 600VAC BUS 11B SUPPLY TRANSFORMER                                  | AUXILIARY | 609.00      | 4KV RM, 600V SWGR Area, IN THE NE REGN OF THE RM   | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 129  | 4      | 1-TR11C        | 0      | ELECTRICAL DISTRIBUT / 600VAC BUS 11C SUPPLY TRANSFORMER                                  | AUXILIARY | 609.00      | 4KV RM, CD 4KV SWGR RM, IN THE NE REGN OF THE RM   | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 130  | 4      | 1-TR11D        | 0      | ELECTRICAL DISTRIBUT / 600VAC BUS 11D SUPPLY TRANSFORMER                                  | AUXILIARY | 609.00      | 4KV RM, 600V SWGR Area, IN THE NE REGN OF THE RM   | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 131  | 16     | 1-BC-A         | 0      | 250VDC CONTROL AND I / BATTERY CHARGER  | AUXILIARY | 633.00      | HALLWAY, 20 FEET N OF THE 'N' TRAIN BATTERY RM, NEAR THE E WALL                                  |            | Yes  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 132  | 16     | 1-BC-AB1       | 0      | 250V DC DISTRIBUTION / PLANT BATT BATT-AB BATTERY CHARGER #1                              | AUXILIARY | 613.00      | 4KV RM, IN CENTER OF RM, 4 FT N OF PLANT BATTERY CHARGER #1-BC-AB2                               | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 133  | 16     | 1-BC-AB2       | 0      | 250V DC DISTRIBUTION / PLANT BATTERY BATT-AB CHARGER #2                                   | AUXILIARY | 613.00      | 4KV RM, Mezzanine Area, IN CENTER OF THE RM, 4 FT S EAST OF PLANT BATTERY CONTROL PANEL #1-BC-AB | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 134  | 16     | 1-BC-B         | 0      | 250VDC CONTROL AND I / BATTERY CHARGER  | AUXILIARY | 633.00      | HALLWAY, 22 FEET N OF THE 'N' TRAIN BATTERY RM, NEAR THE E WALL                                  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 135  | 16     | 1-BC-CD1       | 0      | 250V DC DISTRIBUTION / PLANT BATTERY BATT-CD CHARGER #1                                   | AUXILIARY | 626.00      | CD BATT EQUIP AREA, IN N END OF RM, 4 FT SW OF PLANT BATTERY DISTRIBUTION PANEL #1-BCTC-CD       | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 136  | 16     | 1-BC-CD2       | 0      | 250V DC DISTRIBUTION / PLANT BATTERY BATT-CD CHARGER #2                                   | AUXILIARY | 626.00      | CD BATT EQUIP AREA, IN N END OF THE RM   | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 137  | 16     | 1-CRID-I-INV   | 0      | 120VAC CONTROL ROOM / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CH-I INVERTER    | AUXILIARY | 609.00      | INVERTER AREA, IN THE MIDDLE E REGN OF THE RM, 20 FEET FROM THE N WALL, 3 FEET FROM THE E WALL   | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 138  | 16     | 1-CRID-II-INV  | 0      | 120V DC DISTRIBUTION / 120V AC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CH-II INVERTER | AUXILIARY | 609.00      | INVERTER AREA, IN SE REGN OF RM, 10 FT FROM THE N WALL, 3 FT FROM THE E WALL                     | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 139  | 16     | 1-CRID-III-INV | 0      | 120V CONTROL ROOM IN / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CH-III INVERTER | AUXILIARY | 609.00      | INVERTER AREA, IN THE SW REGN OF THE RM, 20 FEET FROM THE S WALL, 3 FEET FROM THE W WALL         | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

Signature

Date

T.R. Satyan Sharma  
Print or Type Name

Signature

Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip.ID No.  | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|--|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 140  | 16     | 1-CRID-IV-INV | 0      | 120V CONTROL ROOM IN / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CH-IV INVERTER | AUXILIARY | 633.00      | CONTROL RM, IN THE NE CORNER OF TH RM, ON THE E WALL, ON CONTROL RM E REAR INSTRUMENT/RELAY RACK #1-ERR                | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 141  | 16     | 1-DGAB-INV    | 0      | DIESEL GENERATOR, CO / AB EMERGENCY DIESEL GENERATOR OME-150-AB INVERTER                 | AUXILIARY | 587.00      | AB EDG RM, IN NE REGN OF THE RM, 20 FEET NE OF AB EMERGENCY DIESEL GENERATOR #1-OME-150-AB                             | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 142  | 16     | 1-DGCD-INV    | 0      | 7 DIESEL GENERATOR INVERTER  | AUXILIARY | 587.00      | CD EDG RM, IN THE MIDDLE S REGN OF THE RM, 15 FEET SW OF THE CD EMERGENCY DIESEL GENERATOR #1-OME-150-CD, NEAR THE FLR | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/16/95  
Date

T.R. Satyan Sharma  
Print or Type Name

*T.R. Satyan Sharma*  
Signature

12/20/95  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description                                    | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|---|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 1    | 5      | 1-QT-106-AB1  | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL TRANSFER PUMP #1 | AUXILIARY | 587.00      | AB EDG FUEL OIL TRANSFER PUMP RM, IN THE MIDDLE SE REGN OF THE RM, 20FT S OF THE RM'S ENTRANCE DOOR, NEAR THE E WALL, ON THE FLR   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 2    | 5      | 1-QT-106-AB2  | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL TRANSFER PUMP #2 | AUXILIARY | 587.00      | AB EDG FUEL OIL TRANSFER PUMP RM, IN THE MIDDLE SE REGN OF THE RM, 22FT S OF THE RM'S ENTRANCE DOOR, NEAR THE E WALL, NEAR THE FLR | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

  
Signature

12/16/95  
Date

T.R. Satyan Sharma  
Print or Type Name

  
Signature

12/20/95  
Date



20

21

6

2

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID | Rev No | System/Equipment Description                         | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40? | Capacity vs. Demand Basis  | Cap > Demd? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|-----------|--------|--|-----------|-------------|---|------------|------|--|-------------|-------------|------------|--------------|-----------|
| 1    | 5      | 1-PP-10E  | 0      | CCW / EAST CCW PUMP                                  | AUXILIARY | 609.00      | HALLWAY   | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes         | Yes        | Yes          | Yes       |
| 2    | 5      | 1-PP-10W  | 0      | CCW / WEST CCW PUMP                                  | AUXILIARY | 609.00      | HALLWAY,  | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes         | Yes        | Yes          | Yes       |
| 3    | 5      | 1-PP-26N  | 0      | SAFETY INJECTION / NORTH SAFETY INJECTION PUMP       | AUXILIARY | 587.00      | N SAFETY INJECTION PUMP RM, IN THE MIDDLE OF THE RM, 5' SE OF THE ENTRANCE DOOR.                                    | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes         | Yes        | Yes          | Yes       |
| 4    | 5      | 1-PP-26S  | 0      | SAFETY INJECTION / SOUTH SAFETY INJECTION PUMP       | AUXILIARY | 587.00      | S SAFETY INJECTION PUMP RM, IN THE CENTER OF THE RM, 5' SE OF THE RM'S ENTRANCE.                                    | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes         | Yes        | Yes          | Yes       |
| 5    | 5      | 1-PP-3E   | 0      | AUX FEEDWATER / EAST MOTOR DRIV AUX FEEDWATER PUMP   | TURBINE   | 591.00      | E MOTOR DRIV AUX FDWTR PUMP RM, IN THE MIDDLE OF THE S PART OF THE RM.  | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes         | Yes        | Yes          | Yes       |
| 6    | 5      | 1-PP-3W   | 0      | AUX FEEDWATER / WEST MOTOR DRIVEN AUX FEEDWATER PUMP | TURBINE   | 591.00      | W MOTOR DRIV AUX FDWTR PUMP RM, IN THE MIDDLE OF THE W PART OF THE RM, 4' S OF THE ROLL-UP DOOR ENTRANCE.           | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes         | Yes        | Yes          | Yes       |
| 7    | 5      | 1-PP-4    | 0      | AUX FEEDWATER / TURBINE DRIV AUX FEEDWATER PUMP      | TURBINE   | 591.00      | TURB DRIV AUX FDWTR PUMP RM, SE PART OF THE RM.   | 591.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes         | Yes        | Yes          | Yes       |
| 8    | 5      | 1-PP-46-1 | 0      | CVCS / BORIC ACID STORAGE TANKS TRANSFER PUMP 1      | AUXILIARY | 587.00      | BORIC ACID STORAGE TANK AREA, IN MIDDLE E REGN OF RM, 5' E OF MIDDLE BORIC ACID STORAGE TANK 12-TK-12M, NEAR FLR.   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes         | No         | Yes          | No        |
| 9    | 5      | 1-PP-46-2 | 0      | CVCS / BORIC ACID STORAGE TANKS TRANSFER PUMP 2      | AUXILIARY | 587.00      | BORIC ACID STORAGE TANK AREA, IN MIDDLE NE REGN OF RM, 5' NE OF MIDDLE BORIC ACID STORAGE TANK 12-TK-12M, NEAR FLR. | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes         | Yes        | Yes          | Yes       |
| 10   | 5      | 1-PP-49   | 0      | CVCS / RECIPROCATING CHARGING PUMP                   | AUXILIARY | 587.00      | RECIPROCATING CHARGING PUMP RM, IN THE CENTER OF THE N END OF THE RM, FLR MOUNTED, 5' ABOVE THE FLR                 | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

John D. Stevenson  
Print or Type Name

*John D. Stevenson*  
Signature

12/11/95  
Date

Paul R. Wilson  
Print or Type Name

*Paul R. Wilson*  
Signature

12/11/95  
Date



6

6

3

3



## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID | Rev No | System/Equipment Description   | Building     | Floor Elev. | Room or Row/Column   | Base Elev. | <40? | Capacity vs. Demand Basis  | Cap > Demd? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|-----------|--------|--|--------------|-------------|--|------------|------|--|-------------|-------------|------------|--------------|-----------|
| 11   | 5      | 1-PP-50E  | 0      | CVCS / EAST CENTRIFUGAL CHARGING PUMP                                  | AUXILIARY    | 587.00      | E CENTRIFUGAL CHARGING PUMP RM, IN THE CENTER OF THE RM, FLR MOUNTED, 5' ABOVE THE FLR   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes         | Yes        | Yes          | Yes       |
| 12   | 5      | 1-PP-50W  | 0      | CVCS / WEST CENTRIFUGAL CHARGING PUMP                                  | AUXILIARY    | 587.00      | W CENTRIFUGAL CHARGING PUMP RM, IN CENTER OF THE RM, 5' ABOVE FLR  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes         | Yes        | Yes          | Yes       |
| 13   | 5      | 1-PP-82N  | 0      | CONTROL ROOM A/C CHI / CONTROL ROOM NORTH CHILL WATER CIRCULATION PUMP | AUXILIARY    | 650.00      | CONTROL RM, A/C RM, 4' E OF CR A/C N LIQUID CHILLER, NEAR THE FLR.   | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes         | Yes        | Yes          | Yes       |
| 14   | 5      | 1-PP-82S  | 0      | CONTROL ROOM A/C CHI / CONTROL A/C SOUTH CHILL WATER CIRCULATION PUMP  | AUXILIARY    | 650.00      | CONTROL RM, A/C RM, 4' E OF C/R A/C S LIQUID CHILLER, NEAR THE FLR.  | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes         | Yes        | Yes          | Yes       |
| 15   | 5      | 12-PP-10  | 0      | CCW / SPARE CCW PUMP   | AUXILIARY    | 609.00      | HALLWAY,   | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes         | Yes        | Yes          | Yes       |
| 16   | 5      | 12-PP-31N | 0      | SPENT FUEL PIT COOLI / NORTH SPENT FUEL PIT PUMP                       | AUXILIARY    | 609.00      | SPENT FUEL PIT HEAT XCHGR RM, IN THE NW REGION OF RM, 5 FT NORTH OF NORTH SPENT FUEL PIT HEAT EXCHANGER #12-HE-16N, NEAR THE FLR | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | No          | No         | Yes          | No        |
| 17   | 6      | 1-PP-35E  | 0      | RHR / EAST RHR PUMP  | AUXILIARY    | 573.00      | E RHR PUMP RM, 10 FEET N OF THE E RHR PUMP DOORWAY,  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes         | Yes        | Yes          | Yes       |
| 18   | 6      | 1-PP-35W  | 0      | RHR / WEST RHR PUMP  | AUXILIARY    | 573.00      | W RHR PUMP RM, MIDDLE OF N PART OF RM,   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes         | Yes        | Yes          | Yes       |
| 19   | 6      | 1-PP-7E   | 0      | ESW / EAST ESW PUMP  | SCREEN HOUSE | 591.00      | E ESW PUMP RM,   | 591.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes         | Yes        | Yes          | Yes       |
| 20   | 6      | 1-PP-7W   | 0      | ESW / WEST ESW PUMP  | SCREEN HOUSE | 591.00      | W ESW PUMP RM,   | 591.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

John D. Stevenson  
Print or Type Name

*John D. Stevenson*  
Signature

12/11/95  
Date

Paul R. Wilson  
Print or Type Name

*Paul R. Wilson*  
Signature

12/11/95  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID | Rev No | System/Equipment Description                    | Building  | Floor Elev. | Room or Row/Column                              | Base Elev. | <40? | Capacity vs. Demand Basis  | Cap > Demd? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|-----------|--------|---|-----------|-------------|---|------------|------|--|-------------|-------------|------------|--------------|-----------|
| 21   | 6      | 1-PP-9E   | 0      | CONTAINMENT SPRAY / EAST CONTAINMENT SPRAY PUMP | AUXILIARY | 573.00      | E CONT SPRAY PUMP RM, IN THE NW REGN.           | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes         | Yes        | Yes          | Yes       |
| 22   | 6      | 1-PP-9W   | 0      | CONTAINMENT SPRAY / WEST CONTAINMENT SPRAY PUMP | AUXILIARY | 573.00      | W CONT SPRAY PUMP RM, IN THE NW REGN OF THE RM. | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

John D. Stevenson  
Print or Type Name

*John D. Stevenson*  
Signature

12/11/95  
Date

Paul R. Wilson  
Print or Type Name

*Paul R. Wilson*  
Signature

12/11/95  
Date



## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|--|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 1    | 7      | 1-DRV-407     | 0      | STEAM LINE DRAINS / MAIN STEAM LEADS CONDENSATION DRAIN TANK TK-200, OUTLET SHUTOFF VALVE        | AUXILIARY | 621.00      | W MAIN STEAM STOP ENCLOSURE, 4' SW OF SG STOP VALVE #1-MRV-230, NEAR THE FLR.  | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | No           | No        |
| 2    | 7      | 1-FRV-245     | 0      | AUX FEEDWATER / WEST MOTOR DRV / AUX FEEDWATER PUMP PP-3W2 AIR OPERATED TEST VALVE               | TURBINE   | 591.00      | W MOTOR DRV AUX FDWTR PUMP RM, ON THE MIDDLE OF THE E WALL, 4' E OF W MDAFW PP, 3' ABOVE FLR.                        | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 3    | 7      | 1-FRV-247     | 0      | AUX FEEDWATER / WEST MOTOR DRV / AUX FEEDWATER PUMP PP-3W EMERG 1 AIR OPERATED LEAKOFF VALVE     | TURBINE   | 591.00      | W MOTOR DRV AUX FDWTR PUMP RM, IN THE SE PART OF THE RM, 10' SE OF W MDAFW PP, 2' ABOVE THE FLR.                     | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 4    | 7      | 1-FRV-255     | 0      | AUX FEEDWATER / EAST MOTOR DRV / AUX FEEDWATER PUMP PP-3E2 AIR OPERATED TEST VALVE               | TURBINE   | 591.00      | E MOTOR DRV AUX FDWTR PUMP RM, IN THE NW PART OF THE RM, NEAR THE W WALL, 7' NW OF E MDAFW PP MTR, 2' ABOVE THE FLR. | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 5    | 7      | 1-FRV-256     | 0      | AUX FEEDWATER / TURBINE DRV / AUX FEED PUMP PP-42 AIR OPERATED TEST VALVE                        | TURBINE   | 591.00      | TURB DRV AUX FDWTR PUMP RM, IN THE NW PART OF THE RM, 7' NW OF AUX FEED PUMP TURBINE 1-OME-39, 4' ABOVE THE FLR.     | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 6    | 7      | 1-FRV-257     | 0      | AUX FEEDWATER / EAST MOTOR DRV / AUX FEEDWATER PUMP PP-3E EMERG 1 AIR OPERATED LEAKOFF VALVE     | TURBINE   | 591.00      | E MOTOR DRV AUX FDWTR PUMP RM, IN THE NW PART OF THE RM, ON THE W WALL, 6' NW OF E MDAFW PP, 5' ABOVE THE FLR.       | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 7    | 7      | 1-FRV-258     | 0      | AUX FEEDWATER / TURBINE DRV / AUX FEED PUMP EMERG 1 AIR OPERATED LEAKOFF VALVE                   | TURBINE   | 591.00      | TURB DRV AUX FDWTR PUMP RM, IN THE NW PART OF THE RM, 8' NW OF AFW PP TURBINE 1-OME-39, 6' ABOVE THE FLR.            | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 8    | 7      | 1-MRV-221     | 0      | MAIN STEAM / STEAM GENERATOR 2 STOP VALVE MRV-220 STEAM CYLINDER 'A' DUMP VALVE                  | AUXILIARY | 633.00      | W MAIN STEAM STOP ENCLOSURE, 5' S OF STEAM STOP VALVE 1-MRV-220, BY THE 640 EL. PLATFORM.                            | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 9    | 7      | 1-MRV-222     | 0      | MAIN STEAM / STEAM GENERATOR 2 STOP VALVE MRV-220 STEAM CYLINDER 'B' DUMP VALVE                  | AUXILIARY | 633.00      | W MAIN STEAM STOP ENCLOSURE, 3' SE OF STEAM STOP VALVE 1-MRV-220, ON THE 640 EL. PLATFORM.                           | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 10   | 7      | 1-MRV-223     | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2 PORV  | AUXILIARY | 633.00      | W MAIN STEAM STOP ENCLOSURE, 7' SE OF THE TOP OF STEAM STOP VALVE 1-MRV-220, ON THE 647 EL. PLATFORM.                | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 11   | 7      | 1-MRV-231     | 0      | MAIN STEAM / STEAM GENERATOR 3 STOP VALVE MRV-230 STEAM CYLINDER 'A' DUMP VALVE                  | AUXILIARY | 633.00      | W MAIN STEAM STOP ENCLOSURE, 5' N OF STEAM STOP VALVE 1-MRV-230, ON 640 EL. PLATFORM.                                | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 12   | 7      | 1-MRV-232     | 0      | MAIN STEAM / STEAM GENERATOR 3 STOP VALVE MRV-230 STEAM CYLINDER 'B' DUMP VALVE                  | AUXILIARY | 633.00      | W MAIN STEAM STOP ENCLOSURE, 3' NW OF STEAM STOP VALVE 1-MRV-230, ON THE 640 EL. PLATFORM.                           | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 13   | 7      | 1-MRV-233     | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3 PORV  | AUXILIARY | 633.00      | W MAIN STEAM STOP ENCLOSURE, 8' NE OF THE TOP OF STEAM STOP VALVE 1-MRV-230, ON THE 647 EL. PLATFORM.                | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 14   | 7      | 1-SV-140-1    | 0      | AUX FEEDWATER / TURBINE DRV / AUX FEED PUMP GOVERNOR OIL COOLER COOLING WATER INLET SAFETY VALVE | TURBINE   | 591.00      | TB DRIVEN AUX FDWTR PMP  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 15   | 7      | 1-SV-140-2    | 0      | AUX FEEDWATER / TURBINE DRV / AUX FEED PUMP OIL COOLER COOLING WATER INLET SAFETY VALVE          | TURBINE   | 591.00      | TB DRIVEN AUX FDWTR PMP  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Walter Djordjevic  
Print or Type Name

Signature

Date

Gunnar Harstead  
Print or Type Name

Signature

Date

12/13/95

Gunnar Harstead 12/12/95



## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No. | System/Equipment Description   | Building    | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|---------|--|-------------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 16   | 7      | 1-SV-169E     | 0       | AUX FEEDWATER / EAST MOTOR DRN AUX FEED PUMP PP-3E SUCTION SAFETY VALVE                              | TURBINE     | 591.00      | E MOTOR DRIVEN AUX FDWTR PU  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 17   | 7      | 1-SV-169W     | 0       | AUX FEEDWATER / WEST MOTOR DRN AUX FEEDWATER PUMP SUCTION SAFETY VALVE                               | TURBINE     | 591.00      | W MOTOR DRIVEN AUX FDWTR PU  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 18   | 7      | 1-SV-1A-2     | 0       | MAIN STEAM / STEAM GENERATOR OME-3-2 SAFETY VALVE 1A   | AUXILIARY   | 633.00      | W MAIN STM STOP ENCL   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 19   | 7      | 1-SV-1A-3     | 0       | MAIN STEAM / STEAM GENERATOR OME-3-3 SAFETY VALVE 1A   | AUXILIARY   | 633.00      | W MAIN STM STOP ENCL   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 20   | 7      | 1-SV-1B-2     | 0       | MAIN STEAM / STEAM GENERATOR 2 SAFETY VALVE 1B   | AUXILIARY   | 633.00      | W MAIN STM STOP ENCL   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 21   | 7      | 1-SV-1B-3     | 0       | MAIN STEAM / STEAM GENERATOR OME-3-3 SAFETY VALVE 1B   | AUXILIARY   | 633.00      | W MAIN STM STOP ENCL   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 22   | 7      | 1-SV-2A-2     | 0       | MAIN STEAM / STEAM GENERATOR OME-3-2 SAFETY VALVE 1A   | AUXILIARY   | 633.00      | W MAIN STM STOP ENCL   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 23   | 7      | 1-SV-2A-3     | 0       | MAIN STEAM / STEAM GENERATOR OME-3-3 SAFETY VALVE 2A   | AUXILIARY   | 633.00      | W MAIN STM STOP ENCL   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 24   | 7      | 1-SV-2B-2     | 0       | MAIN STEAM / STEAM GENERATOR OME-3-2 SAFETY VALVE 2B   | AUXILIARY   | 633.00      | W MAIN STM STOP ENCL   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 25   | 7      | 1-SV-2B-3     | 0       | MAIN STEAM / STEAM GENERATOR OME-3-3 SAFETY VALVE 2B   | AUXILIARY   | 633.00      | W MAIN STM STOP ENCL   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 26   | 7      | 1-SV-3-2      | 0       | MAIN STEAM / STEAM GENERATOR OME-3-2 SAFETY VALVE 3  | AUXILIARY   | 633.00      | W MAIN STM STOP ENCL   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 27   | 7      | 1-SV-3-3      | 0       | MAIN STEAM / STEAM GENERATOR OME-3-3 SAFETY VALVE #3   | AUXILIARY   | 633.00      | W MAIN STM STOP ENCL, 10 FT NW OF STEAM STOP VLV #1-MRV-230, ON 640 ELEVATION PLATFORM | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 28   | 7      | 1-SV-67-1     | 0       | CCW / CCW TO BORIC ACID SAFETY VALVE   | AUXILIARY   | 587.00      | REFUELING WTR PURIF PMP RM   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 29   | 7      | 1-WRV-711     | 0       | ESW / ESW TO CONTROL ROOM A/C NORTH LIQUID CHILLER CONDENSER CONTROL VALVE                           | AUXILIARY   | 650.00      | CTRL RM AIR COND RM  | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 30   | 7      | 1-WRV-712     | 0       | ESW / ESW TO CONTROL ROOM A/C SOUTH LIQUID CHILLER CONDENSER CONTROL VALVE                           | AUXILIARY   | 650.00      | CTRL RM AIR COND RM  | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 31   | 7      | 1-WRV-761     | 0       | ESW / EAST ESW PUMP PP-7E DISCHARGE STRAINER EAST BASKET BACKWASH OUTLET SHUTOFF VALVE               | SCREENHOUSE | 591.00      | E ESW PUMP RM,   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 32   | 7      | 1-WRV-762     | 0       | ESW / WEST ESW PUMP PP-7W DISCHARGE STRAINER EAST BASKET BACKWASH OUTLET SHUTOFF VALVE               | SCREENHOUSE | 591.00      | W ESW PUMP RM, 2' S OF WESW PUMP DISCHARGE STRAINER #1-OME-34W, 1' ABOVE THE FLR.      | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 33   | 7      | 1-WRV-766     | 0       | ESW / EAST ESW PUMP PP-7E DISCHARGE STRAINER EAST BASKET BACKWASH 4 AIR OPERATED INLET SHUTOFF VALVE | SCREENHOUSE | 591.00      | E ESW PUMP RM,   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 34   | 7      | 1-WRV-767     | 0       | ESW / WEST ESW PUMP PP-7W DISCHARGE STRAINER EAST BASKET BACKWASH INLET 4 AIR OPERATED SHUTOFF VALVE | SCREENHOUSE | 591.00      | W ESW PUMP RM,   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Walter Djordjevic  
Print or Type Name

Signature

Date

Gunnar Harstead  
Print or Type Name

Signature

Date

12/13/95

Gunnar Harstead 12/12/95



## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description   | Building    | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|--|-------------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 35   | 7      | 1-WRV-771     | 0      | ESW / EAST ESW PUMP PP-7E DISCHARGE STRAINER WEST BASKET BACKWASH OUTLET SHUTOFF VALVE   | SCREENHOUSE | 591.00      | E ESW PUMP RM,  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 36   | 7      | 1-WRV-772     | 0      | ESW / WEST ESW PUMP PP-7W DISCHARGE STRAINER WEST BASKET BACKWASH SHUTOFF VALVE  | SCREENHOUSE | 591.00      | W ESW PUMP RM,  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 37   | 7      | 1-WRV-776     | 0      | ESW / EAST ESW PUMP PP-7E DISCHARGE STRAINER WEST BASKET BACKWASH INLET 4 AIR OPERATED SHUTOFF VALVE                                 | SCREENHOUSE | 591.00      | E ESW PUMP RM,  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 38   | 7      | 1-WRV-777     | 0      | ESW / WEST ESW PUMP PP-7W DISCHARGE STRAINER WEST BASKET BACKWASH INLET 4 AIR OPERATED SHUTOFF VALVE                                 | SCREENHOUSE | 591.00      | W ESW PUMP RM,  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 39   | 7      | 12-CRV-51     | 0      | CONDENSATE STORAGE S / UNIT 1 AND 2 CONDENSATE STORAGE TANK CROSSTIE 8 AIR OPERATED SHUTOFF VALVE                                    | TURBINE     | 591.00      | AUX FEED PUMP E HALLWAY, 5' SE OF THE TURBINE DRIVEN AFW PUMP RM, 2' NW OF COLUMN #H-13, 4' ABOVE THE FLR.                                      | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 40   | 7      | 12-SV-217     | 0      | REACTOR NITROGEN / REACTOR PLANT NITROGEN BULK STORAGE TANKS SAFETY VALVE  | GROUND      | 609.00      | REACTOR GAS BOTTLE STORAGE AREA, 45 FEET NORTHWEST OF THE AUX 609 CRANEWAY ROLLUP DOOR, BETWEEN REACTOR NITROGEN STORAGE TANKS #12-TK-207-3 AND | 650.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 41   | 8      | 1-IMO-210     | 0      | CONTAINMENT SPRAY / EAST CONTAINMENT SPRAY PUMP PP-9E DISCHARGE SHUTOFF 10 MOTOR OPERATED VALVE                                      | AUXILIARY   | 573.00      | E CONT SPRAY PUMP RM, IN THE SW REGN OF RM, 7' SW OF E CONT. SPRAY PUMP, 4' ABOVE FLR.  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 42   | 8      | 1-IMO-211     | 0      | CONTAINMENT SPRAY / EAST CONTAINMENT SPRAY PUMP PP-9E DISCHARGE SHUTOFF 10 MOTOR OPERATED VALVE                                      | AUXILIARY   | 573.00      | E CONT SPRAY PUMP RM, IN THE SW REGN OF RM, 7' SW OF E CONT. SPRAY PUMP, 4' ABOVE FLR.  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 43   | 8      | 1-IMO-212     | 0      | CONTAINMENT SPRAY / EAST CONTAINMENT SPRAY PUMP PP-9E DISCHARGE TO CONTAINMENT SPRAY ADDITIVE EDUCTOR 2 MOTOR OPERATED SHUTOFF VALVE | AUXILIARY   | 573.00      | E CONT SPRAY PUMP RM, IN THE MIDDLE S PART OF RM, 3' SW OF E CONT. SPRAY PUMP, 3' ABOVE THE FLR.  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 44   | 8      | 1-IMO-215     | 0      | CONTAINMENT SPRAY / RWST TO EAST CONTAINMENT SPRAY PUMP PP-9E SUCTION 12 MOTOR OPERATED SHUTOFF VALVE                                | AUXILIARY   | 573.00      | E CONT SPRAY PUMP RM, IN THE NE PART OF THE RM, 8' N OF E CONT. SPRAY PUMP, ON THE 577 EL. PLATFORM.  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 45   | 8      | 1-IMO-220     | 0      | CONTAINMENT SPRAY / WEST CONTAINMENT SPRAY PUMP PP-9W DISCHARGE SHUTOFF 10 MOTOR OPERATED VALVE                                      | AUXILIARY   | 573.00      | W CONT SPRAY PUMP RM, IN THE S PART OF RM, 5' SE OF W CONT. SPRAY PUMP, 4' ABOVE FLR.   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 46   | 8      | 1-IMO-221     | 0      | CONTAINMENT SPRAY / WEST CONTAINMENT SPRAY PUMP PP-9W DISCHARGE SHUTOFF 10 MOTOR OPERATED VALVE                                      | AUXILIARY   | 573.00      | W CONT SPRAY PUMP RM, IN THE S PART OF RM, 6' SE OF W SPRAY PUMP, 4' ABOVE FLR.   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Walter Djordjevic  
Print or Type Name

Signature

Date

Gunnar Harstead  
Print or Type Name

Signature

Date



## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No. | System/Equipment Description   | Building    | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|---------|--|-------------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 47   | 8      | 1-IMO-222     | 0       | CONTAINMENT SPRAY / WEST CONTAINMENT SPRAY PUMP PP-9W DISCHARGE TO CONTAINMENT SPRAY ADDITIVE EDUCTOR SHUTOFF 2 MOTOR OPERATED VALVE | AUXILIARY   | 573.00      | W CONT SPRAY PUMP RM, IN THE MIDDLE NE PART OF THE RM, 4' E OF W CONT. SPRAY PUMP, 4' ABOVE FLR.   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 48   | 8      | 1-IMO-225     | 0       | CONTAINMENT SPRAY / RWST TO WEST CONTAINMENT SPRAY PUMP PP-9W SUCTION 12 MOTOR OPERATED SHUTOFF VALVE                                | AUXILIARY   | 573.00      | W CONT SPRAY PUMP RM, IN THE NW CORNER OF RM, 8' N OF W CONT. SPRAY PUMP, ON THE 577 EL. PLATFORM. | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 49   | 8      | 1-IMO-310     | 0       | RHR / EAST RHR PUMP PP-3SE SUCTION SHUTOFF 14 MOTOR OPERATED VALVE   | AUXILIARY   | 573.00      | E RHR PUMP RM, IN THE NW CORNER OF THE RM, 14' N OF E RHR PUMP, 2' ABOVE 577 EL. PLATFORM.         | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 50   | 8      | 1-IMO-320     | 0       | RHR / WEST RHR PUMP PP-3SW SUCTION SHUTOFF 14 MOTOR OPERATED VALVE   | AUXILIARY   | 573.00      | W RHR PUMP RM, IN THE NE PART OF THE RM, NEAR THE MIDDLE OF THE N WALL, ON THE 577 EL. PLATFORM.   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 51   | 8      | 1-MCM-221     | 0       | MAIN STEAM / MAIN STEAM LEAD 2 TO AUX FEED PUMP TURBINE 4 MOTOR OPERATED SHUTOFF VALVE   | AUXILIARY   | 633.00      | W MAIN STEAM STOP ENCLOSURE, 5' NE OF STEAM STOP VLV #1-MRV-220, ON 640 EL. PLATFORM.              | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 52   | 8      | 1-MCM-231     | 0       | MAIN STEAM / MAIN STEAM LEAD 3 TO AUX FEED PUMP TURBINE 4 MOTOR OPERATED SHUTOFF VALVE   | AUXILIARY   | 633.00      | W MAIN STEAM STOP ENCLOSURE, 4' SE OF STEAM STOP VALVE 1-MRV-230, ON 640 EL. PLATFORM.             | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 53   | 8      | 1-IMO-220     | 0       | MAIN STEAM / STEAM STOP VALVE MRV-220 STEAM CYLINDER DUMP 4 MOTOR OPERATED VALVES SELECTOR VALVE                                     | AUXILIARY   | 633.00      | W MAIN STEAM STOP ENCLOSURE, 3' S OF STEAM STOP VALVE 1-MRV-220, ON 640 EL. PLATFORM.              | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | No           | No        |
| 54   | 8      | 1-IMO-230     | 0       | MAIN STEAM / STEAM STOP VALVE MRV-230 STEAM CYLINDER DUMP VALVES 4 MOTOR OPERATED SELECTOR VALVE                                     | AUXILIARY   | 633.00      | W MAIN STEAM STOP ENCLOSURE, 3' NW OF STEAM STOP VALVE 1-MRV-230, ON 640 EL. PLATFORM.             | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | No           | No        |
| 55   | 8      | 1-QT-506      | 0       | MAIN STEAM / TURBINE DRIV AUX FEED PUMP PP-4 TRIP AND THROTTLE VALVE   | TURBINE     | 591.00      | TURB DRIV AUX FDWTR PUMP RM, 3' NW OF TDAFWP #1-OME-39, 6' ABOVE THE FLR.                          | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 56   | 8      | 1-WMO-701     | 0       | ESW / EAST ESW PUMP PP-7E DISCHARGE SHUTOFF VALVE  | SCREENHOUSE | 591.00      | E ESW PUMP RM,   | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 57   | 8      | 1-WMO-702     | 0       | ESW / WEST ESW PUMP PP-7W DISCHARGE SHUTOFF VALVE  | SCREENHOUSE | 591.00      | W ESW PUMP RM,   | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 58   | 8      | 1-WMO-705     | 0       | ESW / WEST ESW SUPPLY HEADER CROSSTIE TO UNIT 2 20 MOTOR OPERATED SHUTOFF VALVE  | TURBINE     | 569.00      | ESW PIPE TUNNEL,   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 59   | 8      | 1-WMO-707     | 0       | ESW / EAST ESSENTIAL SERVICE WATER SUPPLY HEADER CROSSTIE TO UNIT 2 20 MOTOR OPERATED SHUTOFF VALVE                                  | TURBINE     | 569.00      | ESW PIPE TUNNEL, 25' SE. OF MIDDLE WATERTIGHT DOOR, 5' ABOVE FLR                                   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 60   | 8      | 1-WMO-744     | 0       | AFW / ESW TO WEST MOTOR DRIV AUX FEEDWATER PUMP PP-3W SHUTOFF 4 MOTOR OPERATED VALVE   | TURBINE     | 591.00      | W MOTOR DRIV AUX FDWTR PUMP RM, 3' SE OF WMDAFWPP, 2' ABOVE THE FLR.                               | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Walter Djordjevic  
Print or Type Name

Signature

Date

Gunnar Harstead  
Print or Type Name

Signature

Date

12/13/95

12/12/95

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description  | Building | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|---|----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 61   | 8      | 1-WMO-753     | 0      | AFW I (ESW TO TURB DRIV AUX FEED PUMP PP-4) SHUTOFF 6 MOTOR OPERATED VALVE  | TURBINE  | 591.00      | TURB DRIV AUX FOWTR PUMP RM, IN THE NW PART OF THE RM, 2' S OF THE N WALL, 6' N OF THE AFWPP TURBINE 1-OME-39, 4' ABOVE THE FLR. | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 62   | 8      | 1-WMO-754     | 0      | AFW I (ESW TO EAST MOTOR DRIV AUX FEED PUMP) SHUTOFF 4 MOTOR OPERATED VALVE | TURBINE  | 591.00      | E MOTOR DRIV AUX FOWTR PUMP RM, IN THE MIDDLE N PART OF THE RM, ON THE N WALL, 7' N OF THE E MDAFW PP, 3' ABOVE THE FLR.         | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Walter Djordjevic  
Print or Type Name

Signature

Date

Gunnar Harstead  
Print or Type Name

Signature

Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID  | Rev No | System/Equipment Description   | Building    | Floor Elev. | Room or Row/Column  | Base Elev. | <40? | Capacity vs. Demand Basis                                     | Cap > Demd? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|------------|--------|--|-------------|-------------|---|------------|------|---|-------------|-------------|------------|--------------|-----------|
| 1    | 0      | 1-TK-253-1 | 0      | CONTROL AIR / PRESSURIZER TR B PRESSURE RELIEF VALVE NRV-152 RESERVE CONTROL AIR TANK                                      | CONTAINMENT | 612.00      | LOWER CONT QD #4, AZ:275, 1' BELOW THE PRESSURIZER DECK   | 612.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes         | Yes        | Yes          | Yes       |
| 2    | 0      | 1-TK-253-2 | 0      | CONTROL AIR / PRZ TR A PRESSURE RELIEF VALVE NRV-153 RESERVE CONTROL AIR TANK  | CONTAINMENT | 612.00      | LOWER CONT QD #4, AZ:275, 1' BELOW THE PRZ DECK   | 612.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes         | Yes        | Yes          | Yes       |
| 3    | 0      | 1-TK-253-3 | 0      | CONTROL AIR / PRESSURIZER TR B PRESSURE RELIEF VALVE NRV-152 EMERG. AIR TANK   | CONTAINMENT | 650.00      | UPPER CONT. ON THE REACTOR SIDE OF THE PRESSURIZER ENCLOSURE, 5' ABOVE THE FLR.   | 650.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes         | Yes        | Yes          | Yes       |
| 4    | 0      | 1-TK-253-4 | 0      | CONTROL AIR / PRESSURIZER TR A PRESSURE RELIEF VALVE NRV-153 EMERG AIR TANK  | CONTAINMENT | 650.00      | UPPER CONT. ON THE REACTOR SIDE OF THE PRESSURIZER ENCLOSURE  | 650.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes         | Yes        | Yes          | Yes       |
| 5    | 7      | 1-IRV-112  | 0      | NITROGEN (REACTOR PL / ACCUMULATOR TANK OME-6-1 NITROGEN SUPPLY/VENT VALVE   | CONTAINMENT | 612.00      | ACCUMULATOR TANK #1 AREA, No photo. OK. ON CRANEWALL SIDE OF ACCUMULATOR TANK #1- OME-6-1, 3' ABOVE FLR.                            | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum            | Yes         | Yes         | N/A        | Yes          | Yes       |
| 6    | 7      | 1-IRV-116  | 0      | RHR / ACCUMULATOR TANK OME-6-1 1 AIR OPERATED OUTLET TO REACTOR COOLANT LOOP #1 COLD LEG TEST VALVE                        | CONTAINMENT | 598.00      | ANNULUS QUAD 1, AZ: 030, D2, F2. OK. ON THE CRANEWALL SIDE OF THE WALKWAY, 14 FT FROM COLUMN #4, 6 FT ABOVE FLR.                    | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum            | Yes         | Yes         | N/A        | Yes          | Yes       |
| 7    | 7      | 1-IRV-122  | 0      | NITROGEN (REACTOR PL / ACCUMULATOR TANK OME-6-2 NITROGEN SUPPLY/VENT VALVE   | CONTAINMENT | 612.00      | ACCUMULATOR TANK #2 AREA, ON CRANEWALL SIDE OF WALKWAY, AT BASE OF ACCUMULATOR TANK #1- OME-6-2, 10' FROM COLUMN #24, 3' ABOVE FLR. | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum            | Yes         | Yes         | N/A        | Yes          | Yes       |
| 8    | 7      | 1-IRV-126  | 0      | RHR / ACCUMULATOR TANK OME-6-2 0.75 AIR OPERATED OUTLET AND SAFETY INJECTION TO REACTOR COOLANT LOOP 2 COLD LEG TEST VALVE | CONTAINMENT | 598.00      | ANNULUS QUAD 2, AZ: 150, ON THE CRANEWALL SIDE OF THE WALKWAY, 10 FT FROM COLUMN #23, 7 FT ABOVE FLR.                               | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum            | Yes         | Yes         | N/A        | Yes          | Yes       |
| 9    | 7      | 1-IRV-132  | 0      | NITROGEN (REACTOR PL / ACCUMULATOR TANK OME-6-3 NITROGEN SUPPLY/VENT VALVE   | CONTAINMENT | 612.00      | ACCUMULATOR TANK #3 AREA, ON CRANEWALL SIDE OF WALKWAY, 3' FROM ACCUMULATOR TANK #1- OME-6-3, 3' ABOVE FLR.                         | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum            | Yes         | Yes         | N/A        | Yes          | Yes       |
| 10   | 7      | 1-IRV-136  | 0      | RHR / ACCUMULATOR TANK OME-6-3 OUTLET AND SAFETY INJECTION TO REACTOR COOLANT LOOP 3 COLD LEG 0.75 AIR OPERATED TEST VALVE | CONTAINMENT | 598.00      | ANNULUS QUAD 3, AZ: 219, ON THE CRANEWALL SIDE OF THE WALKWAY, NEAR COLUMN #17, 3 FT ABOVE THE FLR.                                 | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum            | Yes         | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Walter Djordjevic  
Print or Type Name

Signature

12/14/95  
Date

Stephen Anagnostis  
Print or Type Name

Signature

12/14/95  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq Cl | Equip. ID | Rev No | System/Equipment Description  | Building    | Floor Elev. | Room or Row/Column   | Base Elev. | <40? | Capacity vs. Demand Basis                          | Cap > Demd? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|-------|-----------|--------|---|-------------|-------------|--|------------|------|--|-------------|-------------|------------|--------------|-----------|
| 11   | 7     | 1-IRV-142 | 0      | NITROGEN (REACTOR PL / ACCUMULATOR TANK OME-6-4 NITROGEN SUPPLY/VENT VALVE  | CONTAINMENT | 612.00      | ACCUMULATOR TANK #4 AREA, ON CONT WALL SIDE OF ACCUMULATOR TANK #1-OME-6-4, 3' FROM COLUMN #9, NEAR FLR. | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | N/A        | Yes          | Yes       |
| 12   | 7     | 1-IRV-146 | 0      | RHR / ACCUMULATOR TANK OME-6-4 1 AIR OPERATED OUTLET AND SAFETY INJECTION TO REACTOR COOLANT LOOP 4 COLD LEG TEST VALVE | CONTAINMENT | 598.00      | ANNULUS QUAD 4, AZ: 320, ON THE CRANEWALL SIDE OF THE WALKWAY, NEAR COLUMN # 4, 3 FT ABOVE FLR.          | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | N/A        | Yes          | Yes       |
| 13   | 7     | 1-IRV-147 | 0      | RHR / WEST RHR AND SOUTH SAFETY INJECTION TO REACTOR COOLANT LOOPS 2 AND 3 0.75 AIR OPERATED TEST VALVE                 | CONTAINMENT | 612.00      | HV-CEQ-2 FAN RM, ON THE CONT WALL SIDE OF THE WALKWAY, 3 FT FROM CL # 26, 2 FT ABOVE FLR.                | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | N/A        | Yes          | Yes       |
| 14   | 7     | 1-IRV-148 | 0      | RHR / EAST RHR AND NORTH SAFETY INJECTION TO REACTOR COOLANT LOOPS 1 AND 4 0.75 AIR OPERATED TEST VALVE                 | CONTAINMENT | 612.00      | HV-CEQ-2 FAN RM, ON THE CONT WALL SIDE OF THE WALKWAY, NEAR THE STAIRWAY, IN A CORNER, 2 FT ABOVE FLR.   | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | N/A        | Yes          | Yes       |
| 15   | 7     | 1-IRV-149 | 0      | RHR / WEST RHR TO REACTOR COOLANT LOOPS 2 AND 3 0.75 AIR OPERATED TEST VALVE  | CONTAINMENT | 612.00      | HV-CEQ-2 FAN RM, ON THE CONT WALL SIDE OF THE WALKWAY, 1 FT FROM COLUMN #26, 2 FT ABOVE THE FLR.         | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | N/A        | Yes          | Yes       |
| 16   | 7     | 1-IRV-150 | 0      | RHR / EAST RHR TO REACTOR COOLANT LOOPS 1 AND 4 0.75 AIR OPERATED TEST VALVE  | CONTAINMENT | 612.00      | HV-CEQ-2 FAN RM, ON THE CONT WALL SIDE OF THE WALKWAY, IN A CORNER, NEAR THE STAIRWAY, 2 FT ABOVE FLR.   | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | N/A        | Yes          | Yes       |
| 17   | 7     | 1-IRV-50  | 0      | BORON INJECTION / BORON INJECTION TO ACCUMULATOR FILL LINE 1 AIR OPERATED CONTROL VALVE                                 | CONTAINMENT | 598.00      | ANNULUS QUAD 2, AZ:121, ON THE CONT WALL SIDE OF THE WALKWAY, NEAR COLUMN 26, 1' ABOVE FLR.              | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | N/A        | Yes          | Yes       |
| 18   | 7     | 1-IRV-60  | 0      | SAFETY INJECTION / SAFETY INJECTION TO ACCUMULATOR FILL LINE 1 AIR OPERATED CONTROL VALVE                               | CONTAINMENT | 598.00      | ANNULUS QUAD 2, AZ:155, ON THE CONT WALL SIDE OF THE WALKWAY, NEAR COLUMN 26, 1' ABOVE THE FLR.          | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | N/A        | Yes          | Yes       |
| 19   | 7     | 1-MRV-151 | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 1 STEAM SAMPLE MSX-101 0.5 AIR OPERATED CONTAINMENT ISOLATION VALVE                  | CONTAINMENT | 612.00      | E CONT LOWER VENT RM, ON THE CRANEWALL SIDE OF THE WALKWAY, 10' FROM COLUMN 6, 2' ABOVE THE FLR.         | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | N/A        | Yes          | Yes       |
| 20   | 7     | 1-MRV-152 | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 2 STEAM SAMPLE MSX-102 0.5 AIR OPERATED CONTAINMENT ISOLATION VALVE                  | CONTAINMENT | 612.00      | W CONT LOWER VENT RM, ON THE CRANEWALL SIDE OF THE WALKWAY, 15' FROM COLUMN 21, 1' ABOVE THE FLR.        | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | N/A        | Yes          | Yes       |
| 21   | 7     | 1-MRV-153 | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 3 STEAM SAMPLE MSX-103 0.5 AIR OPERATED CONTAINMENT ISOLATION VALVE                  | CONTAINMENT | 612.00      | W CONT LOWER VENT RM, ON THE CRANEWALL SIDE OF THE WALKWAY, 15' FROM COLUMN 21, 1' ABOVE THE FLR.        | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Walter Djordjevic  
Print or Type Name

Signature

Date

Stephen Anagnostis  
Print or Type Name

Signature

Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID | Rev No | System/Equipment Description  | Building    | Floor Elev. | Room or Row/Column   | Base Elev. | <40? | Capacity vs. Demand Basis  | Cap > Demd? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|-----------|--------|---|-------------|-------------|--|------------|------|--|-------------|-------------|------------|--------------|-----------|
| 22   | 7      | 1-MRV-154 | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 4 STEAM SAMPLE MSX-104 0.5 AIR OPERATED CONTAINMENT ISOLATION VALVE          | CONTAINMENT | 612.00      | E CONT LOWER VENT RM, ON THE CRANEWALL SIDE OF THE WALKWAY, 10' FROM COLUMN 6, 2' ABOVE THE FLR                | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes         | N/A        | Yes          | Yes       |
| 23   | 7      | 1-NRV-101 | 0      | NUCLEAR SAMPLING / REACTOR COOLANT LOOP 1 HOT LEG SAMPLE NSX-101 SHUTOFF VALVE                                  | CONTAINMENT | 598.00      | ANNULUS QUAD 1, AZ 016, ON CONT WALL SIDE OF WALKWAY, 2' FROM COL. 5, 8' ABOVE FLR                             | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes         | N/A        | Yes          | Yes       |
| 24   | 7      | 1-NRV-102 | 0      | NUCLEAR SAMPLING / PRESSURIZER LIQUID SPACE SAMPLE NSX-102 0.5 AIR OPERATED SHUTOFF VALVE                       | CONTAINMENT | 612.00      | INSTRUMENTATION RM, 6' ABOVE LOWER CONT ENTRANCE DOOR, ON A LEDGE, E OF SEAL TABLE                             | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes         | N/A        | Yes          | Yes       |
| 25   | 7      | 1-NRV-103 | 0      | NUCLEAR SAMPLING / REACTOR COOLANT LOOP 3 HOT LEG SAMPLE NSV-103 SHUTOFF VALVE                                  | CONTAINMENT | 598.00      | ANNULUS QUAD 3, AZ 210, ON CONT WALL SIDE OF WALKWAY, BY COLUMN 19, 8' ABOVE FLR                               | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes         | N/A        | Yes          | Yes       |
| 26   | 7      | 1-NRV-104 | 0      | NUCLEAR SAMPLING / PRESSURIZER STEAM SPACE SAMPLE NSX-104 0.5 AIR OPERATED SHUTOFF VALVE                        | CONTAINMENT | 612.00      | INSTRUMENTATION RM, 6' ABOVE LOWER CONT ENTRANCE DOOR, ON A LEDGE, E OF THE SEAL TABLE                         | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes         | N/A        | Yes          | Yes       |
| 27   | 7      | 1-NRV-151 | 0      | PRESSURIZER / PRESSURIZER 'B' PRESSURE RELIEF VALVE   | CONTAINMENT | 650.00      | PRESSURIZER ENCLOSURE INTERIOR, IN PRZ ENCLOSURE, ON THE 686 EL PLATFORM, 2' ABOVE GRATING                     | 688.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | No          | Yes         | N/A        | Yes          | No        |
| 28   | 7      | 1-NRV-152 | 0      | PRESSURIZER / PRESSURIZER 'B' PRESSURE RELIEF VALVE   | CONTAINMENT | 650.00      | PRESSURIZER ENCLOSURE INTERIOR, IN PRZ ENCLOSURE, ON THE 686 EL PLATFORM, 2' ABOVE GRATING                     | 688.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | No          | Yes         | N/A        | Yes          | No        |
| 29   | 7      | 1-NRV-153 | 0      | PRESSURIZER / PRESSURIZER 'A' PRESSURE RELIEF VALVE   | CONTAINMENT | 650.00      | PRESSURIZER ENCLOSURE INTERIOR, IN PRZ ENCLOSURE, ON THE 686 EL PLATFORM, NEAR ACCESS LADDER, 2' ABOVE GRATING | 688.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | No          | Yes         | N/A        | Yes          | No        |
| 30   | 7      | 1-NRV-163 | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP 3 TO PRESSURIZER 4 AIR OPERATED LVE                                      | CONTAINMENT | 612.00      | LOWER CONT QUAD 3, AZ 270, ON THE CRANEWALL SIDE OF THE WALKWAY, NEAR RCP #3, 2' ABOVE 612' EL PLATFORM        | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes         | N/A        | Yes          | Yes       |
| 31   | 7      | 1-NRV-164 | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP 4 TO PRESSURIZER SPRAY 4 AIR OPERATED CONTROL VALVE                      | CONTAINMENT | 612.00      | LOWER CONT QUAD 3, AZ 270, ON THE CRANEWALL SIDE OF THE WALKWAY, NEAR RCP #3, 2' ABOVE 612' EL PLATFORM        | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes         | N/A        | Yes          | Yes       |
| 32   | 7      | 1-QRV-10  | 0      | REACTOR COOLANT PUMP / RCP 1 SEAL 1 LEAKOFF TO RCP SEAL WATER RETURN FILTER QC-109 2 AIR OPERATED SHUTOFF VALVE | CONTAINMENT | 617.00      | LOWER CONT QUAD 1, AZ 055, ON THE CRANEWALL SIDE OF THE WALKWAY, 2' ABOVE THE 617 EL PLATFORM                  | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Walter Djordjevic  
Print or Type Name

Signature

Date

Stephen Anagnostis  
Print or Type Name

Signature

Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID | Rev No | System/Equipment Description   | Building    | Floor Elev. | Room or Row/Column   | Base Elev. | <40? | Capacity vs. Demand Basis                          | Cap > Demd? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|-----------|--------|--|-------------|-------------|--|------------|------|--|-------------|-------------|------------|--------------|-----------|
| 33   | 7      | 1-QRV-111 | 0      | CVCS / REACTOR COOLANT NORMAL LETDOWN TRAIN 'A' SHUTOFF VALVE  | CONTAINMENT | 612.00      | LOWER CONT QUAD 4, AZ 290, ON THE CRANEWALL SIDE OF THE WALKWAY, 10' FROM THE LOWER CONT. 612 AIRLOCK CRANEWALL DR, ABOVE RCP #4, ON THE 612 EL PLATFORM             | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | N/A        | Yes          | Yes       |
| 34   | 7      | 1-QRV-112 | 0      | CVCS / REACTOR COOLANT NORMAL LETDOWN TRAIN 'B' SHUTOFF VALVE  | CONTAINMENT | 612.00      | LOWER CONT QUAD 4, AZ 290, ON THE CRANEWALL SIDE OF THE WALKWAY, 10' FROM THE LOWER CONT. 612 AIRLOCK CRANEWALL DR, ABOVE RCP #4, ON THE 612 EL PLATFORM             | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | N/A        | Yes          | Yes       |
| 35   | 7      | 1-QRV-113 | 0      | CVCS / REACTOR COOLANT EXCESS LETDOWN TO EXCESS LETDOWN HEAT EXCHANGER HE-13 1 AIR OPERATED 'B' SHUTOFF VALVE                              | CONTAINMENT | 612.00      | LOWER CONT QUAD 4, AZ 290, ON CRANEWALL SIDE OF THE WALKWAY, 10' FROM THE LOWER CONTINMENT 612 AIRLOCK CRANEWALL ENTERANCE DR, ABOVE RCP#4, ON THE 612 ELEV PLTRFM   | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | N/A        | Yes          | Yes       |
| 36   | 7      | 1-QRV-114 | 0      | CVCS / REACTOR COOLANT EXCESS LETDOWN TO EXCESS LETDOWN HEAT EXCHANGER HE-13 1 AIR OPERATED 'A' SHUTOFF VALVE                              | CONTAINMENT | 612.00      | LOWER CONTINMENT QUAD 4, AZ 290, ON CRANEWALL SIDE OF THE WALKWAY, 10' FROM LOWER CONTINMENT 612 AIRLOCK CRANEWALL ENTERANCE DR, ABOVE RCP#4, ON THE 612 ELEV PLTRFM | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | N/A        | Yes          | Yes       |
| 37   | 7      | 1-QRV-150 | 0      | REACTOR COOLANT PUMP / REACTOR COOLANT PUMPS STARTUP SEAL SYSTEM BYPASS TO SEAL WATER RETURN FILTER QC-109 0.75 AIR OPERATED SHUTOFF VALVE | CONTAINMENT | 598.00      | ANNULUS QUAD 2, AZ 153, ON THE CRANEWALL SIDE OF WALKWAY, NEAR COLUMN #23, 4' ABOVE THE FLR  | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | N/A        | Yes          | Yes       |
| 38   | 7      | 1-QRV-20  | 0      | REACTOR COOLANT PUMP / RCP 2 SEAL 1 LEAKOFF TO RCP SEAL WATER RETURN FILTER QC-109 2 AIR OPERATED SHUTOFF VALVE                            | CONTAINMENT | 617.00      | LOWER CONT QUAD 2, AZ 125, ON THE CRANEWALL SIDE OF RCP #3 ON THE 617 EL PLATFORM, 2' ABOVE THE GRATING  | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | N/A        | Yes          | Yes       |
| 39   | 7      | 1-QRV-30  | 0      | REACTOR COOLANT PUMP / RCP 3 SEAL 1 LEAKOFF TO RCP SEAL WATER RETURN FILTER QC-109 2 AIR OPERATED SHUTOFF VALVE                            | CONTAINMENT | 612.00      | LOWER CONT QUAD 3, AZ 240, ON THE CRANEWALL SIDE OF THE WALKWAY, NEAR RCP #3, 1' ABOVE 612 EL PLATFORM   | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | N/A        | Yes          | Yes       |
| 40   | 7      | 1-QRV-40  | 0      | REACTOR COOLANT PUMP / RCP 4 SEAL 1 LEAKOFF TO RCP RETURN FILTER QC-109 2 AIR OPERATED SHUTOFF VALVE                                       | CONTAINMENT | 612.00      | LOWER CONT QUAD 4, AZ 330, NEAR RCP #4 SEAL & THE CRANEWALL, AT THE PUMP, 2' ABOVE THE 612 EL PLATFORM   | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Walter Djordjevic  
Print or Type Name

Signature

12/14/95  
Date

Stephen Anagnostis  
Print or Type Name

Signature

12/14/95  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID | Rev No | System/Equipment Description  | Building    | Floor Elev. | Room or Row/Column   | Base Elev. | <40? | Capacity vs. Demand Basis  | Cap > Demd? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|-----------|--------|---|-------------|-------------|--|------------|------|--|-------------|-------------|------------|--------------|-----------|
| 41   | 7      | 1-SV-45A  | 0      | / SAFETY RELIEF VALVE   | CONTAINMENT | 650.00      | PRESSURIZER ENCLOSURE  | 688.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | No          | Yes         | N/A        | Yes          | No        |
| 42   | 7      | 1-SV-45B  | 0      | / SAFETY RELIEF VALVE   | CONTAINMENT | 650.00      | PRESSURIZER ENCLOSURE  | 688.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | No          | Yes         | N/A        | Yes          | No        |
| 43   | 7      | 1-SV-45C  | 0      | / SAFETY RELIEF VALVE   | CONTAINMENT | 650.00      | PRESSURIZER ENCLOSURE  | 688.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | No          | Yes         | N/A        | Yes          | No        |
| 44   | 7      | 1-SV-50   | 0      | / SAFETY RELIEF VALVE   | CONTAINMENT | 598.00      | ANNULUS, QUAD 3  | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes         | N/A        | Yes          | Yes       |
| 45   | 7      | 1-SV-51   | 0      | / SAFETY RELIEF VALVE   | CONTAINMENT | 598.00      | ANNULUS, QUAD 4  | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes         | N/A        | Yes          | Yes       |
| 46   | 7      | 1-SV-64   | 0      | CCW / EXCESS LETDOWN HEAT EXCHANGER HE-13<br>CCW OUTLET SAFETY VALVE                                    | CONTAINMENT | 598.00      | ANNULUS, QUAD3   | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes         | N/A        | Yes          | Yes       |
| 47   | 8      | 1-ICM-111 | 0      | RHR / RHR TO REACTOR COOLANT LOOPS 2 AND 3<br>COLD LEGS CONTAINMENT ISOLATION VALVE                     | CONTAINMENT | 598.00      | ANNULUS QUAD 2 AZ:126, ON THE CRANEWALL SIDE OF THE WALKWAY, 10 FEET FROM COLUMN #25, 5 FEET ABOVE FLR                             | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes         | N/A        | Yes          | Yes       |
| 48   | 8      | 1-ICM-129 | 0      | RHR / REACTOR COOLANT LOOP 2 HOT LEG TO RHR<br>PUMPS SUCTION CONTAINMENT ISOLATION VALVE                | CONTAINMENT | 598.00      | ANNULUS QUAD 2, AZ: 135, ON CRANEWALL SIDE OF WALKWAY, 10FT FROM COLUMN #24, 6FT. ABOVE FLR  | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes         | N/A        | Yes          | Yes       |
| 49   | 8      | 1-IMO-128 | 0      | RHR / REACTOR COOLANT LOOP 2 HOT LEG TO RHR<br>PUMPS SUCTION SHUTOFF VALVE                              | CONTAINMENT | 598.00      | LOWER CONT QUAD 2, ON PLATFORM AT LOOP 2 HOTLEG, UNDERNEATH SG #2, COL BETWEEN SG AND SHIELD WALL, AT 608 EL.                      | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes         | N/A        | Yes          | Yes       |
| 50   | 8      | 1-IMO-315 | 0      | RHR / EAST RHR AND NORTH SAFETY INJECTION TO<br>REACTOR COOLANT LOOPS 1 AND 4 HOT LEGS<br>SHUTOFF VALVE | CONTAINMENT | 612.00      | E CONT LOWER VENT RM, 8 FEET FROM CONT LOWER COMPARTMENT OD #4 VENTILATION UNIT #1-HV-CLV-4, 10 FEET FROM COL# 7, 5 FEET ABOVE FLR | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Walter Djordjevic  
Print or Type Name

Signature

Date

Stephen Anagnostis  
Print or Type Name

Signature

Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip.ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|--------------|--------|--|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 1    | 7      | 1-IRV-310    | 0      | RHR / EAST RHR HEAT EXCHANGER HE-17E 8 AIR OPERATED OUTLET FLOW CONTROL VALVE                    | AUXILIARY | 609.00      | E RHR HEAT EXCHANGER RM, IN THE SE REGN OF THE RM, 7' SE OF E RHR HEAT EXCHANGER, 1' ABOVE 615 EL. PLATFORM.               | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 2    | 7      | 1-IRV-311    | 0      | RHR / RHR HEAT EXCHANGERS BYPASS FLOW 8 AIR OPERATED CONTROL VALVE                               | AUXILIARY | 609.00      | E RHR HEAT EXCHANGER RM, IN THE SW REGN OF THE RM, 10' SW OF E RHR HEAT EXCHANGER, 3' ABOVE 615 EL. PLATFORM.              | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 3    | 7      | 1-IRV-320    | 0      | RHR / WEST RHR HEAT EXCHANGER HE-17W 8 AIR OPERATED OUTLET FLOW CONTROL VALVE                    | AUXILIARY | 609.00      | W RHR HEAT EXCHANGER RM, IN THE SE REGN OF RM, 3' SE OF W RHR HEAT EXCHANGER, 1' ABOVE THE 615 EL. PLATFORM.               | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 4    | 7      | 1-MRV-211    | 0      | MAIN STEAM / STEAM GENERATOR 1 STOP VALVE MRV-210 STEAM CYLINDER 'A' DUMP VALVE                  | AUXILIARY | 633.00      | E MAIN STEAM STOP ENCLOSURE, IN SW REGN OF RM, 6' S OF STEAM STOP VALVE 1-MRV-210, 6' ABOVE THE 640 EL. PLATFORM.          | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 5    | 7      | 1-MRV-212    | 0      | MAIN STEAM / STEAM GENERATOR 1 STOP VALVE MRV-212 STEAM CYLINDER 'B' DUMP VALVE                  | AUXILIARY | 633.00      | E MAIN STEAM STOP ENCLOSURE, IN THE SW REGN OF THE RM, 4' SW OF STEAM STOP VALVE 1-MRV-210, 6' ABOVE THE 640 EL. PLATFORM. | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 6    | 7      | 1-MRV-213    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 PORV  | AUXILIARY | 633.00      | E MAIN STEAM STOP ENCLOSURE, IN THE SW REGN OF THE RM, 4' W OF STEAM STOP VALVE 1-MRV-210, 6' ABOVE THE 640 EL. PLATFORM.  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 7    | 7      | 1-MRV-241    | 0      | MAIN STEAM / STEAM GENERATOR 4 STOP VALVE MRV-240 STEAM CYLINDER 'A' DUMP VALVE                  | AUXILIARY | 633.00      | E MAIN STEAM STOP ENCLOSURE, IN THE NW REGN OF THE RM, 5' N OF STEAM STOP VALVE 1-MRV-240, 6' ABOVE THE 640 EL. PLATFORM.  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 8    | 7      | 1-MRV-242    | 0      | MAIN STEAM / STEAM GENERATOR 4 STOP VALVE MRV-240 STEAM CYLINDER 'B' DUMP VALVE                  | AUXILIARY | 633.00      | E MAIN STEAM STOP ENCLOSURE, IN THE NW REGN OF THE RM, 3' NW OF STEAM STOP VALVE 1-MRV-240, 6' ABOVE THE 640 EL. PLATFORM. | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 9    | 7      | 1-MRV-243    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 PORV  | AUXILIARY | 633.00      | E MAIN STEAM STOP ENCLOSURE, IN THE NW REGN OF THE RM, 3' W OF STEAM STOP VALVE 1-MRV-240, 6' ABOVE THE 640 EL. PLATFORM.  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 10   | 7      | 1-SV-104E    | 0      | RESIDUAL HEAT REMOVA / EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17E OUTLET SAFETY VALVE      | AUXILIARY | 609.00      | EAST RHR HEAT EXCHGR RM, IN THE NE CORNER OF THE RM, 6 FT NE OF EAST RHR HEAT EXCHANGER #1-HE-17E, 2 FT ABOVE THE GRATING  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 11   | 7      | 1-SV-104W    | 0      | RESIDUAL HEAT REMOVA / WEST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17W OUTLET SAFETY VALVE      | AUXILIARY | 609.00      | W RHR HEAT EXCHGR RM, 5 FT NE OF THE WEST RHR HEAT EXCHANGER   | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 12   | 7      | 1-SV-14E     | 0      | ESW / EAST CONTAINMENT SPRAY HEAT EXCHANGER HE-18E SIDE SAFETY VALVE                             | AUXILIARY | 609.00      | E CONT SPRAY HEAT EXCHGR RM  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 13   | 7      | 1-SV-14W     | 0      | ESW / WEST CONTAINMENT SPRAY HEAT EXCHANGER HE-18W SIDE SAFETY VALVE                             | AUXILIARY | 609.00      | W CONT SPRAY HEAT EXCHGR RM  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 14   | 7      | 1-SV-15E     | 0      | ESSENTIAL SERVICE WA / EAST COMPONENT COOLING WATER HEAT EXCHANGER HE-15E TUBE SIDE SAFETY VALVE | AUXILIARY | 609.00      | HALLWAY, ON SE CORNER OF UNIT 1 EAST CCW HEAT EXCHANGER #1-HE-15E  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

T.R. Satyan Sharma  
Print or Type Name

Signature

Date

Paul R. Wilson  
Print or Type Name

Signature

Date



## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|---|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 15   | 7      | 1-SV-15W      | 0      | ESSENTIAL SERVICE WA / WEST COMPONENT COOLING WATER HEAT EXCHANGER HE-15W TUBE SIDE SAFETY VALVE                    | AUXILIARY | 609.00      | HALLWAY, ON SE CORNER OF WEST UNIT 1 CCW HEAT EXCHANGER #1-HE-15W   | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 16   | 7      | 1-SV-1A-1     | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 SAFETY VALVE 1A  | AUXILIARY | 633.00      | E MAIN STM STOP ENCL  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 17   | 7      | 1-SV-1A-4     | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 SAFETY VALVE 1A  | AUXILIARY | 633.00      | E MAIN STM STOP ENCL  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 18   | 7      | 1-SV-1B-1     | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 SAFETY VALVE 1B  | AUXILIARY | 633.00      | E MAIN STM STOP ENCL  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 19   | 7      | 1-SV-1B-4     | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 SAFETY VALVE 1B  | AUXILIARY | 633.00      | E MAIN STM STOP ENCL  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 20   | 7      | 1-SV-2A-1     | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 SAFETY VALVE 2A  | AUXILIARY | 633.00      | E MAIN STM STOP ENCL  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 21   | 7      | 1-SV-2A-4     | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 SAFETY VALVE 2A  | AUXILIARY | 633.00      | E MAIN STM STOP ENCL, 6 FT NORTH OF STEAM STOP VLV #1-MRV-240, OFF THE 640 ELEVATION PLATFORM                 | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 22   | 7      | 1-SV-2B-1     | 0      | MAIN STEAM / STEAM OME-3-1 SAFETY VALVE 2B  | AUXILIARY | 633.00      | E MAIN STM STOP ENCL  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 23   | 7      | 1-SV-2B-4     | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 SAFETY VALVE 2B  | AUXILIARY | 633.00      | E MAIN STM STOP ENCL  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 24   | 7      | 1-SV-3-1      | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 SAFETY VALVE 3   | AUXILIARY | 633.00      | E MAIN STM STOP ENCL  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 25   | 7      | 1-SV-3-4      | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 SAFETY VALVE 3   | AUXILIARY | 633.00      | E MAIN STM STOP ENCL  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 26   | 7      | 1-SV-68       | 0      | CCW /   | AUXILIARY | 609.00      | 609 HALLWAY   | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 27   | 7      | 1-SV-71       | 0      | CCW / NORTH SPENT FUEL PIT HTX 12-HE-16N CCW OUTLET SAFETY VALVE  | AUXILIARY | 609.00      | SPENT FUEL PIT HEAT XCHGR RM. AT THE EAST END OF THE NORTH SPENT FUEL PIT HTX #12-HE-16N, 12 FT ABOVE THE FLR | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 28   | 7      | 1-SV-72E      | 0      | COMPONENT COOLING WA / EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17E COMPONENT COOLING WATER OUTLET SAFETY VALVE | AUXILIARY | 609.00      | HALLWAY, 25 FT NW OF THE CVCS DEMINERALIZERS CENTRAL HALLWAY 7 FT ABOVE THE 621 ELEVATION PLATFORM            | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 29   | 7      | 1-SV-97       | 0      | BORON INJECTION / BORON INJECTION TANK TK-11 OUTLET SAFETY VALVE  | AUXILIARY | 612.00      | BORON INJ TANK RM, 5 FT SE OF THE BORON INJECTION TANK, IN SE CORNER OF THE RM                                | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

T.R. Satyan Sharma  
Print or Type Name

*T.R. Satyan Sharma*  
Signature

12/19/95  
Date

Paul R. Wilson  
Print or Type Name

*Paul R. Wilson*  
Signature

12/16/95  
Date



## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID | Rev No | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40? | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | OK? | Interact OK? | Equip OK? |
|------|--------|-----------|--------|---|-----------|-------------|--|------------|------|--|---------------|-------------|-----|--------------|-----------|
| 1    | 7      | 1-QRV-400 | 0      | CVCS / NORTH BORIC ACID BLENDER QP-21 2 AIR OPERATED TO CVCS CHARGING PUMP SUCTION SHUTOFF VALVE                  | AUXILIARY | 609.00      | VOLUME CONTROL TANK E HALLWAY, ON THE E SIDE OF THE VCT SHIELD WALL, ON THE W WALL                               | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A | Yes          | Yes       |
| 2    | 7      | 1-QRV-451 | 0      | BORON MAKEUP (CVCS) / NORTH BORIC ACID BLENDER QP-21 TO REACTOR COOLANT LETDOWN VOLUME CONTROL TANK SHUTOFF VALVE | AUXILIARY | 609.00      | VOLUME CONTROL TANK E HALLWAY, IN MIDDLE W REGN OF RM, ON THE 618 EL PLATFORM                                    | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A | Yes          | Yes       |
| 3    | 7      | 1-SV-54   | 0      | CVCS / REACTOR COOLANT PUMP SEAL WATER HEAT EXCHANGER HE-11 SAFETY VALVE  | AUXILIARY | 609.00      | SEAL WTR HEAT XCHGR RM, 8 FT EAST OF REACTOR COOLANT PUMP SEAL WATER HEAT EXCHANGER #1-HE-11, 7 FT ABOVE THE FLR | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A | Yes          | Yes       |
| 4    | 8      | 1-QMO-451 | 0      | CVCS / REACTOR COOLANT LETDOWN VOLUME CONTROL TANK TK-10 TO CHARGING PUMP 'A' SHUTOFF 4 MOTOR OPERATED VALVE      | AUXILIARY | 609.00      | VOLUME CONTROL TANK E HALLWAY, AT THE S END OF THE HALLWAY, ON THE W WALL, 3' ABOVE THE FLR                      | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A | Yes          | Yes       |
| 5    | 8      | 1-QMO-452 | 0      | CVCS / REACTOR COOLANT LETDOWN VOLUME CONTROL TANK TK-10 TO CHARGING PUMP 'B' SHUTOFF 4 MOTOR OPERATED VALVE      | AUXILIARY | 609.00      | VOLUME CONTROL TANK E HALLWAY, IN THE MIDDLE OF THE W SIDE OF THE HALLWAY, 1' ABOVE THE FLR                      | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A | Yes          | Yes       |
| 6    | 8      | 1-WMO-721 | 0      | ESW / WEST ESW SUPPLY HEADER TO AB EMERG DIESEL HEAT EXCHANGER SHUTOFF VALVE                                      | AUXILIARY | 587.00      | AB EDG RM, S Pipe Tunnel,  | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A | Yes          | Yes       |
| 7    | 8      | 1-WMO-723 | 0      | ESW / EAST ESW SUPPLY HEADER TO AB EMERG DIESEL HEAT EXCHANGER SHUTOFF VALVE                                      | AUXILIARY | 587.00      | AB EDG RM, S Pipe Tunnel,  | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A | Yes          | Yes       |
| 8    | 8      | 1-WMO-725 | 0      | ESW / EAST ESW SUPPLY HEADER TO CD EMERG DIESEL HEAT EXCHANGER SHUTOFF VALVE                                      | AUXILIARY | 587.00      | AB EDG RM, S Pipe Tunnel, 20' E OF THE HALLWAY DOOR, ON THE N WALL   | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A | Yes          | Yes       |
| 9    | 8      | 1-WMO-727 | 0      | ESW / WEST ESW SUPPLY HEADER TO CD EMERG DIESEL HEAT EXCHANGER SHUTOFF VALVE                                      | AUXILIARY | 587.00      | AB EDG RM, S Pipe Tunnel, 25' E OF THE HALLWAY DOOR, ON THE N WALL   | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

Signature

12/16/95  
Date

T.R. Satyan Sharma  
Print or Type Name

Signature

Date

12/22/95



## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip.ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|--------------|--------|--|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 30   | 7      | 12-SV-69N    | 0      | CCW/   | AUXILIARY | 609.00      | 609 HALLWAY   | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 31   | 7      | 12-SV-69S    | 0      | CCW/   | AUXILIARY | 609.00      | 609 HALLWAY   | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 32   | 8      | 1-CMO-410    | 0      | CCW/ EAST CCW TO HEAT EXCHANGER HE-15E CCW OUTLET SHUTOFF VALVE  | AUXILIARY | 609.00      | HALLWAY,  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 33   | 8      | 1-CMO-411    | 0      | CCW/ CCW PUMPS SUCTION CROSSTIE HEADER 'A' 18 MOTOR OPERATED SHUTOFF VALVE   | AUXILIARY | 609.00      | HALLWAY,  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 34   | 8      | 1-CMO-412    | 0      | CCW/ CCW PUMPS DISCHARGE CROSSTIE HEADER 'A' 16 MOTOR OPERATED SHUTOFF VALVE   | AUXILIARY | 609.00      | HALLWAY,  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 35   | 8      | 1-CMO-413    | 0      | CCW/ CCW PUMPS SUCTION CROSSTIE HEADER 'B' 18 MOTOR OPERATED SHUTOFF VALVE   | AUXILIARY | 609.00      | HALLWAY,  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 36   | 8      | 1-CMO-414    | 0      | CCW/ CCW PUMPS DISCHARGE CROSSTIE HEADER 'A' 16 MOTOR OPERATED SHUTOFF VALVE   | AUXILIARY | 609.00      | HALLWAY,  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 37   | 8      | 1-CMO-415    | 0      | CCW/ CCW TO MISCELLANEOUS SERVICE HEADER 'A' 16 MOTOR OPERATED SHUTOFF VALVE   | AUXILIARY | 609.00      | HALLWAY,  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 38   | 8      | 1-CMO-416    | 0      | CCW/ CCW TO MISCELLANEOUS SERVICE HEADER 'B' 16 MOTOR OPERATED SHUTOFF VALVE   | AUXILIARY | 609.00      | HALLWAY,  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 39   | 8      | 1-CMO-419    | 0      | CCW/ EAST RHR HEAT EXCHANGER HE-17E CCW OUTLET SHUTOFF VALVE   | AUXILIARY | 609.00      | HALLWAY,  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 40   | 8      | 1-CMO-420    | 0      | CCW/ WEST CCW TO HEAT EXCHANGER HE-15W CCW OUTLET SHUTOFF VALVE  | AUXILIARY | 609.00      | HALLWAY,  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 41   | 8      | 1-FMO-211    | 0      | AUX FEEDWATER / TURBINE DRIV AUX FEED PUMP PP-4 DISCHARGE TO STEAM GENERATOR OME-3-1 4 INCH MOTOR OPERATED CONTROL VALVE       | AUXILIARY | 612.00      | E MAIN STEAM STOP ENCLOSURE, 20' S OF RM'S ENTRANCE DOOR, 1' N OF A CEMENT COLUMN, 3' ABOVE FLR.    | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 42   | 8      | 1-FMO-212    | 0      | AUX FEEDWATER / WEST MOTOR DRIV AUX FEEDWATER PUMP PP-3W SUPPLY TO STEAM GENERATOR OME-3-1 4 INCH MOTOR OPERATED CONTROL VALVE | AUXILIARY | 612.00      | E MAIN STEAM STOP ENCLOSURE, 25' S OF RM'S ENTRANCE DOOR, NEAR A CEMENT COLUMN, 3' ABOVE THE FLR.   | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 43   | 8      | 1-FMO-241    | 0      | AUX FEEDWATER / TURBINE DRIV AUX FEED PUMP PP-4 DISCHARGE TO STEAM GENERATOR OME-3-4 4 INCH MOTOR OPERATED CONTROL VALVE       | AUXILIARY | 612.00      | E MAIN STEAM STOP ENCLOSURE, 8' S OF THE RM'S ENTRANCE DOOR, 1' N OF A CEMENT COLUMN, 3' ABOVE FLR. | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

T.R. Satyan Sharma  
Print or Type Name

Signature

Date

Paul R. Wilson  
Print or Type Name

Signature

Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|---|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 44   | 8      | 1-FMO-242     | 0      | AUX FEEDWATER / WEST MOTOR DRIV AUX FEED PUMP PP-3W SUPPLY TO STEAM GENERATOR 3-4 4 INCH MOTOR OPERATED CONTROL VALVE | AUXILIARY | 612.00      | E MAIN STEAM STOP ENCLOSURE, 12' S OF THE RMS ENTRANCE DOOR, 3' ABOVE THE FLR.                                     | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 45   | 8      | 1-ICM-250     | 0      | BORON INJECTION / BORON INJECTION TANK A CONTAINMENT ISOLATION VALVE  | AUXILIARY | 612.00      | BORON INJECTION TANK RM, IN THE CENTER OF THE RM, 4' ABOVE THE FLR.  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 46   | 8      | 1-ICM-251     | 0      | BORON INJECTION / BORON INJECTION TANK 'B' CONTAINMENT ISOLATION VALVE  | AUXILIARY | 612.00      | BORON INJECTION TANK RM, IN THE CENTER OF THE RM, 4' ABOVE THE FLR.  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 47   | 8      | 1-ICM-311     | 0      | RHR / EAST RHR TO REACTOR COOLANT LOOPS 1 AND 4 HOT LEGS CONTAINMENT ISOLATION 8 MOTOR OPERATED VALVE                 | AUXILIARY | 609.00      | E RHR HEAT EXCHANGER RM, 6' NE OF E RHR HEAT EXCHANGER, NEAR THE N WALL, 5' ABOVE THE GRATING.                     | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 48   | 8      | 1-ICM-321     | 0      | RHR / WEST RHR TO REACTOR COOLANT LOOPS 2 AND 3 HOT LEGS CONTAINMENT ISOLATION 8 MOTOR OPERATED VALVE                 | AUXILIARY | 609.00      | WRHR HEAT EXCHANGER RM, 4' N OF WRHR HEAT EXCHANGER, NEAR THE N WALL   | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 49   | 8      | 1-IMO-255     | 0      | BORON INJECTION / BORON INJECTION TANK 'A' INLET SHUTOFF VALVE  | AUXILIARY | 612.00      | BORON INJECTION TANK RM, 3' S OF BORON INJECTION TANK, 4' ABOVE THE FLR.   | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 50   | 8      | 1-IMO-256     | 0      | BORON INJECTION / BORON INJECTION TANK 'B' INLET SHUTOFF VALVE  | AUXILIARY | 612.00      | BORON INJECTION TANK RM, 3' S OF BORON INJECTION TANK 1-TK-11, 4' ABOVE FLR.                                       | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 51   | 8      | 1-IMO-314     | 0      | RHR / EAST RHR PUMP PP-3SE DISCHARGE CROSSTIE SHUTOFF 8 MOTOR OPERATED VALVE  | AUXILIARY | 609.00      | E RHR HEAT EXCHANGER RM, IN THE MIDDLE OF THE S PART OF RM, 10' S OF E RHR HEAT EXCHANGER, 1' ABOVE GRATING.       | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 52   | 8      | 1-IMO-324     | 0      | RHR / WEST RHR PUMP PP-35W DISCHARGE CROSSTIE SHUTOFF 8 MOTOR OPERATED VALVE  | AUXILIARY | 609.00      | WRHR HEAT EXCHANGER RM, IN THE SE PART OF THE RM, 6' S OF WRHR HEAT EXCHANGER, 5' ABOVE GRATING.                   | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 53   | 8      | 1-IMO-340     | 0      | RHR / EAST RHR HEAT EXCHANGER TO CHARGING PUMPS SUCTION SHUTOFF 8 MOTOR OPERATED VALVE                                | AUXILIARY | 609.00      | E RHR HEAT EXCHANGER RM, IN THE MIDDLE OF THE S PART OF THE RM, 7 FT S OF E RHR HE # 1-HE-17E, 1 FT ABOVE GRATING. | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 54   | 8      | 1-MMO-210     | 0      | MAIN STEAM / STEAM STOP VALVE MRV-210 STEAM CYLINDER DUMP 4 MOTOR OPERATED VALVES SELECTOR VALVE                      | AUXILIARY | 633.00      | E MAIN STEAM STOP ENCLOSURE, 3' SE OF STEAM STOP VALVE 1-MRV-210, 2' ABOVE THE 640 EL. PLATFORM.                   | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 55   | 8      | 1-MMO-240     | 0      | MAIN STEAM / STEAM STOP VALVE MRV-240 STEAM CYLINDER DUMP VALVE 4 MOTOR OPERATED SELECTOR VALVE                       | AUXILIARY | 633.00      | E MAIN STEAM STOP ENCLOSURE, IN THE N PART OF RM, 3' NE OF STEAM STOP VALVE 1-MRV-240, ON THE 640 EL. PLATFORM.    | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 56   | 8      | 1-WMO-713     | 0      | ESW / EAST CONTAINMENT SPRAY HEAT EXCHANGER ESW OUTLET SHUTOFF VALVE  | AUXILIARY | 609.00      | HALLWAY,   | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 57   | 8      | 1-WMO-717     | 0      | ESW / WEST CONTAINMENT SPRAY HEAT EXCHANGER ESW OUTLET SHUTOFF VALVE  | AUXILIARY | 609.00      | HALLWAY,   | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

T.R. Satyan Sharma  
Print or Type Name

Signature

Date

Paul R. Wilson  
Print or Type Name

Signature

Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|--|-----------|-------------|--------------------|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 58   | 8      | 1-WMO-731     | 0      | ESW / EAST CCW HEAT EXCHANGER HE-15E ESW INLET 16 MOTOR OPERATED SHUTOFF VALVE | AUXILIARY | 609.00      | HALLWAY,           | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 59   | 8      | 1-WMO-733     | 0      | ESW / EAST CCW HEAT EXCHANGER HE-15E ESW OUTLET SHUTOFF VALVE                  | AUXILIARY | 609.00      | HALLWAY,           | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 60   | 8      | 1-WMO-735     | 0      | ESW / WEST CCW HEAT EXCHANGER HE-15W ESW INLET 16 MOTOR OPERATED SHUTOFF VALVE | AUXILIARY | 609.00      | HALLWAY,           | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 61   | 8      | 1-WMO-737     | 0      | ESW / WEST CCW HEAT EXCHANGER HE-15W ESW OUTLET SHUTOFF VALVE                  | AUXILIARY | 609.00      | HALLWAY,           | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

T.R. Satyan Sharma  
Print or Type Name

*T.R. Satyan Sharma*  
Signature

12/19/95  
Date

Paul R. Wilson  
Print or Type Name

*Paul R. Wilson*  
Signature

12/16/95  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|--|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 1    | 8      | 1-MO-312      | 0      | RHR / EAST RHR HEAT EXCHANGER HE-17E OUTLET MINI-FLOW LINE SHUTOFF VALVE                             | AUXILIARY | 609.00      | E RHR HEAT EXCHANGER RM, IN THE SE PART OF RM, 5 FEET SE OF E RHR HE # 1-HE-17E, 6 FEET ABOVE THE GRATING       | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 2    | 8      | 1-MO-322      | 0      | RHR / WEST RHR HEAT EXCHANGER HE-17W OUTLET MINI-FLOW LINE SHUTOFF VALVE                             | AUXILIARY | 609.00      | W RHR HEAT EXCHANGER RM, 3 FEET SE OF W RHR HE # 1-HE-17W 5 FEET ABOVE PLATFORM GRATING, NEAR THE E WALL        | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 3    | 8      | 1-MO-330      | 0      | RHR / EAST RHR TO UPPER CONTAINMENT SPRAY SHUTOFF 8 MOTOR OPERATED VALVE                             | AUXILIARY | 609.00      | E RHR HEAT EXCHANGER RM, 8 FT NE OF E RHR HE # 1-HE-17E, NEAR ES WALL, 3 FT ABOVE THE 615 EL PLATFORM           | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 4    | 8      | 1-MO-331      | 0      | RHR / WEST RHR TO UPPER CONTAINMENT SPRAY SHUTOFF 8 MOTOR OPERATED VALVE                             | AUXILIARY | 609.00      | W RHR HEAT EXCHANGER RM, 5 FT NE OF THE W RHR HE # 1-HE-17W, NEAR E WALL  | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 5    | 8      | 1-MO-350      | 0      | RHR / WEST RHR HEAT EXCHANGER OUTLET TO SAFETY INJECTION PUMP SUCTION SHUTOFF 8 MOTOR OPERATED VALVE | AUXILIARY | 609.00      | W RHR HEAT EXCHANGER RM, IN THE NE PART OF THE RM, 2 FT NW OF W RHR HE # 1-HE-17W, NEAR THE W WALL              | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 6    | 18     | 1-IF-335      | 0      | RHR / RHR TO REACTOR COOLANT LOOPS 2 AND 3 COLD LEGS FLOW INDICATING TRANSMITTER                     | AUXILIARY | 591.00      | VESTIBULE, 5FT S OF VESTIBULE DOORWAY, ON N WALL  | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 7    | 19     | 1-TR-335      | 0      | RHR / RHR TO REACTOR COOLANT LOOP 2 AND 3 COLD LEGS TEMP RECORDER THERMAL SENSOR                     | AUXILIARY | 609.00      | E RHR HEAT EXCHANGER RM, IN NE PART OF THE RM, 5FT NE OF E RHR HE # 1-HE-17E, 5FT BELOW THE 615 EL PLATFORM     | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 8    | 20     | 1-ARA-2       | 0      | / REACTOR PROTECTION TRAIN A AUX RELAY CABINET #2  | AUXILIARY | 633.00      | CONTROL RM, REAR SIDE OF MAIN FEED PUMPS CONTROL PANEL # 1-FP, N OF 250 VDC VALVE DISTRIBUTION PANEL # 1-VDAB-2 | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 9    | 20     | 1-ARB-2       | 0      | / REACTOR PROTECTION TRAIN B AUXILIARY RELAY CABINET #2  | AUXILIARY | 633.00      | CONTROL RM, MIDDLE S REGN OF THE RM, ON THE REAR SIDE OF RADIATION MONITORING SYSTEM RACK I PANEL 1-RMS-I       | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 10   | 20     | 1-BA          | 0      | / BORIC ACID CHARGING & LETDOWN CONTROL PANEL  | AUXILIARY | 633.00      | CONTROL RM, NW PART OF THE RM, 15 FEET NW OF THE UNIT SUPERVISOR'S DESK   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | No          | Yes        | Yes          | No        |
| 11   | 20     | 1-CAS         | 0      | / CONTAINMENT AUXILIARIES SUBPANEL (VENTILATION)   | AUXILIARY | 633.00      | HALLWAY, N END OF THE HALLWAY, 115 FEET SW OF THE AUXILIARY BUILDING VENTILATION EXHAUST UNITS.                 | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 12   | 20     | 1-GR-1        | 0      | / GENERATOR PANEL REAR INSTRUMENT/RELAY RACK #1  | AUXILIARY | 633.00      | CONTROL RM, IN THE SE REGN OF THE RM, ON REAR SIDE OF MAIN GENERATOR CONTROL PANEL # 1-G                        | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 13   | 20     | 1-RHR         | 0      | / RESIDUAL HEAT REMOVAL CONTROL PANEL  | AUXILIARY | 633.00      | CONTROL RM, 14 FEET NW OF THE UNIT SUPERVISOR'S DESK  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 14   | 20     | 1-RPS-A       | 0      | / REACTOR PROTECTION AND SAFEGUARD ACTUATION TRAIN A   | AUXILIARY | 633.00      | CONTROL RM, IN THE NE CORNER OF THE RM, IN FRONT OF THE CONTROL RM E REAR RACK                                  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | No          | Yes        | No           | No        |
| 15   | 20     | 1-RPS-B       | 0      | / REACTOR PROTECTION AND SAFEGUARD ACTUATION TRAIN B CABINET   | AUXILIARY | 633.00      | CONTROL RM, IN THE MIDDLE S REGN OF THE RM, ON THE REAR SIDE OF MOVABLE INCORE INSTRUMENTATION PANEL #1-MFX     | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | No          | Yes        | Yes          | No        |
| 16   | 20     | 1-SIS         | 0      | / SAFETY INJECTION CONTROL PANEL   | AUXILIARY | 633.00      | CONTROL RM, NW PART OF THE RM, 13 FT W OF THE UNIT SUPERVISOR'S DESK  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 17   | 20     | 1-SPY         | 0      | / CONTAINMENT SPRAY CONTROL PANEL  | AUXILIARY | 633.00      | CONTROL RM, NW PART OF THE RM 14 FEET SW OF UNIT SUPERVISOR'S DESK  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

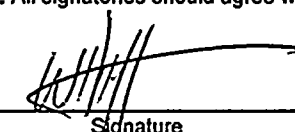
Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

  
Signature

12/16/95  
Date

Walter Djordjevic  
Print or Type Name

  
Signature

12/14/95  
Date





3

34

35

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq Cl | Equip. ID | Rev No | System/Equipment Description  | Building    | Floor Elev. | Room or Row/Column   | Base Elev. | <40° | Capacity vs. Demand Basis   | Cap > Demd? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|-------|-----------|--------|---|-------------|-------------|--|------------|------|---|-------------|-------------|------------|--------------|-----------|
| 51   | 8     | 1-IMO-316 | 0      | RHR / EAST RHR AND NORTH SAFETY INJECTION TO REACTOR COOLANT LOOPS 1 AND 4 COLD LEGS SHUTOFF 8 MOTOR OPERATED VALVE | CONTAINMENT | 612.00      | E CONT LOWER VENT RM, 8' FROM CONT LOWER COMPARTMENT #4 VENTILATION UNIT 1-HV-CLV-4, 4' FROM COLUMN 7, 5' ABOVE FLR.                           | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                      | Yes         | Yes         | N/A        | Yes          | Yes       |
| 52   | 8     | 1-IMO-325 | 0      | RHR / WEST RHR AND SOUTH SAFETY INJECTION TO REACTOR COOLANT LOOPS 2 AND 3 HOT LEGS SHUTOFF VALVE                   | CONTAINMENT | 612.00      | W CONT LOWER VENT RM, NEAR THE CRANEWALL SIDE OF WALKWAY, 5 FEET FROM COL # 21, 3FT. FROM CONT. LOWER VENT UNIT 1-HV-CLV-3, 5 FT. ABOVE FLR.   | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                      | Yes         | Yes         | N/A        | Yes          | Yes       |
| 53   | 8     | 1-IMO-326 | 0      | RHR / WEST RHR AND SOUTH SAFETY INJECTION TO REACTOR COOLANT LOOPS 2 AND 3 COLD LEGS SHUTOFF 8 MOTOR OPERATED VALVE | CONTAINMENT | 612.00      | W CONT LOWER VENT RM, NEAR THE CONT WALL SIDE OF THE WALKWAY, 5' FROM COLUMN 21, 3' FROM CONT LOWER VENTILATION UNIT 1-HV-CLV-3, 5' ABOVE FLR. | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                      | Yes         | Yes         | N/A        | Yes          | Yes       |
| 54   | 8     | 1-IMO-51  | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP 1 SHUTOFF 1.5 MOTOR OPERATED VALVE                        | CONTAINMENT | 598.00      | ANNULUS QUADRANT 1, AZ-050, ON THE CRANEWALL SIDE OF THE WALKWAY, 10' FROM COLUMN 2, 4' ABOVE THE FLR.   | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                      | Yes         | Yes         | N/A        | Yes          | Yes       |
| 55   | 8     | 1-IMO-52  | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP 2 SHUTOFF 1.5 MOTOR OPERATED VALVE                        | CONTAINMENT | 598.00      | ANNULUS QUAD 2, AZ:119, ON THE CRANEWALL SIDE OF THE WALKWAY, 10' FROM COLUMN 23, 4' ABOVE FLR.  | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                      | Yes         | Yes         | N/A        | Yes          | Yes       |
| 56   | 8     | 1-IMO-53  | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOUP 3 SHUTOFF 1.5 MOTOR OPERATED VALVE                        | CONTAINMENT | 598.00      | ANNULUS QUAD 3, AZ:200, ON THE CRANEWALL SIDE OF THE WALKWAY, NEAR COLUMN 19, 5' ABOVE FLR.  | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                      | Yes         | Yes         | N/A        | Yes          | Yes       |
| 57   | 8     | 1-IMO-54  | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP 4 SHUTOFF 1.5 MOTOR OPERATED VALVE                        | CONTAINMENT | 598.00      | ANNULUS QUADRANT 4, AZ:325, ON THE CRANEWALL SIDE OF THE WALKWAY, 10' ABOVE COLUMN 4, 5' ABOVE FLR.  | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                      | Yes         | Yes         | N/A        | Yes          | Yes       |
| 58   | 8     | 1-NMO-151 | 0      | PRESSURIZER / PRESSURIZER RELIEF VALVE NRV-151 UPSTREAM 3 MOTOR OPERATED SHUTOFF VALVE                              | CONTAINMENT | 650.00      | PRESSURIZER ENCLOSURE INTERIOR, ON THE 686 EL PLATFORM, 3' ABOVE GRATING   | 688.00     | N/A  | MOV-GERS vs. Amplified Realistic Median Centered Floor Response Spectra | No          | Unk         | N/A        | Yes          | No        |
| 59   | 8     | 1-NMO-152 | 0      | PRESSURIZER / PRESSURIZER RELIEF VALVE NRV-152 UPSTREAM 3 MOTOR OPERATED SHUTOFF VALVE                              | CONTAINMENT | 650.00      | PRESSURIZER ENCLOSURE INTERIOR, ON THE 686 EL PLATFORM, 3' ABOVE GRATING   | 688.00     | N/A  | MOV-GERS vs. Amplified Realistic Median Centered Floor Response Spectra | No          | Unk         | N/A        | Yes          | No        |
| 60   | 8     | 1-NMO-153 | 0      | PRESSURIZER / PRESSURIZER RELIEF VALVE NRV-153 3 MOTOR OPERATED UPSTREAM SHUTOFF VALVE                              | CONTAINMENT | 650.00      | PRESSURIZER ENCLOSURE INTERIOR, ON THE 686 EL PLATFORM, NEAR THE ACCESS LADDER, 3' ABOVE GRATING   | 688.00     | N/A  | MOV-GERS vs. Amplified Realistic Median Centered Floor Response Spectra | No          | Unk         | N/A        | Yes          | No        |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Walter Djordjevic  
Print or Type Name

Signature

12/14/95  
Date

Stephen Anagnostis  
Print or Type Name

Signature

12/14/95  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq Cl | Equip. ID  | Rev No | System/Equipment Description  | Building    | Floor Elev. | Room or Row/Column   | Base Elev. | <40? | Capacity vs. Demand Basis  | Cap > Demd? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|-------|------------|--------|---|-------------|-------------|--|------------|------|--|-------------|-------------|------------|--------------|-----------|
| 61   | 8     | 1-NSO-61   | 0      | REACTOR COOLANT SYST / PRESSURIZER OME-4 POST ACCIDENT VENT 'A' SOLENOID VALVE                | CONTAINMENT | 650.00      | PRESSURIZER ENCLOSURE INTERIOR, IN THE PRZ ENCLOSURE, ON THE 679 EL PLATFORM   | 688.00     | N/A  | Test Data vs. Amplified Realistic Median Centered Floor Response Spectra | No          | Yes         | N/A        | Yes          | No        |
| 62   | 8     | 1-NSO-62   | 0      | REACTOR COOLANT SYST / PRESSURIZER OME-4 POST ACCIDENT VENT 'A' SOLENOID VALVE                | CONTAINMENT | 650.00      | PRESSURIZER ENCLOSURE INTERIOR, IN THE PRZ ENCLOSURE, ON THE 679 EL PLATFORM   | 688.00     | N/A  | Test Data vs. Amplified Realistic Median Centered Floor Response Spectra | No          | Yes         | N/A        | Yes          | No        |
| 63   | 8     | 1-NSO-63   | 0      | REACTOR COOLANT SYST / PRESSURIZER OME-4 POST ACCIDENT VENT 'B' SOLENOID VALVE                | CONTAINMENT | 650.00      | PRESSURIZER ENCLOSURE INTERIOR, IN THE PRZ ENCLOSURE, ON THE 679 EL PLATFORM   | 688.00     | N/A  | Test Data vs. Amplified Realistic Median Centered Floor Response Spectra | No          | Yes         | N/A        | Yes          | No        |
| 64   | 8     | 1-NSO-64   | 0      | REACTOR COOLANT SYST / PRESSURIZER OME-4 POST ACCIDENT VENT 'B' SOLENOID VALVE                | CONTAINMENT | 650.00      | PRESSURIZER ENCLOSURE INTERIOR, IN THE PRZ ENCLOSURE, ON THE 679 EL PLATFORM   | 688.00     | N/A  | Test Data vs. Amplified Realistic Median Centered Floor Response Spectra | No          | Yes         | N/A        | Yes          | No        |
| 65   | 8     | 1-QCM-250  | 0      | REACTOR COOLANT PUMP / RCP SEAT WATER RETURN 'A' CONTAINMENT ISOLATION 4 MOTOR OPERATED VALVE | CONTAINMENT | 598.00      | ANNULUS QUAD 2, AZ 149, ON THE CRANEWALL SIDE OF THE WALKWAY, 10' FROM COLUMN #23, 4' ABOVE FLR                          | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                       | Yes         | Yes         | N/A        | Yes          | Yes       |
| 66   | 8     | 1-XSO-505  | 0      | CONTROL AIR / PRESSURIZER TRAIN B PRESSURE RELIEF VALVE NRV-152 CONTROL SOLENOID              | CONTAINMENT | 650.00      | PRESSURIZER ENCLOSURE INTERIOR, IN THE PRESSURIZER ENCLOSURE, AT THE 686 EL. PLATFORM.                                   | 688.00     | N/A  | MOV-GERS vs. Amplified Realistic Median Centered Floor Response Spectra  | Yes         | Unk         | N/A        | Yes          | Yes       |
| 67   | 8     | 1-XSO-507  | 0      | CONTROL AIR / PRESSURIZER TR A PRESSURE RELIEF VALVE NRV-153 CONTROL SOLENOID                 | CONTAINMENT | 650.00      | PRESSURIZER ENCLOSURE INTERIOR, IN THE PRESSURIZER ENCLOSURE, AT THE 686 EL. PLATFORM.                                   | 688.00     | N/A  | MOV-GERS vs. Amplified Realistic Median Centered Floor Response Spectra  | Yes         | Unk         | N/A        | Yes          | Yes       |
| 68   | 9     | 1-HV-CEQ-1 | 0      | HYDROGEN SKIMMER / CONTAINMENT HYDROGEN SKIMMER VENTILATION FAN 1                             | CONTAINMENT | 625.00      | HV-CEQ-1 FAN RM, CEQ FANS ARE NEEDED FOR ACCIDENTS AND WILL NOT BE ACTIVATED DUE TO SEISMIC EVENT. FOR ANCHORAGE ONLY.   | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                       | Yes         | Yes         | Yes        | Yes          | Yes       |
| 69   | 9     | 1-HV-CEQ-2 | 0      | HYDROGEN SKIMMER / CONTAINMENT HYDROGEN SKIMMER VENTILATION FAN 2                             | CONTAINMENT | 625.00      | HV-CEQ-2 FAN RM, CEQ FANS ARE NEEDED FOR ACCIDENTS AND WILL NOT BE ACTIVATED DUE TO A SEISMIC EVENT. FOR ANCHORAGE ONLY. | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                       | Yes         | Yes         | Yes        | Yes          | Yes       |
| 70   | 18    | 1-BLI-110  | 0      | STEAM GENERATING / STEAM GENERATOR OME-3-1 WIDE RANGE LEVEL INDICATOR TRANSMITTER             | CONTAINMENT | 614.00      | ANNULUS, QD #1, AZ-020, ON THE CONT WALL SIDE OF THE WALKWAY, NEAR COLUMN #5.  | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                       | Yes         | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Walter Djordjevic  
Print or Type Name

Signature

12/14/95  
Date

Stephen Anagnostis  
Print or Type Name

Signature

12/14/95  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID | Rev No | System/Equipment Description  | Building    | Floor Elev. | Room or Row/Column  | Base Elev. | <40? | Capacity vs. Demand Basis                          | Cap > Demd? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|-----------|--------|---|-------------|-------------|---|------------|------|--|-------------|-------------|------------|--------------|-----------|
| 71   | 18     | 1-BLI-120 | 0      | STEAM GENERATING / STEAM GENERATOR OME-3-2 WIDE RANGE LEVEL TRANSMITTER                 | CONTAINMENT | 614.00      | ANNULUS, QD #2, AZ:130, ON THE CRANEWALL SIDE OF THE WALKWAY.   | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | Yes        | Yes          | Yes       |
| 72   | 18     | 1-BLI-130 | 0      | STEAM GENERATING / STEAM GENERATOR OME-3-3 WIDE RANGE LEVEL INDICATOR TRANSMITTER       | CONTAINMENT | 614.00      | ANNULUS, QD #3, AZ:190, ON THE CRANEWALL SIDE OF THE WALKWAY, ACROSS FROM COLUMN #20.   | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | Yes        | Yes          | Yes       |
| 73   | 18     | 1-BLI-140 | 0      | STEAM GENERATING / STEAM GENERATOR OME-3-4 WIDE RANGE LEVEL INDICATOR TRANSMITTER       | CONTAINMENT | 614.00      | ANNULUS, QD #4, AZ:334, ON THE CONT WALL SIDE OF THE WALKWAY, NEAR COLUMN #8.   | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | Yes        | Yes          | Yes       |
| 74   | 18     | 1-IFI-51  | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP #1 FLOW INDICATOR TRANSMITTER | CONTAINMENT | 598.00      | ANNULUS, QD#1, AZ:050, ON THE CRANEWALL SIDE OF THE WALKWAY, ACROSS FROM COLUMN 2, 6' ABOVE FLR. INST DWG 1-5570B, 1-5571.              | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | Yes        | Yes          | Yes       |
| 75   | 18     | 1-IFI-52  | 0      | BORON INJECTION / BORON INJECTION TO RC LOOP #2 FLOW INDICATOR TRANSMITTER              | CONTAINMENT | 598.00      | ANNULUS, QD#2, AZ:155, ON THE CRANEWALL SIDE OF THE WALKWAY. INST DWG 1-5570C, 1-5571A.   | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | Yes        | Yes          | Yes       |
| 76   | 18     | 1-IFI-53  | 0      | BORON INJECTION / BORON INJECTION TO RC LOOP #3 FLOW INDICATOR TRANSMITTER              | CONTAINMENT | 598.00      | ANNULUS, QD#3, AZ:213, ON THE CRANEWALL SIDE OF THE WALKWAY, NEAR COLUMN 18. INST DWG 1-5570D, 1-5571B.                                 | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | Yes        | Yes          | Yes       |
| 77   | 18     | 1-IFI-54  | 0      | BORON INJECTION / BORON INJECTION TO RC LOOP #4 FLOW INDICATOR TRANSMITTER              | CONTAINMENT | 598.00      | ANNULUS, QD #4, AZ:337, ON THE CONT WALL SIDE OF WALKWAY, NEAR COLUMN 8. INST DWG 1-5570E, 1-5571C.                                     | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | Yes        | Yes          | Yes       |
| 78   | 18     | 1-NLI-151 | 0      | PRESSURIZER / PRESSURIZER LEVEL INDICATOR TRANSMITTER                                   | CONTAINMENT | 612.00      | INSTRUMENTATION RM, 5' SW OF THE 612 AIRLOCK DOOR, ON THE CRANEWALL, INSIDE A PROTECTED BOX, INST DWG 1-5581B, 1-5581, 1-5581A, 1-5531B | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | Yes        | Yes          | Yes       |
| 79   | 18     | 1-NLP-151 | 0      | PRESSURIZER / PRESSURIZER (OME-4) LEVEL TRANSMITTER                                     | CONTAINMENT | 612.00      | INSTRUMENTATION RM, 4' SW OF THE 612 AIRLOCK DOOR, ON THE W WALL.   | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | Yes        | Yes          | Yes       |
| 80   | 18     | 1-NLP-152 | 0      | PRESSURIZER / PRESSURIZER (OME-4) LEVEL TRANSMITTER                                     | CONTAINMENT | 612.00      | INSTRUMENTATION RM, ON THE CONT. WALL, 4' W OF COL # 13 NEAR ANNULUS HATCH  | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | Yes        | Yes          | Yes       |
| 81   | 18     | 1-NLP-153 | 0      | PRESSURIZER / PRESSURIZER (OME-4) LEVEL TRANSMITTER                                     | CONTAINMENT | 612.00      | INSTRUMENTATION RM, ON THE CRANEWALL, NEAR THE FOOT OF THE SEAL TABLE STAIRS  | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Walter Djordjevic  
Print or Type Name

Signature

Date

Stephen Anagnostis  
Print or Type Name

Signature

Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

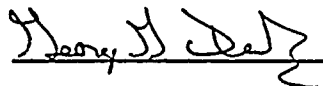
|    | Eq. CI | Equip. ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|----|--------|---------------|--------|--|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 1  | 7      | 1-HV-SGR-MD-1 | 0      | AUX BUILDING VENTIL / CONTROL ROD DRIVE EQUIP ROOM AND INVERTER AREA VENTILATION RECIRCULATING AIR INLET DAMPER          | AUXILIARY | 609.00      | 4KV RM, 600V SWGR Area, IN SW CORNER OF RM, SW OF 11A SWGR, 10' ABOVE FLR, ON SIDE OF INLET DUCT. WALKDOWN NOTE: IEEE 344-75 ANALYSIS AVAIL.   | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 2  | 7      | 1-HV-SGR-MD-2 | 0      | AUX BUILDING VENTIL / CONTROL ROD DRIVE EQUIP ROOM AND INVERTER AREA VENTILATION RECIRCULATING AIR INLET DAMPER          | AUXILIARY | 609.00      | 4KV RM, 600V SWGR Area, IN SW CORNER OF RM, SW OF SWGR, MNTD IN CEILING, NOT VISIBLE W/O ENTERING ACCESS DOOR. NOTE FOR WALKDOWN: IEEE 344-75 ANALYSIS AVAIL.                          | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 3  | 7      | 1-SV-65       | 0      | CCW / LETDOWN HEAT EXCHANGER HE-14 CCW OUTLET SAFETY VALVE   | AUXILIARY | 633.00      | 633 HALLWAY, 20 FT. NORTH OF THE FREIGHT ELEVATOR, 12 FT. ABOVE FLOOR.   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 4  | 7      | 1-SV-94N      | 0      | CTRL RM AIR CONDITIO / CONTROL ROOM AIR CONDITIONING NORTH CHILL WATER EXPANSION TANK TK-76N SAFETY VALVE                | AUXILIARY | 650.00      | CTRL RM AIR COND RM, IN THE NW CORNER OF THE RM, 1 FT WEST OF NORTH CONTROL RM AIR CONDITIONING NORTH CHILL WATER EXPANSION  | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 5  | 7      | 1-SV-94S      | 0      | CTRL RM AIR CONDITIO / CONTROL ROOM AIR CONDITIONING SOUTH CHILL WATER EXPANSION TANK TK-76S SAFETY VALVE                | AUXILIARY | 650.00      | CTRL RM AIR COND RM, AT THE WEST END OF CONTROL RM AIR CONDITIONING SOUTH LIQUID CHILLER #1-HV-ACR-2, NEAR THE SO. WALL, 8 FT  | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 6  | 7      | 1-VRV-315     | 0      | CTRL RM A/C CHILL WA / CONTROL ROOM VENTILATION UNIT HV-ACRA-1 CHILL WATER 2 1/2, 3-WAY AIR OPERATED CONTROL VALVE       | AUXILIARY | 650.00      | CONTROL ROOM A/C ROOM, 3 FEET WEST OF CONTROL ROOM AIR HANDLING SUBPANEL #1-ACRA-1, NEAR THE NORTH WALL, 2 FEET ABOVE THE FLOOR  | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 7  | 7      | 1-VRV-325     | 0      | CTRL RM A/C CHILL WA / CONTROL ROOM VENTILATION UNIT HV-ACRA-2 CHILL WATER 2 1/2 3-WAY AIR OPERATED CONTROL VALVE        | AUXILIARY | 650.00      | CONTROL ROOM A/C ROOM, IN MIDDLE SOUTH REGION OF THE ROOM, 10 FEET EAST OF CONTROL ROOM AIR CONDITIONING SOUTH LIQUID CHILLER #1-HV-ACR-2, NEAR THE SOUTH WALL, 2 FEET ABOVE THE FLOOR | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 8  | 8      | 1-HV-DGS-DAB  | 0      | DIESEL ROOM VENTILAT / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN HV-DGS-1 OUTSIDE AIR SHUTOFF DAMPER     | AUXILIARY | 596.00      | REACTOR CABLE TUNNEL, QUAD. NO. 3, IN MIDDLE OF SW REGN OF THE RM 15 FEET S OF THE ACCESS DOOR FROM THE DIESEL HALLWAY, 6 FEET ABOVE THE FLR   | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 9  | 8      | 1-HV-DGS-DCD  | 0      | DIESEL ROOM VENTILAT / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN HV-DGS-2 OUTSIDE AIR SHUTOFF DAMPER     | AUXILIARY | 596.00      | STORAGE TANK PIPE TUNNEL, IN NW AREA OF PIPE TUNNEL, NEAR LADDER TO THE RWST VALVE HOUSE, 2' FROM THE E WALL, 10' ABOVE THE 593 EL. PLATFORM.  | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 10 | 8      | 1-HV-SGR-MD-3 | 0      | AUXILIARY BUILDING V / 4KV ROOM 600V SWITCHGEAR TRANSFORMERS TR11A & TR11C AREA VENT SUPPLY FAN HV-SGRS-8 SUCTION DAMPER | AUXILIARY | 609.00      | 4KV RM, 600V SWGR Area, IN NW REGN OF THE RM, ON 600V SWGR TRANSFORMERS AREA VENTILATION SUPPLY FAN # 1-HV-SGRS-8  | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

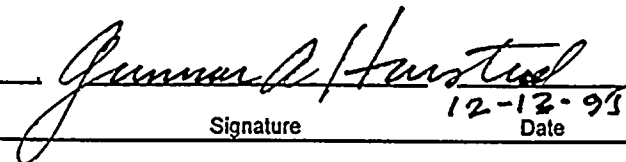
Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas



12/11/95

Gunnar Harstead



Print or Type Name

Signature

Date

Print or Type Name

Signature

12-12-95  
Date



## SCREENING VERIFICATION DATA SHEET (SVDS)

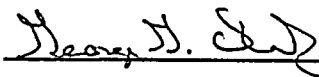
| SCREENING VERIFICATION DATA SHEET (SVDS) |              |                |                              |   |             |                    |   |        |                           |  |             |            |              |           |     |
|--|--------------|----------------|------------------------------|---|-------------|--------------------|---|--------|---------------------------|--|-------------|------------|--------------|-----------|-----|
| Eq. Cl                                   | Equip.ID No. | Rev No         | System/Equipment Description | Building  | Floor Elev. | Room or Row/Column | Base Elev.  | <40'   | Capacity vs. Demand Basis | Cap > Demand?  | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |     |
| 11                                       | 8            | 1-HV-SGR-MD-4  | 0                            | AUXILIARY BUILDING V / 4KV ROOM 600V SWITCHGEAR TRANSFORMERS AREA VENTILATION SUPPLY FAN HV-SGRS-7 SUCTION DAMPER | AUXILIARY   | 609.00             | 4KV RM, 600V SWGR Area, IN NE REGN OF THE RM, ON 600V SWGR TRANSFORMERS AREA VENTILATION SUPPLY FAN # 1-HV-SGRS-7                                       | 609.00 | Yes                       | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes        | N/A          | Yes       | Yes |
| 12                                       | 8            | 1-HV-SGR-MD-5  | 0                            | AUXILIARY BUILDING V / 600VAC MOTOR CONTROL CENTER MEZZANINE AREA VENTILATION SUPPLY FAN HV-SGRS-9 VENT DAMPER    | AUXILIARY   | 613.00             | 4KV RM, Mezzanine Area, IN MIDDLE S. REGN OF THE RM, AT S END OF 600VAC MOTOR CONTROL CENTER MEZZ. AREA VENT. SUPPLY FAN 1-HV-SGRS-9, 10' ABOVE THE FLR | 633.00 | Yes                       | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes        | N/A          | Yes       | Yes |
| 13                                       | 9            | 1-HV-AES-1     | 0                            | AUX BUILDING VENTILA / AUX BUILDING VENTILATION ENGINEERED SAFETY FEATURE EXHAUST UNIT 1                          | AUXILIARY   | 633.00             | NORMAL BLOWDOWN FLASHTANK RM, IN THE SW REGN OF THE RM, 20' SE OF SG NORMAL BD FLASH TK# 1-TK-99, NEAR THE S WALL                                       | 633.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 14                                       | 9            | 1-HV-AES-2     | 0                            | AUX BUILDING VENTILA / AUX BUILDING VENTILATION ENGINEERED SAFETY FEATURE EXHAUST UNIT 2                          | AUXILIARY   | 633.00             | NORMAL BLOWDOWN FLASHTANK RM, IN THE SW REGN OF THE RM, 20' SW OF SGBD FLASHTANK #1-TK-99, NEAR THE S WALL  | 650.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 15                                       | 9            | 1-HV-AFP-BRE-1 | 0                            | AUX BUILDING VENTILA / 'N BATTERY ROOM EAST EXHAUST FAN   | AUXILIARY   | 633.00             | HALLWAY, ON THE N WALL OF THE N-TRAIN BATTERY RM, 5' FROM E WALL, 4' ABOVE THE FLR  | 633.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 16                                       | 9            | 1-HV-AFP-BRE-2 | 0                            | AUX BUILDING VENTILA / TR. 'N BATTERY ROOM WEST EXHAUST FAN   | AUXILIARY   | 633.00             | HALLWAY, ON THE N WALL OF THE N-TRAIN BATTERY RM, 4' ABOVE THE FLR  | 633.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 17                                       | 9            | 1-HV-AFP-M1    | 0                            | TURBINE BUILDING VEN / EAST MOTOR DRIV AUX FEEDWATER PUMP ROOM EXHAUST FAN  | TURBINE     | 591.00             | E MOTOR DRIV AUX FDWTR PUMP RM, IN THE SW CORNER OF THE RM, 10' SW OF E MDAFWP, ON THE W WALL, 12' ABOVE THE FLR  | 591.00 | Yes                       | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes        | Yes          | Yes       | Yes |
| 18                                       | 9            | 1-HV-AFP-M2    | 0                            | TURBINE BUILDING VEN / EAST MOTOR DRIV AUX FEED WATER PUMP ROOM SUPPLY FAN  | TURBINE     | 591.00             | E MOTOR DRIV AUX FDWTR PUMP RM, IN THE NE CORNER OF THE RM, 8' N OF THE RMS ENTRANCE DOOR, ON THE N WALL, 12' ABOVE THE FLR                             | 591.00 | Yes                       | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes        | Yes          | Yes       | Yes |
| 19                                       | 9            | 1-HV-AFP-T1    | 0                            | TURBINE BUILDING VEN / TURB DRIV AUX FEED PUMP ROOM SOUTH EXHAUST FAN   | TURBINE     | 591.00             | TURB DRIV AUX FDWTR PUMP RM, IN THE SW REGN OF THE RM, 4' W OF AFP TURBINE, ON THE W WALL, 12' ABOVE THE FLR  | 591.00 | Yes                       | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes        | Yes          | Yes       | Yes |
| 20                                       | 9            | 1-HV-AFP-T2    | 0                            | TURBINE BUILDING VEN / TURBINE DRIV AUX FEED PUMP ROOM NORTH EXHAUST FAN  | TURBINE     | 591.00             | TURB DRIV AUX FDWTR PUMP RM, IN THE NW CORNER OF THE RM, ON THE W WALL, 5' NW OF AUX FPT, 12' ABOVE THE FLR   | 591.00 | Yes                       | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes        | Yes          | Yes       | Yes |
| 21                                       | 9            | 1-HV-AFP-X1    | 0                            | TURBINE BUILDING VEN / WEST MOTOR DRIV AUX FEED PUMP ROOM EAST EXHAUST FAN  | TURBINE     | 591.00             | W MOTOR DRIV AUX FDWTR PUMP RM, IN THE SE REGN OF THE RM, 8' SE OF W MDAFWP, ON THE S WALL, 3' ABOVE THE FLR  | 591.00 | Yes                       | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes        | Yes          | Yes       | Yes |
| 22                                       | 9            | 1-HV-AFP-X2    | 0                            | TURBINE BUILDING VEN / WEST MOTOR DRIV AUX FEEDWATER PUMP ROOM WEST EXHAUST FAN                                   | TURBINE     | 591.00             | W MOTOR DRIV AUX FDWTR PUMP RM, IN SW REGN OF THE RM, 8' SW OF W MDAFWP, ON THE S WALL, 3' ABOVE THE FLR  | 591.00 | Yes                       | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes        | Yes          | Yes       | Yes |
| 23                                       | 9            | 1-HV-SGRS-1A   | 0                            | AUX BUILDING VENTILA / CONTROL ROD DRIVE EQUIPMENT ROOM AND INVERTER AREA VENTILATION SOUTH SUPPLY FAN            | AUXILIARY   | 609.00             | 4KV RM, 600V SWGR Area, IN THE SW CORNER OF THE RM, 3' N OF VENT FAN #1-HV-SGRS-1A, NEAR THE CEILING.   | 587.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas



12/11/95

Gunnar Harstead



Print or Type Name

Signature

Date

Print or Type Name

Signature

Date



pp.

22



## SCREENING VERIFICATION DATA SHEET (SVDS)

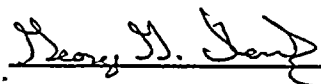
| SCREENING VERIFICATION DATA SHEET (SVDS) |               |              |                              |   |             |                    |   |        |                           |  |             |            |              |           |     |
|--|---------------|--------------|------------------------------|---|-------------|--------------------|---|--------|---------------------------|--|-------------|------------|--------------|-----------|-----|
| Eq. Cl                                   | Equip. ID No. | Rev No       | System/Equipment Description | Building  | Floor Elev. | Room or Row/Column | Base Elev.  | <40'   | Capacity vs. Demand Basis | Cap > Demand?  | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |     |
| 24                                       | 9             | 1-HV-SGRS-2  | 0                            | AUX BUILDING VENTILA / 4KV ROOM AB 4KV SWITCHGEAR AREA VENTILATION SUPPLY FAN                             | AUXILIARY   | 609.00             | 4KV RM, CD 4KV SWGR RM, IN THE NE CORNER OF THE RM, ON THE E WALL, 12' ABOVE THE FLR.   | 633.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 25                                       | 9             | 1-HV-SGRS-3  | 0                            | AUX BUILDING VENTILA / 4KV ROOM CD 4KV SWITCHGEAR AREA VENTILATION SUPPLY FAN                             | AUXILIARY   | 609.00             | 4KV RM, CD 4KV SWGR RM, IN THE NW REGN OF THE RM, 2' E OF TURBINE ACCESS DOORWAY, NEAR THE CEILING. RFC 3063 WILL CHANGE POWER SUPPLY TO TR. A. | 633.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 26                                       | 9             | 1-HV-SGRS-4A | 0                            | AUXILIARY BUILDING V / CONTROL ROD DRIVE EQUIP ROOM AND INVERTER AREA VENTILATION NORTH SUPPLY FAN        | AUXILIARY   | 609.00             | 4KV RM, 600V SWGR Area, IN SW. CORNER OF THE RM, 2' S. OF VENT FAN 1-HV-SGRS-4A, NEAR S. WALL, NEAR THE CEILING                                 | 633.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 27                                       | 9             | 1-HV-SGRS-7  | 0                            | AUX BUILDING VENTILA / 4KV ROOM 600V SWITCHGEAR TRANSFORMER TR-11B AND TR-11D AREA VENTILATION SUPPLY FAN | AUXILIARY   | 609.00             | 4KV RM, 600V SWGR Area, IN THE NE REGN OF RM, 4' S OF 600VAC BUS 11B SUPPLY XFMR #1-TR11B, 9' ABOVE THE FLR.                                    | 633.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 28                                       | 9             | 1-HV-SGRS-8  | 0                            | AUXILIARY BUILDING V / 4KV ROOM 600V SWITCHGEAR TRANSFORMERS TR11A AND TR11C AREA VENTILATION SUPPLY FAN  | AUXILIARY   | 609.00             | 4KV RM, 600V SWGR Area, IN NW. REGN OF RM, 7' E OF THE TURBINE BUILDING ROOLUP DOOR, NEAR THE CEILING   | 633.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 29                                       | 9             | 1-HV-SGRS-9  | 0                            | AUXILIARY BUILDING V / 600VAC MOTOR CONTROL CENTER MEZZANINE AREA VENTILATION SUPPL FAN                   | AUXILIARY   | 613.00             | 4KV RM, Mezzanine Area, IN MIDDLE S. REGN OF THE RM, NEAR PLANT BATTERY CONTROL PANEL 1-BA-AB, 10' ABOVE THE FLR                                | 633.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 30                                       | 9             | 1-HV-SGRX-2  | 0                            | AUX BUILDING VENTILA / 4KV ROOM AB 4KV SWITCHGEAR AREA VENTILATION EXHAUST FAN                            | AUXILIARY   | 609.00             | 4KV RM, 600V SWGR Area, IN SW. REGN OF THE RM, 8' W. OF 600VAC BUS 11A SWGR, ON THE W. WALL, 4' ABOVE THE FLR                                   | 633.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 31                                       | 9             | 1-HV-SGRX-3  | 0                            | AUX BUILDING VENTILA / 4KV ROOM CD 4KV SWITCHGEAR AREA VENTILATION EXHAUST FAN                            | AUXILIARY   | 609.00             | 4KV RM, 600V SWGR Area,   | 633.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 32                                       | 9             | 1-HV-SGRX-5  | 0                            | AUX BUILDING VENTILA / AB BATTERY EQUIPMENT AREA BATTERY ROOM VENTILATION EXHAUST FAN                     | AUXILIARY   | 609.00             | AB BATT EQUIP AREA, IN THE CENTER OF THE RM, NEAR THE CEILING.  | 633.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 33                                       | 9             | 1-HV-SGRX-6  | 0                            | AUX BUILDING VENTILA / CD BATTERY EQUIPMENT AREA BATTERY ROOM VENTILATION EXHAUST FAN                     | AUXILIARY   | 626.00             | SWGR CABLE SPREADING RM, IN THE NE REGN OF THE RM, 15' E OF A CEMENT COLUMN, NEAR A S WALL, NEAR THE FLR.                                       | 633.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 34                                       | 9             | 12-HV-ACCP-1 | 0                            | AUX BUILDING VENTILA / CCW PUMPS VENTILATION NORTH SUPPLY FAN   | AUXILIARY   | 633.00             | HALLWAY, IN SW REGN OF THE HALLWAY, 20' SW OF CONT AUX SUBPNL #2-CAS, 12' ABOVE THE FLR.  | 633.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 35                                       | 9             | 12-HV-ACCP-2 | 0                            | AUX BUILDING VENTILA / CCW PUMPS VENTILATION MIDDLE SUPPLY FAN  | AUXILIARY   | 633.00             | HALLWAY, IN THE SW REGN OF THE HALLWAY, 20' SW OF CONT. AUX SUBPNL #2-CAS, 12' ABOVE THE FLR.   | 633.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 36                                       | 9             | 12-HV-ACCP-3 | 0                            | AUX BUILDING VENTILA / CCW PUMPS VENTILATION SOUTH SUPPLY FAN   | AUXILIARY   | 633.00             | HALLWAY, IN THE SW REGN OF THE HALLWAY, 20' SW OF CONT AUX SUBPNL #2-CAS, 12' ABOVE THE FLR.  | 633.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas



12/11/95

Gunnar Harstead



Print or Type Name

Signature

Date

Print or Type Name

Signature

Date



## SCREENING VERIFICATION DATA SHEET (SVDS)

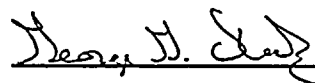
| SCREENING VERIFICATION DATA SHEET (SVDS) |            |                  |                              |  |             |                    |  |        |                           |  |             |            |              |           |     |
|--|------------|------------------|------------------------------|--|-------------|--------------------|--|--------|---------------------------|--|-------------|------------|--------------|-----------|-----|
| Eq. CI                                   | Eq. ID No. | Rev No           | System/Equipment Description | Building   | Floor Elev. | Room or Row/Column | Base Elev.   | <40'   | Capacity vs. Demand Basis | Cap > Demand?  | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |     |
| 37                                       | 9          | 12-HV-ESW-5      | 0                            | SCREENHOUSE VENTILAT / UNIT 1 WEST ESW PUMP ROOM SUPPLY VENTILATION FAN                              | SCREENHOUSE | 591.00             | W ESW PUMP RM, IN THE SW CORNER OF THE RM, 15' SW OF W ESW PP, 13' ABOVE THE FLR.  | 587.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       |     |
| 38                                       | 9          | 12-HV-ESW-6      | 0                            | SCREENHOUSE VENTILAT / UNIT 1 WEST ESW PUMP ROOM SUPPLY VENTILATION FAN                              | SCREENHOUSE | 591.00             | W ESW PUMP RM, IN SE CORNER OF THE RM, 15' SE OF W ESW PP, 13' ABOVE THE FLR.      | 587.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       |     |
| 39                                       | 9          | 12-HV-ESW-7      | 0                            | SCREENHOUSE VENTILAT / UNIT #1 EAST ESW PUMP ROOM SUPPLY VENTILATION FAN                             | SCREENHOUSE | 591.00             | E ESW PUMP RM, IN THE SW CORNER OF THE RM, 15' SE OF E ESW PP, 13' ABOVE THE FLR.  | 587.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       |     |
| 40                                       | 9          | 12-HV-ESW-8      | 0                            | SCREENHOUSE VENTILAT / UNIT 1 ESW PUMP ROOM SUPPLY VENTILATION FAN                                   | SCREENHOUSE | 591.00             | E ESW PUMP RM, IN SE CORNER OF THE RM, 15' SE OF E ESW PP, 13' ABOVE THE FLR.      | 587.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       |     |
| 41                                       | 10         | 1-HV-ACRA-1      | 0                            | CONTROL ROOM VENTILA / CONTROL ROOM VENTILATION NORTH AIR HANDLER PACKAGE                            | AUXILIARY   | 650.00             | CONTROL RM, A/C RM,  | 650.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       |     |
| 42                                       | 10         | 1-HV-ACRA-2      | 0                            | CONTROL ROOM VENTILA / CONTROL ROOM VENTILATION SOUTH AIR HANDLER PACKAGE                            | AUXILIARY   | 650.00             | CONTROL RM, A/C RM,  | 650.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       |     |
| 43                                       | 10         | 1-HV-AES-1 (FLT) | 0                            | AUX BUILDING VENTILA / AUX BUILDING VENTILATION ENGINEERED SAFETY FEATURE EXHAUST AIR FILTER UNIT #1 | AUXILIARY   | 633.00             | NORMAL BLOWDOWN FLASHTANK RM,  | 633.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       |     |
| 44                                       | 10         | 1-HV-AES-2 (FLT) | 0                            | AUX BUILDING VENTILA / AUX BUILDING VENTILATION ENGINEERED SAFETY FEATURE EXHAUST AIR FILTER UNIT #2 | AUXILIARY   | 633.00             | NORMAL BLOWDOWN FLASHTANK RM,  | 633.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       |     |
| 45                                       | 11         | 1-HV-ACR-1       | 0                            | CONTROL ROOM A/C CHI / CONTROL ROOM NORTH LIQUID CHILLER PACKAGE                                     | AUXILIARY   | 650.00             | CONTROL RM, A/C RM,  | 650.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | No         | No           | Yes       | No  |
| 46                                       | 11         | 1-HV-ACR-2       | 0                            | CONTROL ROOM A/C CHI / CONTROL ROOM SOUTH LIQUID CHILLER PACKAGE                                     | AUXILIARY   | 650.00             | CONTROL RM, A/C RM,  | 650.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | No         | No           | Yes       | No  |
| 47                                       | 11         | 1-HE-63N         | 0                            | CONTROL ROOM A/C CHI / CONTRL ROOM A/C NORTH LIQUID CHILLER HV-ACR1 EVAPORATOR                       | AUXILIARY   | 650.00             | CTRL RM AIR COND RM  | 650.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 48                                       | 11         | 1-HE-63S         | 0                            | CTRL RM AIR CONDITIO / CONTROL ROOM AIR CONDITIONING SOUTH LIQUID CHILLER HV-ACR-2 EVAPORAT          | AUXILIARY   | 650.00             | CTRL RM AIR COND RM, IN THE SW PART OF THE RM, ON THE SO. WALL, 2 FT ABOVE THE FLR | 650.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 49                                       | 11         | 1-HE-64N         | 0                            | CONTROL ROOM A/C CHI / CONTROL ROOM A/C NORTH LIQUID CHILLER HV-ACR-1 CONDENSER                      | AUXILIARY   | 650.00             | CTRL RM AIR COND RM  | 650.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 50                                       | 11         | 1-HE-64S         | 0                            | CONTROL ROOM A/C CHI / CONTROL ROOM A/C SOUTH LIQUID CHILLER HV-ACR-2 CONDENSER                      | AUXILIARY   | 650.00             | CTRL RM AIR COND RM  | 650.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas



12/15/95

Gunnar Harstead



12-12-95

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID      | Rev No | System/Equipment Description   | Building    | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis                          | Cap > Demd? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|----------------|--------|--|-------------|-------------|---|------------|------|--|-------------|-------------|------------|--------------|-----------|
| 82   | 18     | 1-NPP-151      | 0      | PRESSURIZER / PRESSURIZER (OME-4) LEVEL TRANSMITTER                                      | CONTAINMENT | 612.00      | INSTRUMENTATION RM, 5' SW OF THE 612 AIRLOCK DOOR, IN THE SW CORNER OF THE RM, ON THE W WALL                | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | Yes        | Yes          | Yes       |
| 83   | 18     | 1-NPP-152      | 0      | PRESSURIZER / PRESSURIZER (OME-4) PRESSURE TRANSMITTER                                   | CONTAINMENT | 612.00      | INSTRUMENTATION RM, ON THE CONT. WALL, NEAR COL #13, NEAR ANNULUS HATCH, 2' ABOVE THE FLR                   | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | Yes        | Yes          | Yes       |
| 84   | 18     | 1-NPP-153      | 0      | PRESSURIZER / PRESSURIZER (OME-4) PRESSURE TRANSMITTER                                   | CONTAINMENT | 612.00      | INSTRUMENTATION RM, ON THE CRANWALL, NEAR COL #15, NEAR THE SEAL TABLE STAIRS                               | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | Yes        | Yes          | Yes       |
| 85   | 18     | 1-NPS-121      | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP 2 HOT LEG WIDE RANGE PRESSURE TRANSMITTER         | CONTAINMENT | 612.00      | W CONT LOWER VENT RM, ON CRANWALL SIDE OF THE WALKWAY, 1' FROM CONT. LOWER VENT U# 1-HV-CLV-2, 5' ABOVE FLR | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | Yes        | Yes          | Yes       |
| 86   | 18     | 1-NPS-122      | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP 1 HOT LEG WIDE RANGE PRESSURE TRANSMITTER         | CONTAINMENT | 611.00      | E CONT LOWER VENT RM, NEAR COLUMN # 5, NEAR THE DOORWAY TO VENT UNIT # 1-HV-CLV-1                           | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | Yes        | Yes          | Yes       |
| 87   | 18     | 1-NRI-21       | 0      | NUCLEAR INSTRUMENTAT / NUCLEAR INST. WIDE RANGE RADIATION DETECTOR                       | CONTAINMENT | 626.00      | REACTOR CAVITY, AZ 090,   | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | Yes        | Yes          | Yes       |
| 88   | 18     | 1-NRI-23       | 0      | NUCLEAR INSTRUMENTAT / NUCLEAR INST. SOURCE RANGE RADIATION DETECTOR                     | CONTAINMENT | 626.00      | REACTOR CAVITY, AZ 270,   | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | Yes        | Yes          | Yes       |
| 89   | 18     | 1-XRV-RACK-152 | 0      | CONTROL AIR / PRZ TR-B PRESSURE RELIEF VLV NRV-152 VLV RACK EMERG AIR PRESSURE REGULATOR | CONTAINMENT | 650.00      | UPPER CONT, ON THE CRANWALL SIDE OF THE AREA, ON THE OUTSIDE OF THE PRZ DOGHOUSE                            | 650.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | Yes        | Yes          | Yes       |
| 90   | 18     | 1-XRV-RACK-153 | 0      | CONTROL AIR / PRZ TR-A PRESSURE RELIEF VLV NRV-153 VLV RACK EMERG AIR PRESS REGULATOR    | CONTAINMENT | 650.00      | UPPER CONT, ON THE CRANWALL SIDE OF THE AREA, ON THE OUTSIDE OF THE PRZ DOGHOUSE                            | 650.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | Yes        | Yes          | Yes       |
| 91   | 19     | 1-NTR-110      | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP 1 HOT LEG WIDE RANGE TEMP RECORDER THERMAL SENSOR | CONTAINMENT | 598.00      | LOWER CONT QUAD 1, AZ 015, ON THE SHIELD WALL SIDE OF SG #1, 20' ABOVE FLR                                  | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | N/A        | Yes          | Yes       |
| 92   | 19     | 1-NTR-120      | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP 2 HOT LEG WIDE RANGE TEMP RECORDER THERMAL SENSOR | CONTAINMENT | 617.00      | LOWER CONT QUAD 2, AZ 169, ON THE SHIELD WALL SIDE OF SG #2, ON THE 621 EL. PLATFORM                        | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | N/A        | Yes          | Yes       |
| 93   | 19     | 1-NTR-130      | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP 3 HOT LEG WIDE RANGE TEMP RECORDER THERMAL SENSOR | CONTAINMENT | 625.00      | LOWER CONT QUAD 3, AZ 194, ON THE SHIELD WALL SIDE OF SG #3, ON THE 621 EL. PLATFORM                        | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Walter Djordjevic  
Print or Type Name

Signature

12/14/95  
Date

Stephen Anagnostis  
Print or Type Name

Signature

12/14/95  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID | Rev. No | System/Equipment Description  | Building    | Floor Elev. | Room or Row/Column   | Base Elev. | <40'? | Capacity vs. Demand Basis                          | Cap > Demd? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|-----------|---------|---|-------------|-------------|--|------------|-------|--|-------------|-------------|------------|--------------|-----------|
| 94   | 19     | 1-NTR-140 | 0       | REACTOR COOLANT / REACTOR COOLANT LOOP 4 HOT LEG WIDE RANGE TEMP RECORDER THERMAL SENSOR  | CONTAINMENT | 598.00      | LOWER CONT QUAD 4, AZ 336, ON THE SHIELD WALL SIDE OF SG #4, 20' ABOVE THE FLR       | 598.00     | Yes   | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | N/A        | Yes          | Yes       |
| 95   | 19     | 1-NTR-210 | 0       | REACTOR COOLANT / REACTOR COOLANT LOOP 1 COLD LEG WIDE RANGE TEMP RECORDER THERMAL SENSOR | CONTAINMENT | 598.00      | LOWER CONT QUAD 1, AZ 035, BETWEEN THE RCP #1 & THE SHIELD WALL, ON 617 EL. PLATFORM | 598.00     | Yes   | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | N/A        | Yes          | Yes       |
| 96   | 19     | 1-NTR-230 | 0       | REACTOR COOLANT / REACTOR COOLANT LOOP 3 COLD LEG WIDE RANGE TEMP RECORDER THERMAL SENSOR | CONTAINMENT | 617.00      | LOWER CONT QUAD 3, AZ 236, BETWEEN THE RCP #3 & THE SHIELD WALL, ON 617 EL. PLATFORM | 625.00     | Yes   | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | N/A        | No           | No        |
| 97   | 19     | 1-NTR-240 | 0       | REACTOR COOLANT / REACTOR LOOP 4 COLD LEG WIDE RANGE TEMP RECORDER THERMAL SENSOR         | CONTAINMENT | 617.00      | LOWER CONT QUAD 4, AZ 307, BETWEEN THE RCP #4 & THE SHIELD WALL, ON 617 EL. PLATFORM | 625.00     | Yes   | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes         | Yes         | N/A        | No           | No        |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Walter Djordjevic  
Print or Type Name

Signature

12/14/95  
Date

Stephen Anagnostis  
Print or Type Name

Signature

12/14/95  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

|    | Eq. CI | Equip. ID No. | Rev No. | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|----|--------|---------------|---------|---|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 1  | 18     | 1-CLI-113     | 0       | CONDENSATE STORAGE T / CONDENSATE STORAGE TANK TK-32 LEVEL INDICATOR TRANSMITTER    | AUXILIARY | 586.00      | STORAGE TANK PIPE TUNNEL, IN THE NE AREA OF PIPE TUNNEL, ON THE N WALL, 5' ABOVE 593 EL. PLATFORM.  | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 2  | 18     | 1-CLI-114     | 0       | CONDENSATE STORAGE T / CONDENSATE STORAGE TANK TK-32 LEVEL INDICATOR TRANSMITTER    | AUXILIARY | 586.00      | STORAGE TANK PIPE TUNNEL, IN THE NE AREA OF THE PIPE TUNNEL, 10' E OF THE CST ACCESS LADDER HATCH, 5' ABOVE THE 593 EL. PLATFORM.                       | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 3  | 18     | 1-CPS-410     | 0       | CCW / EAST CCW PUMP PP-110E DISCHARGE PRESSURE SWITCH                               | AUXILIARY | 609.00      | HALLWAY, 7 FT NW OF EAST CCW PUMP #12-PP-10E  | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 4  | 18     | 1-CPS-420     | 0       | CCW / WEST CCW PUMP PP-10W DISCHARGE PRESSURE SWITCH                                | AUXILIARY | 609.00      | HALLWAY, 5 FT NW OF WEST CCW PUMP #12-PP-10W  | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 5  | 18     | 1-FFI-210     | 0       | AUX FEEDWATER / AUX FEEDWATER TO STEAM GENERATOR OME-3-1 FLOW INDICATOR TRANSMITTER | AUXILIARY | 621.00      | E MAIN STEAM STOP ENCLOSURE, SW CORNER OF RM  | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 6  | 18     | 1-FFI-220     | 0       | AUX FEEDWATER / AUX FEEDWATER TO STEAM GENERATOR OME-3-2 FLOW INDICATOR TRANSMITTER | AUXILIARY | 621.00      | W MAIN STEAM STOP ENCLOSURE, S CENTRAL AREA OF RM.  | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 7  | 18     | 1-FFI-230     | 0       | AUX FEEDWATER / AUX FEEDWATER TO STEAM GENERATOR OME-3-3 FLOW INDICATOR TRANSMITTER | AUXILIARY | 621.00      | W MAIN STEAM STOP ENCLOSURE, IN THE MIDDLE OF THE N PART OF THE RM, 12' W OF CONT PENETRATION #1-CPN-9.   | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 8  | 18     | 1-FFI-240     | 0       | AUX FEEDWATER / AUX FEEDWATER TO STEAM GENERATOR OME-3-4 FLOW INDICATOR TRANSMITTER | AUXILIARY | 621.00      | E MAIN STEAM STOP ENCLOSURE, ON THE N WALL, 10' N OF STAIRS.  | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 9  | 18     | 1-IFI-310     | 0       | RHR / EAST RHR HEAT EXCHANGER HE-17E OUTLET LOW RANGE FLOW INDICATOR TRANSMITTER    | AUXILIARY | 609.00      | HALLWAY, 11' E OF RHR HE RM'S DOORWAY, ON THE N WALL, 5' ABOVE THE FLR  | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 10 | 18     | 1-IFI-311     | 0       | RHR / EAST RHR HEAT EXCHANGER HE-17E OUTLET HIGH RANGE FLOW INDICATOR TRANSMITTER   | AUXILIARY | 609.00      | HALLWAY, 12' E OF E RHR HEAT EXCHANGER RM DOORWAY, ON N WALL, 5' ABOVE THE FLR.   | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 11 | 18     | 1-IFI-320     | 0       | RHR / WEST RHR HEAT EXCHANGER HE-17W OUTLET LOW RANGE FLOW INDICATOR TRANSMITTER    | AUXILIARY | 609.00      | HALLWAY, 15' N OF THE PASSENGER ELEVATOR, ON THE N WALL, 5' ABOVE THE FLR   | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 12 | 18     | 1-IFI-321     | 0       | RHR / WEST RHR HEAT EXCHANGER HE-17W OUTLET HIGH RANGE FLOW INDICATOR TRANSMITTER   | AUXILIARY | 609.00      | HALLWAY, 15' N OF THE PASSENGER ELEVATOR, ON THE N WALL, 5' ABOVE THE FLR.  | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 13 | 18     | 1-ILS-950     | 0       | RWST SUPPLY / RWST TK-33 EXTREME LOW LEVEL TRANSMITTER                              | AUXILIARY | 586.00      | STORAGE TANK PIPE TUNNEL, IN THE NE AREA OF PIPE TUNNEL, 8' E OF REFUELING WATER STORAGE TANK VALVE HOUSE LADDER, ON N WALL, 7' ABOVE 593 EL. PLATFORM. | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

T.R. Satyan Sharma

Print or Type Name

Signature

12/21/95

Date

Paul R. Wilson

Print or Type Name

Signature

12/16/95

Date



## SCREENING VERIFICATION DATA SHEET (SVDS)

| SCREENING VERIFICATION DATA SHEET (SVDS) |               |           |                              |  |             |                    |  |        |                           |  |             |            |              |           |     |
|--|---------------|-----------|------------------------------|--|-------------|--------------------|--|--------|---------------------------|--|-------------|------------|--------------|-----------|-----|
| Eq. CI                                   | Equip. ID No. | Rev No    | System/Equipment Description | Building   | Floor Elev. | Room or Row/Column | Base Elev.   | <40'   | Capacity vs. Demand Basis | Cap > Demand?  | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |     |
| 14                                       | 18            | 1-ILS-951 | 0                            | RWST SUPPLY / RWST TK-33 LEVEL TRANSMITTER   | AUXILIARY   | 586.00             | STORAGE TANK PIPE TUNNEL, IN NE AREA OF PIPE TUNNEL, 12' E OF REFUELING WTR STORAGE TANK VLV LADDER, ON N WALL, 7' ABOVE 593 EL. PLATFORM.               | 587.00 | Yes                       | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes        | Yes          | Yes       | Yes |
| 15                                       | 18            | 1-MPP-210 | 0                            | MAIN STEAM / STEAM GENERATOR OME-3-1 CHANNEL I STEAM PRESSURE TRANSMITTER                            | AUXILIARY   | 633.00             | E MAIN STEAM STOP ENCLOSURE, IN THE SW REGN OF THE RM, 4' NW OF THE TOP OF STEAM STOP VALVE 1-MRV-210, 2' ABOVE 647 EL. PLATFORM.                        | 650.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 16                                       | 18            | 1-MPP-212 | 0                            | MAIN STEAM / STEAM GENERATOR OME-3-1 CHANNEL IV REACTOR PROTECTION INPUT STEAM PRESSURE TRANSMITTER  | AUXILIARY   | 633.00             | E MAIN STEAM STOP ENCLOSURE,   | 650.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 17                                       | 18            | 1-MPP-220 | 0                            | MAIN STEAM / STEAM GENERATOR OME-3-2 CHANNEL I STEAM PRESSURE TRANSMITTER                            | AUXILIARY   | 633.00             | W MAIN STEAM STOP ENCCLOSURE, 8' NE OF MAIN STEAM STOP VALVE 1-MRV-220, AT 652 EL. PLATFORM, ON THE CONT WALL, LOCATED INSIDE OF BLAST BOX.              | 650.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 18                                       | 18            | 1-MPP-222 | 0                            | MAIN STEAM / STEAM GENERATOR OME-3-2 CHANNEL III REACTOR PROTECTION INPUT STEAM PRESSURE TRANSMITTER | AUXILIARY   | 633.00             | W MAIN STEAM STOP ENCCLOSURE, SE AREA OF 652 EL. PLATFORM, ON CONT WALL LOCATED INSIDE OF BLAST BOX.   | 650.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 19                                       | 18            | 1-MPP-230 | 0                            | MAIN STEAM / STEAM GENERATOR OME-3-3 CHANNEL I STEAM PRESSURE TRANSMITTER                            | AUXILIARY   | 633.00             | W MAIN STEAM STOP ENCCLOSURE, 8' E OF MAIN STOP VALVE 1-MRV-230, ON THE CONT WALL, AT 652 EL. PLATFORM.  | 650.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 20                                       | 18            | 1-MPP-232 | 0                            | MAIN STEAM / STEAM GENERATOR OME-3-3 CHANNEL III REACTOR PROTECTION INPUT STEAM PRESSURE TRANSMITTER | AUXILIARY   | 633.00             | W MAIN STEAM STOP ENCCLOSURE, NE CORNER OF 652 EL. PLATFORM, ON CONT WALL, LOCATED INSIDE OF BLAST BOX.  | 650.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 21                                       | 18            | 1-MPP-240 | 0                            | MAIN STEAM / STEAM GENERATOR OME-3-4 CHANNEL I STEAM PRESSURE TRANSMITTER                            | AUXILIARY   | 633.00             | E MAIN STEAM STOP ENCLOSURE, IN NW REGN OF RM, 5' SW OF TOP OF STEAM STOP VALVE 1-MRV-240, NEAR THE W WALL, 2' ABOVE 647 EL. PLATFORM.                   | 650.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 22                                       | 18            | 1-MPP-242 | 0                            | MAIN STEAM / STEAM GENERATOR OME-3-4 CHANNEL IV REACTOR PROTECTION INPUT STEAM PRESSURE TRANSMITTER  | AUXILIARY   | 633.00             | E MAIN STEAM STOP ENCLOSURE, IN THE NW CORNER OF THE RM, 8' NW OF THE TOP OF STEAM STOP VALVE 1-MRV-240, NEAR THE W WALL, 2' ABOVE THE 647 EL. PLATFORM. | 650.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 23                                       | 18            | 1-PPP-301 | 0                            | CONTAINMENT VENTILAT / LOWER CONT. CH. III PRESSURE PROTECTION TRANSMITTER                           | AUXILIARY   | 612.00             | AIRLOCK AREA, 15' NE OF THE 612 EL. AIRLOCK, 3' SE OF VALVE 1-VCR-202, 6' ABOVE THE FLR.   | 650.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 24                                       | 18            | 1-PPP-302 | 0                            | CONTAINMENT VENTILAT / LOWER CONTAINMENT CHANNEL II PRESSURE PROT. TRANSMITTER                       | AUXILIARY   | 612.00             | AIRLOCK AREA, 15' NE OF THE 612 EL. AIRLOCK, 5' SE OF VALVE 1-VCR-202, 3' ABOVE THE FLR. INST DWG 1-5581.A.B.  | 650.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 25                                       | 18            | 1-PPP-303 | 0                            | CONTAINMENT VENTILAT / LOWER CONTAINMENT CHANNEL I PRESSURE PROTECTION TRANSMITTER                   | AUXILIARY   | 612.00             | AIRLOCK AREA, 1' S OF CONT PENETRATION #1-CPN-99, 4' OF VENTILATION UNIT #1-IV-CIPX-1, NEAR CONT WALL, 5' ABOVE THE FLR                                  | 650.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 26                                       | 18            | 1-QFA-210 | 0                            | RCTR COOLANT PMP SEA / RCP WATER INJECTION TO RCP PP-45-1 LOW FLOW ALARM TRANSMITTER                 | AUXILIARY   | 587.00             | HALLWAY, 7' E OF DOORWAY TO THE STARTUP BLOWDOWN FLASHTANK RM'S RAMP, ON THE N WALL, 6' ABOVE THE FLR  | 587.00 | Yes                       | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes        | Yes          | Yes       | Yes |
| 27                                       | 18            | 1-QFA-220 | 0                            | RCTR COOLANT PMP SEA / RCP SEAL WATER INJECTION TO RCP 2 LOW FLOW ALARM TRANSMITTER                  | AUXILIARY   | 587.00             | HALLWAY, 7' E OF DOORWAY TO THE STARTUP BLOWDOWN FLASHTANK RM'S RAMP, ON THE N WALL, 6' ABOVE THE FLR  | 587.00 | Yes                       | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes        | Yes          | Yes       | Yes |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

T.R. Satyan Sharma  
Print or Type Name

Signature

Date

Paul R. Wilson  
Print or Type Name

Signature

Date



## SCREENING VERIFICATION DATA SHEET (SVDS)

|    | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description  | Building    | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|----|--------|---------------|--------|---|-------------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 28 | 18     | 1-QFA-230     | 0      | RCTR COOLANT PMP SEA / RCP SEAL WATER INJECTION TO RCP 3 LOW FLOW ALARM TRANSMITTER                         | AUXILIARY   | 587.00      | HALLWAY, 7' E OF DOORWAY TO THE STARTUP BLOWDOWN FLASHTANK RM'S RAMP, ON THE N WALL, 6' ABOVE THE FLR                        | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 29 | 18     | 1-QFA-240     | 0      | RCTR COOLANT PMP SEA / RCP SEAL WATER TO RCP 4 LOW FLOW ALARM TRANSMITTER                                   | AUXILIARY   | 587.00      | HALLWAY, 7' E OF DOORWAY TO THE STARTUP BLOWDOWN FLASHTANK RM'S RAMP, ON THE N WALL, 6' ABOVE THE FLR                        | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 30 | 18     | 1-QFI-200     | 0      | CVCS - CHARGING / CVCS CHG PPS DISCH FLOW INDICATOR   | AUXILIARY   | 587.00      | HALLWAY, ON W WALL, 10' N OF CHARGING PUMP RM DOORWAY INST DWG. 12-5565, 1-5531B   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 31 | 18     | 1-QLC-451     | 0      | CVCS / REACTOR COOLANT LETDOWN VCT TK-10 EXTREME HIGH LEVEL CONTROL TRANSMITTER                             | AUXILIARY   | 609.00      | HALLWAY, 10' N OF FREIGHT ELEVATOR, ON THE N WALL, 5' ABOVE FLR  | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 32 | 18     | 1-QLC-452     | 0      | CVCS / REACTOR COOLANT LETDOWN VCT TK-10 HIGH LEVEL CONTROL TRANSMITTER                                     | AUXILIARY   | 609.00      | VOLUME CONTROL TANK RM, ON SW SIDE OF TANK, 15' ABOVE THE FLR  | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 33 | 18     | 1-WDS-701     | 0      | ESW / EAST ESW PUMP PP-7E DISCHARGE STRAINER OME-34E HIGH DIFFERENTIAL PRESSURE SWITCH                      | SCREENHOUSE | 591.00      | ESSNTL SERV WTR PMP RM   | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 34 | 18     | 1-WDS-702     | 0      | ESW / WEST ESW PUMP PP-7W DISCHARGE STRAINER OME-34W HIGH DIFFERENTIAL PRESSURE SWITCH                      | SCREENHOUSE | 591.00      | WESSNTL SERV WTR PMP RM  | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 35 | 18     | 1-WPS-701     | 0      | ESW / EAST ESW SUPPLY HEADER PRESSURE SWITCH  | TURBINE     | 569.00      | ESSNTL SERV WTR PIPE TUNNEL  | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 36 | 18     | 1-WPS-705     | 0      | ESW / WEST ESW SUPPLY HEADER PRESSURE SWITCH  | TURBINE     | 569.00      | ESSNTL SERV WTR PIPE TUNNEL  | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 37 | 18     | 12-CPS-430    | 0      | CCW / SPARE CCW PUMP DISCHARGE PRESSURE SWITCH  | AUXILIARY   | 609.00      | HALLWAY, 4 FT NW OF THE SPARE CCW PUMP #12-PP-10, 3 FT ABOVE THE FLR   | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 38 | 19     | 1-CTR-415     | 0      | CCW / EAST CCW HEAT EXCHANGER HE-15E CCW OUTLET TEMPERATURE RECORDER THERMAL SENSOR                         | AUXILIARY   | 609.00      | HALLWAY,   | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 39 | 19     | 1-CTR-425     | 0      | CCW / WEST COMPONENT COOLING WATER HEAT EXCHANGER HE-15W CCW OUTLET TEMPERATURE RECORDER THERMAL SENSOR     | AUXILIARY   | 609.00      | HALLWAY, ON N. END OF W. COMPONENT COOLING WATER HEAT EXCHANGER 1-HE-15W, 6' ABOVE FLR                                       | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 40 | 19     | 1-VTS-201     | 0      | TURBINE BUILDING VEN / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP ROOM EXHAUST FAN HV-AFP-M1 THERMAL SENSOR | TURBINE     | 591.00      | E MOTOR DRIV AUX FDWTR PUMP RM, 8' NW. OF E. MOTOR DRIVEN AUXILIARY FDWTR PUMP 1-PP-3E, ON W. WALL, 8' ABOVE FLR             | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 41 | 19     | 1-VTS-203     | 0      | TURBINE BUILDING VEN / TURBINE DRIVEN AUXILIARY FEED PUMP ROOM NORTH EXHAUST FAN HV-AFP-T1 THERMAL SENSOR   | TURBINE     | 591.00      | TURB DRIV AUX FDWTR PUMP RM, IN SE. REGN OF RM, 6' S. OF TURBINE DRIVEN AUXILIARY FEED PUMP 1-PP-4, ON S. WALL, 9' ABOVE FLR | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

T.R. Satyan Sharma

Print or Type Name

Signature

12/21/95

Date

Paul R. Wilson

Print or Type Name

Signature

12/16/95

Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

|    | Eq. Cl | Equip.ID No. | Rev No | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|----|--------|--------------|--------|---|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 42 | 19     | 1-VTS-204    | 0      | TURBINE BUILDING VEN / TURBINE DRIVEN AUXILIARY FEED PUMP ROOM SOUTH EXHAUST FAN HV-AFP-T2 THERMAL SENSOR   | TURBINE   | 591.00      | TURB DRIV AUX FOWTR PUMP RM, IN NE REGN OF RM, 8' N. OF TURBINE DRIVEN AUXILIARY FEED PUMP 1-PP-4, ON N. WALL, 8' ABOVE FLR         | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 43 | 19     | 1-VTS-206    | 0      | TURBINE BUILDING VEN / WEST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP ROOM WEST EXHAUST FAN HV-AFP-X2 THERMAL SENSOR                                      | TURBINE   | 591.00      | W MOTOR DRIV AUX FOWTR PUMP RM, IN SW. CORNOR OF RM, ON S. WALL, 5' ABOVE FLR   | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 44 | 19     | 1-VTS-340    | 0      | DIESEL BUILDING VENT / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION FANS OUTSIDE AIR THERMOSTAT   | AUXILIARY | 596.00      | REACTOR CABLE TUNNEL, QUAD, #3, IN SW. REGN OF RM, 15' S. OF FIRE DOOR #325, ON VENTILATION EXHAUST FAN 1-HV-ET-7, 8' ABOVE THE FLR | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 45 | 19     | 1-VTS-350    | 0      | AUXILIARY BUILDING V / CONTROL ROD DRIVE EQUIP ROOM AND INV AREA VENT SOUTH SUPPLY FAN HV-SGRA-1A TEMPERATURE SWITCH                                  | AUXILIARY | 609.00      | INVERTER AREA, IN NE. CORNOR OF RM, 8' SE. OF THE ENTRANCE DOOR, ON E. WALL, 4' ABOVE FLR   | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 46 | 19     | 1-VTS-351    | 0      | AUXILIARY BUILDING V / CONTROL ROD DRIVE EQUIPMENT ROOM AND INV AREA VENT SOUTH SUPPLY FAN HV-SGRS-1A TEMPERATURE SWITCH                              | AUXILIARY | 609.00      | CONTROL ROD DRIVE EQUIPMENT RM, IN NW. REGN OF RM, 1' W. OF THE RM'S ENTRANCE DOOR, ON THE N. WALL, 5' ABOVE THE FLR                | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 47 | 19     | 1-VTS-352    | 0      | AUXILIARY BUILDING V / 4KV ROOM 600 VOLT SWGR XFRMS TR11B AND TR11D AREA VENT SUPPLY FAN HV-SGRS-7 TEMP SWITCH  | AUXILIARY | 609.00      | 4KV RM, 600V SWGR Area,   | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 48 | 19     | 1-VTS-353    | 0      | AUXILIARY BUILDING V / 600VAC MOTOR CONTROL CENTER MEZZANINE AREA VENT SUPPLY FAN SGRS-9 TEMPERATURE SWITCH   | AUXILIARY | 613.00      | 4KV RM, Mezzanine Area, IN NW. REGN OF RM, 2' W. OF 480V BUS SWITCH GEAR 1-11PHA, ON THE W. WALL, 5' ABOVE THE FLR                  | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 49 | 19     | 1-VTS-354    | 0      | AUXILIARY BUILDING V / CONT ROD DRIVE EQUIP ROOM AND INV AREA OUTSIDE AIR INLET DAMPER HV-SGR-MD-1 AND 2 TEMP SWITCH TO OVERRIDE PNEUMATIC CONTROLLER | AUXILIARY | 609.00      | INVERTER AREA, IN NW. REGN OF RM, 8' SW. OF THE ENTRANCE DOOR, ON THE W. WALL, 5' ABOVE THE FLR                                     | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 50 | 19     | 1-VTS-355    | 0      | AUXILIARY BUILDING V / CRID AND CRDM INV AREA VENT AIR INLET DAMPER HV-SGR-MD-1 AND 2 TEMP SWITCH TO OVERRIDE PNEUMATIC CONTROLLER                    | AUXILIARY | 609.00      | INVERTER AREA, IN NE. CORNOR OF RM, 6' SE OF THE RMS ENTRANCE DOORWAY, ON THE E. WALL, 4' ABOVE THE FLR                             | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 51 | 19     | 1-VTS-356    | 0      | AUXILIARY BUILDING V / CNTRL ROD DRIVE EQUIP ROOM AND INV AREA VENT NORTH SUPPLY FAN HV-SGRS-4A TEMP SWITCH   | AUXILIARY | 609.00      | INVERTER AREA, IN NW. REGN OF RM, 8' SW. OF THE ENTRANCE DOOR, ON W WALL, 5' ABOVE THE FLR  | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

T.R. Satyan Sharma  
Print or Type Name

*T.R. Satyan Sharma*  
Signature

12/21/95  
Date

Paul R. Wilson  
Print or Type Name

*Paul R. Wilson*  
Signature

12/16/95  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

|    | Eq. Cl | Equip.ID No. | Rev No | System/Equipment Description  | Building    | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|----|--------|--------------|--------|---|-------------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 52 | 19     | 1-VTS-357    | 0      | AUXILIARY BUILDING V / CONTROL ROD DRIVE EQUIPMENT ROOM AND INV AREA VENT NORTH SUPPLY FAN HV-SGRS-4A TEMPERATURE SWITCH    | AUXILIARY   | 609.00      | CONTROL ROD DRIVE EQUIPMENT RM, IN NE. REGN OF RM, 5' E OF THE RM'S ENTRANCE DOOR, ON THE N. WALL, 4' ABOVE THE FLR | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 53 | 19     | 1-VTS-802    | 0      | AUXILIARY BUILDING V / 4KV ROOM AB 4KV SWITCHGEAR AREA VENTILATION SUPPLY FAN HV-SGRS-2 THERMAL SENSOR                      | AUXILIARY   | 609.00      |   | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 54 | 19     | 1-VTS-803    | 0      | AUXILIARY BUILDING V / 4KV ROOM CD 4KV SWITCHGEAR AREA VENTILATION SUPPLY FAN HV-SGRS-3 THERMAL SENSOR                      | AUXILIARY   | 609.00      |   | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 55 | 19     | 1-VTS-805    | 0      | AUXILIARY BUILDING V / 4KV ROOM 600V SWGR XFMRs TR11B AND TR11D AREA VENT EXHAUST FAN HV-SGRS-7 TEMP SWITCH THERMAL SENSOR  | AUXILIARY   | 609.00      |   | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 56 | 19     | 1-VTS-808    | 0      | AUXILIARY BUILDING V / 4KV ROOM 600VAC SWGR XFMRs TR11A AND TR11C AREA VENT SUPPLY FAN HV-SGRS-8 TEMP SWITCH THERMAL SENSOR | AUXILIARY   | 609.00      | 4KV RM, AB 4KV SWGR RM, IN THE NW CORNER OF THE RM, ON THE W WALL, 12' ABOVE THE FLR.                               | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 57 | 19     | 12-VTS-706   | 0      | SCREEN HOUSE VENTILA / UNIT 1 WEST ESSTIAL SERVICE WATER PUMP ROOM TEMPERATURE SWITCH THERMAL SENSOR                        | SCREENHOUSE | 591.00      | W ESW PUMP RM, 20' W. OF W. ESSENTIAL SERVICE PUMP 1-PP-7W, ON W. WALL, 10' ABOVE FLR                               | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 58 | 19     | 12-VTS-708   | 0      | SCREEN HOUSE VENTILA / UNIT 1 EAST ESSENTIAL SERVICE WATER PUMP ROOM TEMPERATURE SWITCH THERMAL SENSOR                      | SCREENHOUSE | 591.00      | E ESSENTIAL SERVICE WATER PUMP RM, ON E. WALL, 9' NE. OF E. ESSENTIAL SERVICE WATER PUMP 1-PP-7E, 8' ABOVE THE FLR  | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

T.R. Satyan Sharma  
Print or Type Name

Signature

Date

Paul R. Wilson  
Print or Type Name

Signature

Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

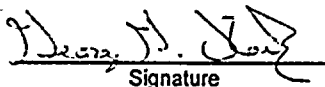
| Item | Eq Cl | Equip.ID No.   | Rev No | System/Equipment Description                                  | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|-------|----------------|--------|---|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 1    | 20    | 1-ERR          | 0      | CONTROL ROOM EAST REAR INSTRUMENT/RELAY RACK                  | AUXILIARY | 633.00      | CONTROL RM, IN THE NE REGION OF THE RM, ON THE EAST WALL  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 2    | 20    | 1-IV           | 0      | CONTAINMENT SPRAY / CONTAINMENT ISOLATION VALVE CONTROL PANEL | AUXILIARY | 633.00      | CONTROL RM, IN THE SW REGION OF THE RM, 29 FT SW OF THE UNIT SUPERVISOR'S DESK  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 3    | 20    | 1-NRI-21-PRCSR | 0      | NUCLEAR INSTRUMENTAT / NI WIDE RANGE SIGNAL PROCESSOR         | AUXILIARY | 633.00      | CONTROL RM, ON MIDDLE W WALL, NEAR REAR OF ESW CONTROL PANEL #1-ESW, ON N-21 INST/REL RACK #1-SWR, 6' ABOVE FLR. INST DWG 1-5538. | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 4    | 20    | 1-VS           | 0      | CONTAINMENT VENTILAT / VENTILATION CONTROL PANEL              | AUXILIARY | 633.00      | CONTROL RM, IN THE SW REGION OF THE RM, 34 FT SW OF THE UNIT SUPERVISOR'S DESK  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

  
Signature

12/14/95  
Date

T.R. Satyan Sharma  
Print or Type Name

  
Signature

12/15/95  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description                                | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|---|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 18   | 20     | 1-SR1         | 0      | 1 STATION AUXILIARIES REAR INSTRUMENT/RELAY RACK # 1        | AUXILIARY | 633.00      | CONTROL RM, NE REGN OF THE RM, ON THE REAR SIDE OF STATION AUXILIARIES CONTROL PANEL # 1-SA                   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 19   | 20     | 1-SSR         | 0      | 1 ENGINEER SAFETY SYSTEM REAR INSTRUMENT/RELAY RACK         | AUXILIARY | 633.00      | CONTROL RM, NW REGN OF THE RM ON THE REAR SIDE OF SAFETY INJECTION CONTROL PANEL #1-SIS                       | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 20   | 20     | 1-WRR         | 0      | 1 WEST RELAY RACK   | AUXILIARY | 633.00      | CONTROL RM, NW REGN OF THE RM, ON THE REAR SIDE OF THE REACTOR COOLANT PUMP CONTROL PANEL # 1-RCP             | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 21   | 20     | 1-DGAB        | 0      | 1 AB EMERGENCY DIESEL GENERATOR OME-150-AB CONTROL SUBPANEL | AUXILIARY | 587.00      | AB EDG RM, MIDDLE N REGN OF THE RM, 5 FEET E OF THE RM'S DOORWAY, 10 FEET NW OF AB EMERGENCY DIESEL           | 587.00     | N/A  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | No           | No        |
| 22   | 20     | 1-DGCD        | 0      | 1 CD EMERGENCY DIESEL GENERATOR OME-150-CD CONTROL SUBPANEL | AUXILIARY | 587.00      | CD EDG RM, MIDDLE S REGN OF THE RM, 6 FEET SE OF CD EMERGENCY DIESEL GENERATOR #1-OME-150-CD, NEAR THE S WALL | 587.00     | N/A  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | No           | No        |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

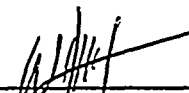
Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

  
Signature

12/16/95  
Date

Walter Djordjevic  
Print or Type Name

  
Signature

12/14/95  
Date

DC COOL UNIT 1  
SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|--|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 1    | 20     | 1-A11         | 0      | EQUIP CTRL AND INDIC / AUXILIARY RELAY PANEL A11                                 | AUXILIARY | 633.00      | CONTROL RM, IN THE SE CORNER OF THE RM  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | No           | No        |
| 2    | 20     | 1-A13         | 0      | EQUIP CTRL AND INDIC / AUXILIARY RELAY PANEL A13                                 | AUXILIARY | 633.00      | CONTROL RM, IN THE SE CORNER OF THE RM  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | No           | No        |
| 3    | 20     | 1-CCW         | 0      | COMPONENT COOLING WA / COMPONENT COOLING WATER CONTROL PANEL                     | AUXILIARY | 633.00      | CONTROL RM, IN THE MIDDLE WEST PART OF THE RM, 15 FT SW OF THE UNIT SUPERVISORS DESK  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 4    | 20     | 1-CI-26       | 0      | / REACTOR PROTECTION CONTROL INPUT CABINET #26                                   | AUXILIARY | 633.00      | CONTROL RM, ON THE MIDDLE OF THE S WALL   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 5    | 20     | 1-CI-27       | 0      | / REACTOR PROTECTION CONTROL INPUT CABINET #27                                   | AUXILIARY | 633.00      | CONTROL RM, ON THE MIDDLE OF THE S WALL   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 6    | 20     | 1-CP          | 0      | CONDENSATE / CONDENSATE PUMP CONTROL PANEL                                       | AUXILIARY | 633.00      | CONTROL RM, IN THE NE PART OF THE RM, 12' NE OF THE UNIT SUPERVISOR'S DESK  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 7    | 20     | 1-CR          | 0      | MISC. EQUIP SUPPORT / CONDENSATE PANEL REAR INST/RELAY RACK                      | AUXILIARY | 633.00      | CONTROL RM, IN THE NE REGN OF THE RM, NEAR THE REAR OF CONDENSATE HEATER LEVEL CONTROL PANEL #1-C.                                  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 8    | 20     | 1-DTU         | 0      | TURBINE INST. AND CO / DELTA T AND UNIT CONTROL PANEL                            | AUXILIARY | 633.00      | CONTROL RM, IN THE N PART OF THE RM, 15' N OF THE UNIT SUPERVISOR'S DESK  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 9    | 20     | 1-EFR         | 0      | MISC EQUIPMENT SUPPO / EMERGENCY FIRE PANEL INSTRUMENT/RELAY RACK                | AUXILIARY | 633.00      | CONTROL RM, IN THE SW REGION OF THE RM, ON THE REAR SIDE OF VENTILATION CONTROL PANEL #1-VS   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 10   | 20     | 1-ESW         | 0      | MISC EQUIPMENT SUPPO / CONTROL ROOM EAST REAR INSTRUMENT/RELAY RACK              | AUXILIARY | 633.00      | CONTROL RM, IN THE MIDDLE WEST REGION OF THE RM, 17 FT SW OF THE UNIT SUPERVISOR'S DESK   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 11   | 20     | 1-FLX         | 0      | NUCLEAR INSTRUMENTAT / FLUX CONTROL PANEL  | AUXILIARY | 633.00      | CONTROL RM, IN THE NORTH REGION OF THE RM, 15 FT NORTH OF THE UNIT SUPERVISORS DESK   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 12   | 20     | 1-GR-2        | 0      | MISC EQUIPMENT SUPPO / GENERATOR PANEL REAR INSTRUMENT/RELAY RACK #2             | AUXILIARY | 633.00      | CONTROL RM, IN THE SE REGION OF THE RM, NEAR THE REAR SIDE OF MAIN GENERATOR CONTROL PANEL #1-G                                     | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 13   | 20     | 1-GRB         | 0      | MISC EQUIPMENT SUPPO / GENERATOR PANEL REAR INSTRUMENT/RELAY RACK B              | AUXILIARY | 633.00      | CONTROL RM, IN MIDDLE EAST REGION OF RM, NEAR REAR SIDE OF MAIN GENERATOR CONTROL PANEL #1-G, 20 FT NE OF REAR PANEL ACCESS DOORWAY | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 14   | 20     | 1-GRC         | 0      | MISC. EQUIPMENT SUPP / GENERATOR PANEL REAR INST/RELAY RACK C                    | AUXILIARY | 633.00      | CONTROL RM, IN THE MIDDLE E REGN OF THE RM, NEAR THE REAR SIDE OF MAIN GENERATOR PANEL #1-G, NEAR THE E WALL                        | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 15   | 20     | 1-HSD1        | 0      | SAFETY INJECTION / UNIT 1 HOT SHUTDOWN PANEL                                     | AUXILIARY | 633.00      | CONTROL RM (UNIT 2), IN THE NW CORNER OF THE RM   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 16   | 20     | 1-NIS-I       | 0      | EQUIPMENT CONTROL AN / NUCLEAR INSTRUMENTATION SYSTEM PROT CH. I CONTROL PANEL   | AUXILIARY | 633.00      | CONTROL RM, IN THE MIDDLE W PART OF THE RM, 25' SW OF THE UNIT SUPERVISOR'S DESK  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 17   | 20     | 1-NIS-III     | 0      | EQUIPMENT CONT AND I / NUCLEAR INSTRUMENTATION SYSTEM PROT CH. III CONTROL PANEL | AUXILIARY | 633.00      | CONTROL RM, IN THE MIDDLE W PART OF THE RM, 22' SW OF THE UNIT SUPERVISORS DESK   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Stephen Anagnostis  
Print or Type Name

Signature

Date

T.R. Salvan Sharma  
Print or Type Name

Signature

Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|--|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 18   | 20     | 1-NSR         | 0      | MISC EQUIPMENT SUPPO / NUCLEAR INSTRUMENTATION SYSTEM REAR INSTRUMENT/RELAY        | AUXILIARY | 633.00      | CONTROL RM, IN MIDDLE WEST REGION OF THE RM, ON THE REAR SIDE OF NUCLEAR INSTRUMENTATION SYSTEM PROTECTION CHANNEL 1 CONTROL PANEL #1-NIS-1 | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 19   | 20     | 1-PRZ         | 0      | PRESSURIZER / PRESSURIZER CONTROL PANEL  | AUXILIARY | 633.00      | CONTROL RM, IN THE NW PART OF THE RM, 15' NE OF THE UNIT SUPERVISOR'S DESK  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 20   | 20     | 1-RC          | 0      | ROD CONTROL AND INST / REACTOR CONTROL RODS CONTROL PANEL                          | AUXILIARY | 633.00      | CONTROL RM, IN THE N PART OF THE RM, 15' N OF THE UNIT SUPERVISOR'S DESK  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 21   | 20     | 1-RCP         | 0      | REACTOR COOLANT / REACTOR COOLANT PUMP CONTROL PANEL                               | AUXILIARY | 633.00      | CONTROL RM, IN THE NW PART OF THE RM, 15' NW OF THE UNIT SUPERVISOR'S DESK  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 22   | 20     | 1-RPSX-A      | 0      | / REACTOR PROTECTION AND SAFEGUARD ACTUATION TRAIN A AUXILIARY CABINET             | AUXILIARY | 633.00      | CONTROL RM, IN THE NE CORNER OF THE RM, ON THE REAR SIDE OF CONDENSATE PUMP CONTROL PANEL #1-CP   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | No          | Yes        | No           | No        |
| 23   | 20     | 1-RPSX-B      | 0      | / REACTOR PROTECTION AND SAFEGUARD ACTUATION TRAIN B AUXILIARY CABINET             | AUXILIARY | 633.00      | CONTROL RM, IN THE MIDDLE S REGN OF THE RM, ON THE REAR SIDE OF MOVABLE INCORE INSTRUMENTATION PANEL #1-MFX                                 | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | No          | Yes        | No           | No        |
| 24   | 20     | 1-SA          | 0      | ELECTRICAL DISTRIBUTION / STATION AUXILIARIES CONTROL PANEL                        | AUXILIARY | 633.00      | CONTROL RM, IN THE SE PART OF RM, 22' SE OF THE UNIT SUPERVISOR'S DESK  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 25   | 20     | 1-SG          | 0      | STEAM GENERATION / S.G. AND AFW PUMP CONTROL PANEL                                 | AUXILIARY | 633.00      | CONTROL RM, IN THE NE PART OF THE RM, 15' NE OF THE UNIT SUPERVISOR'S DESK  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | No          | Yes        | Yes          | No        |
| 26   | 20     | 1-SR2         | 0      | MISC EQUIPMENT SUPPO / STATION AUXILIARIES REAR INSTRUMENT/RELAY RACK #2           | AUXILIARY | 633.00      | CONTROL RM, IN THE MIDDLE OF THE EAST REGION OF THE RM, ON THE REAR SIDE OF STATION AUXILIARIES CONTROL PANEL #1-SA                         | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 27   | 20     | 1-SR3         | 0      | MISC EQUIPMENT SUPPO / STATION AUXILIARIES REAR INSTRUMENT/RELAY RACK #3           | AUXILIARY | 633.00      | CONTROL RM, IN THE MIDDLE OF THE EAST REGION OF THE RM, ON THE REAR SIDE OF STATION AUXILIARIES CONTROL PANEL #1-SA                         | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 28   | 20     | 1-SR4         | 0      | MISC EQUIPMENT SUPPO / STATION AUXILIARIES REAR INSTRUMENT/RELAY RACK #4           | AUXILIARY | 633.00      | CONTROL RM, IN THE MIDDLE OF THE EAST REGION OF THE RM, ON THE REAR SIDE OF STATION AUXILIARIES CONTROL PANEL #1-SA                         | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 29   | 20     | 1-SWR         | 0      | MISC EQUIPMENT SUPPO / NUCLEAR INSTRUMENTAL SOURCE RANGE N21 INSTRUMENT/RELAY RACK | AUXILIARY | 633.00      | CONTROL RM, IN THE MIDDLE OF THE WEST WALL, NEAR THE REAR OF ESSENTIAL SERVICE WATER CONTROL PANEL #1-CCW                                   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 30   | 20     | 1-TRB         | 0      | MISC EQUIPMENT SUPPO / TURBINE PANEL REAR INSTRUMENT/RELAY RACK 'B'                | AUXILIARY | 633.00      | CONTROL RM, IN THE MIDDLE EAST REGION OF THE RM, 10 FT EAST OF CONTROL PANEL #1-SA, NEAR THE EAST WALL                                      | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 31   | 20     | 1-TRD         | 0      | MISC EQUIPMENT SUPPO / TURBINE PANEL REAR INSTRUMENT/RELAY RACK 'D'                | AUXILIARY | 633.00      | CONTROL RM, IN THE EAST REGION OF THE RM, NEAR THE REAR SIDE OF CONTROL PANEL #1-T, 25 FT NE OF REAR PANEL ACCESS DOOR, 5 FT W. OF E. WALL  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 32   | 20     | 1-TRE         | 0      | MISC EQUIPMENT SUPPO / TURBINE PANEL REAR INSTRUMENT/RELAY RACK 'E'                | AUXILIARY | 633.00      | CONTROL RM, IN THE MIDDLE EAST REGION OF THE RM, NEAR THE REAR OF CONTROL PANEL #1-T, 4 FT EAST OF CABINET #1-RPC-II-7, NEAR THE EAST WALL  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Stephen Anagnostis  
Print or Type Name

Signature

Date

T.R. Satyan Sharma  
Print or Type Name

Signature

Date





## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No.  | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|----------------|--------|--|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 1    | 20     | 1-ACRA-1       | 0      | EQUIP CTRL AND INDIC / CONTROL ROOM AIR HANDLING SUBPANEL #1   | AUXILIARY | 650.00      | CTRL RM AIR COND RM, 3 FT NORTH OF CONTROL RM VENTILATION NORTH AIR CONDITIONING UNIT #1-HV-ACRA-1, AT THE CENTER OF THE NORTH                   | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 2    | 20     | 1-ACRA-2       | 0      | EQUIP CTRL AND INDIC / CONTROL ROOM AIR HANDLING SUBPANEL #2   | AUXILIARY | 650.00      | CTRL RM AIR COND RM, 3 FT SOUTH OF CONTROL RM VENTILATION SOUTH AIR CONDITIONING UNIT #1-HV-ACRA-2, AT THE CENTER OF THE SOUTH                   | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 3    | 20     | 1-LSI-1        | 0      | STEAM GENERATING / STEAM GENERATORS #1 AND #4 LOCAL SHUTDOWN STATION                                   | AUXILIARY | 612.00      | E MAIN STM STOP ENCL, ON SO. WALL IN SE CORNER OF RM, 3 FT FROM EAST WALL  | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 4    | 20     | 1-LSI-2        | 0      | STEAM GENERATING / STEAM GENERATORS #2 AND #3 LOCAL SHUTDOWN STATION                                   | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM, IN THE NE CORNER OF THE RM, MOUNTED ON THE NORTH WALL, 5 FT ABOVE THE FLR   | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 5    | 20     | 1-LSI-3        | 0      | PRESSURIZER / REACTOR COOLANT SYSTEM CHARGING AND LETDOWN LOCAL SHUTDOWN STATION                       | AUXILIARY | 587.00      | HALLWAY, IN THE HALLWAY, WEST OF THE REFUELING WATER PURIFICATION PUMP RM, NEAR THE NORTH WALL, ON THE EAST WALL                                 | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 6    | 20     | 1-LSI-4        | 0      | EQUIP CTRL AND INDIC / REACTOR COOLANT SYSTEM TEMPERATURES AND STEAM GENERATORS LOCAL SHUTDOWN STATION | AUXILIARY | 587.00      | HALLWAY, IN THE MIDDLE EAST REGION OF THE HALLWAY, IN THE HALLWAY WEST OF THE REFUELING PURIFICATION PUMP RM, ON THE EAST                        | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 7    | 20     | 1-LSI-5        | 0      | EQUIPMENT CONTROL AN / RC LOOPS #1 & 4 TEMPS, SG'S #1 & 4 PRESS LOCAL SHUTDOWN STATION                 | AUXILIARY | 612.00      | E MAIN STEAM STOP ENCLOSURE, ON S WALL IN SE CORNER OF RM, 7' FROM E WALL  | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 8    | 20     | 1-LSI-5X       | 0      | EQUIPMENT CONTROL AN / LOCAL SHUTDOWN STATION #5X  | AUXILIARY | 621.00      | E MAIN STEAM STOP ENCLOSURE, IN THE NE CORNER OF RM  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 9    | 20     | 1-LSI-6        | 0      | EQUIPMENT CONTROL AN / RC LOOPS 2 & 3 TEMPS, SG'S #2 & 3 PRESS LOCAL SHUTDOWN STN                      | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM, IN NW CORNER OF RM, MOUNTED ON THE N WALL, 1' W OF LOCAL SHUTDOWN STATION #LSI-2, 5' ABOVE THE FLR                | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 10   | 20     | 1-LSI-6X       | 0      | EQUIPMENT CONTROL AN / LOCAL SHUTDOWN STATION #6X  | AUXILIARY | 633.00      | NORMAL BLOWDOWN FLASHTANK RM, IN THE NW CORNER OF THE RM, 3' NE OF THE RM'S ENTRANCE DOORWAY, 4' ABOVE THE FLR                                   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 11   | 20     | 1-NRI-21-AMP   | 0      | NUCLEAR INSTRUMENTAT / NI WIDE RANGE RADIATION AMPLIFIER   | AUXILIARY | 596.00      | REACTOR CABLE TUNNEL, QD #1, 20' SW OF REACTOR CABLE TUNNEL QUAD #1, N OF FIRE DOOR 1-DR-AUX333, NEAR CONT WALL, 6' ABOVE FLR. INST DWG 1-SS52C. | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 12   | 20     | 1-NRI-23-AMP   | 0      | NUCLEAR INSTRUMENTAT / NI SOURCE RANGE RADIATION DETECTOR NRI-23 AMPLIFIER                             | AUXILIARY | 596.00      | REACTOR CABLE TUNNEL, QD #1, 30' SW OF REACTOR CABLE TUNNEL QUAD #1, N FIRE DOOR #1, RM-333, NEAR CONT WALL, 4' ABOVE FLR.                       | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 13   | 20     | 1-NRI-23-ISOL  | 0      | NUCLEAR INSTRUMENTAT / NI SOURCE RANGE SIGNAL ISOLATOR   | AUXILIARY | 596.00      |  | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 14   | 20     | 1-NRI-23-PRCSR | 0      | NUCLEAR INSTRUMENTAT / NUCLEAR INSTRUMENTATION SOURCE RANGE SIGNAL PROCESSOR                           | AUXILIARY | 596.00      |  | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/16/95  
Date

T.R. Satyan Sharma  
Print or Type Name

*T.R. Satyan Sharma*  
Signature

12/20/95  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description                                       | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|--|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 15   | 20     | 1-SCP         | 0      | NUCLEAR SAMPLING / NUCLEAR SAMPLING SYSTEM CONTROL PANEL           | AUXILIARY | 587.00      | NUCLEAR SAMPLING RM, 10 FT SW OF THE SAMPLING SINK, ON CONTROL RM PANEL #1-SCP                          | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 16   | 20     | 1-TFP         | 0      | EQUIP CTRL AND INDIC / TURBINE DRIVEN AUXILIARY FEED PUMP SUBPANEL | TURBINE   | 591.00      | TB DRIVEN AUX FDWTR PMP   | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | No         | No           | No        |
| 17   | 20     | 12-SFP-12     | 0      | EQUIP CTRL AND INDIC / SPENT FUEL PIT SUBPANEL                     | AUXILIARY | 609.00      | SPENT FUEL PIT HEAT XCHGR RM, IN SE CORNER OF RM, 10 FT SW OF THE RM'S ENTRANCE DOOR, NEAR THE SO. WALL | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/16/95  
Date

T.R. Satyan Sharma  
Print or Type Name

*T.R. Satyan Sharma*  
Signature

12/20/95  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No.  | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|----------------|--------|--|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 1    | 20     | 1-ACRA-1       | 0      | EQUIP CTRL AND INDIC / CONTROL ROOM AIR HANDLING SUBPANEL #1   | AUXILIARY | 650.00      | CTRL RM AIR COND RM, 3 FT NORTH OF CONTROL RM VENTILATION NORTH AIR CONDITIONING UNIT #1-HV-ACRA-1, AT THE CENTER OF THE NORTH                   | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 2    | 20     | 1-ACRA-2       | 0      | EQUIP CTRL AND INDIC / CONTROL ROOM AIR HANDLING SUBPANEL #2   | AUXILIARY | 650.00      | CTRL RM AIR COND RM, 3 FT SOUTH OF CONTROL RM VENTILATION SOUTH AIR CONDITIONING UNIT #1-HV-ACRA-2, AT THE CENTER OF THE SOUTH                   | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 3    | 20     | 1-LSI-1        | 0      | STEAM GENERATING / STEAM GENERATORS #1 AND #4 LOCAL SHUTDOWN STATION                                   | AUXILIARY | 612.00      | E MAIN STM STOP ENCL, ON SO. WALL IN SE CORNER OF RM, 3 FT FROM EAST WALL  | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 4    | 20     | 1-LSI-2        | 0      | STEAM GENERATING / STEAM GENERATORS #2 AND #3 LOCAL SHUTDOWN STATION                                   | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM, IN THE NE CORNER OF THE RM, MOUNTED ON THE NORTH WALL, 5 FT ABOVE THE FLR   | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 5    | 20     | 1-LSI-3        | 0      | PRESSURIZER / REACTOR COOLANT SYSTEM CHARGING AND LETDOWN LOCAL SHUTDOWN STATION                       | AUXILIARY | 587.00      | HALLWAY, IN THE HALLWAY, WEST OF THE REFUELING WATER PURIFICATION PUMP RM, NEAR THE NORTH WALL, ON THE EAST WALL                                 | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 6    | 20     | 1-LSI-4        | 0      | EQUIP CTRL AND INDIC / REACTOR COOLANT SYSTEM TEMPERATURES AND STEAM GENERATORS LOCAL SHUTDOWN STATION | AUXILIARY | 587.00      | HALLWAY, IN THE MIDDLE EAST REGION OF THE HALLWAY, IN THE HALLWAY WEST OF THE REFUELING PURIFICATION PUMP RM, ON THE EAST                        | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 7    | 20     | 1-LSI-5        | 0      | EQUIPMENT CONTROL AN / RC LOOPS #1 & 4 TEMPS, SG'S #1 & 4 PRESS LOCAL SHUTDOWN STATION                 | AUXILIARY | 612.00      | E MAIN STEAM STOP ENCLOSURE, ON S WALL IN SE CORNER OF RM, 7' FROM E WALL  | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 8    | 20     | 1-LSI-SX       | 0      | EQUIPMENT CONTROL AN / LOCAL SHUTDOWN STATION #5X  | AUXILIARY | 621.00      | E MAIN STEAM STOP ENCLOSURE, IN THE NE CORNER OF RM  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 9    | 20     | 1-LSI-6        | 0      | EQUIPMENT CONTROL AN / RC LOOPS 2 & 3 TEMPS, SG'S #2 & 3 PRESS LOCAL SHUTDOWN STN                      | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM, IN NW CORNER OF RM, MOUNTED ON THE N WALL, 1' W OF LOCAL SHUTDOWN STATION #LSI-2, 5' ABOVE THE FLR                | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 10   | 20     | 1-LSI-6X       | 0      | EQUIPMENT CONTROL AN / LOCAL SHUTDOWN STATION #6X  | AUXILIARY | 633.00      | NORMAL BLOWDOWN FLASHTANK RM, IN THE NW CORNER OF THE RM, 3' NE OF THE RMS ENTRANCE DOORWAY, 4' ABOVE THE FLR                                    | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 11   | 20     | 1-NRI-21-AMP   | 0      | NUCLEAR INSTRUMENTAT / NI WIDE RANGE RADIATION AMPLIFIER   | AUXILIARY | 596.00      | REACTOR CABLE TUNNEL, QD #1, 20' SW OF REACTOR CABLE TUNNEL QUAD #1, N OF FIRE DOOR 1-DR-AUX333, NEAR CONT WALL, 6' ABOVE FLR. INST DWG 1-5552C. | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 12   | 20     | 1-NRI-23-AMP   | 0      | NUCLEAR INSTRUMENTAT / NI SOURCE RANGE RADIATION DETECTOR NRI-23 AMPLIFIER                             | AUXILIARY | 596.00      | REACTOR CABLE TUNNEL, QD #1, 30' SW OF REACTOR CABLE TUNNEL QUAD #1, N FIRE DOOR #1, RM-333, NEAR CONT WALL, 4' ABOVE FLR.                       | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 13   | 20     | 1-NRI-23-ISOL  | 0      | NUCLEAR INSTRUMENTAT / NI SOURCE RANGE SIGNAL ISOLATOR   | AUXILIARY | 596.00      |  | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 14   | 20     | 1-NRI-23-PRCSR | 0      | NUCLEAR INSTRUMENTAT / NUCLEAR INSTRUMENTATION SOURCE RANGE SIGNAL PROCESSOR                           | AUXILIARY | 596.00      |  | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/16/95  
Date

T.R. Satyan Sharma  
Print or Type Name

*T.R. Satyan Sharma*  
Signature

12/20/95  
Date



## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description                                       | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anch OK? | Fact OK? | Equip OK? |
|------|--------|---------------|--------|--|-----------|-------------|---|------------|------|--|---------------|-------------|----------|----------|-----------|
| 15   | 20     | 1-SCP         | 0      | NUCLEAR SAMPLING / NUCLEAR SAMPLING SYSTEM CONTROL PANEL           | AUXILIARY | 587.00      | NUCLEAR SAMPLING RM, 10 FT SW OF THE SAMPLING SINK, ON CONTROL RM PANEL #1-SCP                          | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes      | Yes      | Yes       |
| 16   | 20     | 1-TFP         | 0      | EQUIP CTRL AND INDIC / TURBINE DRIVEN AUXILIARY FEED PUMP SUBPANEL | TURBINE   | 591.00      | TB DRIVEN AUX FOWTR PMP   | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | No       | No       | No        |
| 17   | 20     | 12-SFP-12     | 0      | EQUIP CTRL AND INDIC / SPENT FUEL PIT SUBPANEL                     | AUXILIARY | 609.00      | SPENT FUEL PIT HEAT XCHGR RM, IN SE CORNER OF RM, 10 FT SW OF THE RM'S ENTRANCE DOOR, NEAR THE SO. WALL | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes      | Yes      | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/16/95  
Date

T.R. Satyan Sharma  
Print or Type Name

*T.R. Satyan Sharma*  
Signature

12/20/95  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Eq CI | Equip ID No. | Rev No | System/Equipment Description   | Building    | Floor Elev. | Room or Row/Column | Base Elev. | <40' | Capacity vs. Demand Basis | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|-------|--------------|--------|--|-------------|-------------|--------------------|------------|------|---------------------------|---------------|-------------|------------|--------------|-----------|
| 7     | 1-SV-122-3   | 0      | CCW / CONTAINMENT VENT FAN<br>HV-CEQ-1 MOTOR AIR COOLER<br>CCW OUTLET SAFETY VALVE | CONTAINMENT | 625.00      | HV-CEQ-1 FAN ROOM  | 598.00     | Yes  | BS<br>GRS                 | Yes           | Yes         | N/A        | Yes          | Yes       |
| 7     | 1-SV-122-4   | 0      | CCW / CONTAINMENT VENT FAN<br>HV-CEQ-2 MOTOR AIR COOLER<br>CCW OUTLET SAFETY VALVE | CONTAINMENT | 625.00      | HV-CEQ-2 FAN ROOM  | 598.00     | Yes  | BS<br>GRS                 | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Stephen Anagnostis  
Print or Type Name

[Signature]  
Signature

12/14/95  
Date

Tom Huang  
Print or Type Name

[Signature]  
Signature

1-15-96  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID    | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40? | Capacity vs. Demand Basis                                     | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|--------------|--------|--|-----------|-------------|--|------------|------|---|---------------|-------------|------------|--------------|-----------|
| 1    | 0      | 1-POV-1-AB   | 0      | STARTING AIR SYST / PILOT OPERATED 4 WAY VALVE FOR AIR START XRV'S FOR DIESEL ENGINE | AUXILIARY | 587.00      | AB EDG RM, IN THE SE REGN OF THE RM, ON THE SE END OF THE DIESEL END OF AB EDG                         | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | N/A         | Yes        | Yes          | Yes       |
| 2    | 0      | 1-POV-1-CD   | 0      | STARTING AIR SYST / PILOT OPERATED 4 WAY VALVE FOR AIR START XRV'S FOR DIESEL ENGINE | AUXILIARY | 587.00      | CD EDG RM,   | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | N/A         | Yes        | Yes          | Yes       |
| 3    | 0      | 1-QT-101-AB  | 0      | DIESEL COMBUSTION A / AB EMERG DIESEL AIR INTAKE SILENCER                            | AUXILIARY | 587.00      | AB EDG RM, IN NE REGN OF THE RM, 10' NE OF DIESEL END OF AB EDG. 10' ABOVE FLR                         | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | N/A         | Yes        | Yes          | Yes       |
| 4    | 0      | 1-QT-101-CD  | 0      | DIESEL COMBUSTION A / CD EMERG DIESEL AIR INTAKE SILENCER                            | AUXILIARY | 587.00      | CD EDG RM, 10FT NE OF THE DIESEL END OF CD EDG, 11FT ABOVE THE FLR                                     | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | N/A         | Yes        | Yes          | Yes       |
| 5    | 0      | 1-QT-112-AB  | 0      | DIESEL LUBE OIL / AB EMERG DIESEL FULL FLOW LUBE OIL FILTER                          | AUXILIARY | 579.00      | AB EDG LUBE OIL PIT, IN THE NE CORNER OF THE PIT   | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | N/A         | Yes        | Yes          | Yes       |
| 6    | 0      | 1-QT-112-CD  | 0      | DIESEL LUBE OIL / CD EMERG DIESEL FULL FLOW LUBE OIL FILTER                          | AUXILIARY | 579.00      | CD EDG LUBE OIL PIT, IN NE CORNER OF PIT, 5FT NE OF CD EMERG DSL LUB SUMP TANK #1-QT-115-CD, NEAR FLR. | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | N/A         | Yes        | Yes          | Yes       |
| 7    | 0      | 1-QT-113-AB1 | 0      | DIESEL LUBE OIL / AB EMERG DIESEL FULL FLOW LUBE OIL STRAINER 1                      | AUXILIARY | 579.00      | AB EDG LUBE OIL PIT,   | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | N/A         | Yes        | Yes          | Yes       |
| 8    | 0      | 1-QT-113-AB2 | 0      | DIESEL LUBE OIL / AB EMERG DIESEL FULL FLOW LUBE OIL STRAINER 2                      | AUXILIARY | 579.00      | AB EDG LUBE OIL PIT,   | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | N/A         | Yes        | Yes          | Yes       |
| 9    | 0      | 1-QT-113-CD1 | 0      | DIESEL LUBE OIL / CD EMERG DIESEL LUBE OIL FULL FLOW STRAINER 1                      | AUXILIARY | 579.00      | CD EDG LUBE OIL PIT,   | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | N/A         | Yes        | Yes          | Yes       |
| 10   | 0      | 1-QT-113-CD2 | 0      | DIESEL LUBE OIL / CD EMERG DIESEL FULL FLOW LUBE OIL STRAINER 2                      | AUXILIARY | 587.00      | CD EDG RM,   | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | N/A         | Yes        | Yes          | Yes       |
| 11   | 0      | 1-QT-118-AB  | 0      | DIESEL LUBE OIL / AB EMERG DIESEL BYPASS LUBE OIL FILTER                             | AUXILIARY | 579.00      | AB EDG LUBE OIL PIT,   | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | N/A         | Yes        | Yes          | Yes       |
| 12   | 0      | 1-QT-118-CD  | 0      | DIESEL LUBE OIL / CD EMERG DIESEL BYPASS LUBE OIL FILTER                             | AUXILIARY | 579.00      | CD EDG LUBE OIL PIT,   | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | N/A         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

Signature

Date

I.C. Huang  
Print or Type Name

Signature

Date

12/14/95

Signature

1-15-96

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID    | Rev No | System/Equipment Description                                       | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40? | Capacity vs. Demand Basis                                     | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|--------------|--------|--|-----------|-------------|--|------------|------|---|---------------|-------------|------------|--------------|-----------|
| 13   | 0      | 1-QT-143-AB1 | 0      | DIESEL STARTING AIR / AB EMERG DIESEL CONTROL AIR DRYER 1          | AUXILIARY | 587.00      | AB EDG RM,   | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | N/A         | Yes        | Yes          | Yes       |
| 14   | 0      | 1-QT-143-AB2 | 0      | DIESEL STARTING AIR / AB EMERG DIESEL CONTROL AIR DRYER 2          | AUXILIARY | 587.00      | AB EDG RM,   | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | N/A         | Yes        | Yes          | Yes       |
| 15   | 0      | 1-QT-143-CD1 | 0      | DIESEL STARTING AIR / CD EMERG DIESEL CONTROL AIR DRYER 1          | AUXILIARY | 587.00      | CD EDG RM,   | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | N/A         | Yes        | Yes          | Yes       |
| 16   | 0      | 1-QT-143-CD2 | 0      | DIESEL STARTING AIR / CD EMERG DIESEL CONTROL AIR DRYER 2          | AUXILIARY | 587.00      | CD EDG RM,   | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | N/A         | Yes        | Yes          | Yes       |
| 17   | 0      | 1-QT-144-AB  | 0      | DIESEL FUEL OIL / AB EMERG DIESEL FUEL OIL TRANSFER FILTER         | AUXILIARY | 587.00      | AB EDG RM,   | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | N/A         | Yes        | Yes          | Yes       |
| 18   | 0      | 1-QT-144-CD  | 0      | DIESEL FUEL OIL / CD EMERG DIESEL FUEL OIL TRANSFER FILTER         | AUXILIARY | 587.00      | CD EDG RM,   | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | N/A         | Yes        | Yes          | Yes       |
| 19   | 0      | 1-TT-DGAB    | 0      | STARTING AIR / 1 AB DIESEL GEN TUBE TRACK                          | AUXILIARY | 587.00      | AB EDG RM,   | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | N/A         | Yes        | Yes          | Yes       |
| 20   | 0      | 1-TT-DGCD    | 0      | STARTING AIR / 1 CD DIESEL GEN TUBE TRACK                          | AUXILIARY | 587.00      | CD EDG RM,   | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | N/A         | Yes        | Yes          | Yes       |
| 21   | 5      | 1-QT-106-CD1 | 0      | DIESEL FUEL OIL / CD EMERG DIESEL FUEL OIL TRANSFER PUMP 1         | AUXILIARY | 587.00      | CD EDG FUEL OIL TRANSFER PUMP RM,  | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum            | Yes           | Yes         | Yes        | Yes          | Yes       |
| 22   | 5      | 1-QT-106-CD2 | 0      | DIESEL FUEL OIL / CD EMERG DIESEL FUEL OIL TRANSFER PUMP 2         | AUXILIARY | 587.00      | CD EDG FUEL OIL TRANSFER PUMP RM,  | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum            | Yes           | Yes         | Yes        | Yes          | Yes       |
| 23   | 5      | 1-QT-111-CD  | 0      | DIESEL LUBE OIL / CD EMERG DIESEL LUBE OIL BEFORE AND AFTER PUMP   | AUXILIARY | 579.00      | CD EDG LUBE OIL PIT, IN THE MIDDLE E REGN OF THE PIT, 4FT E OF LUBE OIL TANK# 1-QT-115-CD, NEAR FLR. | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum            | Yes           | Yes         | Yes        | Yes          | Yes       |
| 24   | 5      | 1-QT-117-AB  | 0      | DIESEL LUBE OIL / AB EMERG DIESEL LUBE OIL HEATER QT-116-AB PUMP   | AUXILIARY | 579.00      | AB EDG LUBE OIL PIT,   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum            | Yes           | Yes         | Yes        | Yes          | Yes       |
| 25   | 5      | 1-QT-117-CD  | 0      | DIESEL LUBE OIL / CD EMERG DIESEL LUBE OIL HEATER QT-116-CD PUMP   | AUXILIARY | 579.00      | CD EDG LUBE OIL PIT,   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum            | Yes           | Yes         | Yes        | Yes          | Yes       |
| 26   | 5      | 1-QT-119-AB  | 0      | DIESEL LUBE OIL / AB EMERG DIESEL LUBE OIL FILTER (QT-118-AB) PUMP | AUXILIARY | 579.00      | AB EDG LUBE OIL PIT,   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum            | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/16/95  
Date

J.C. Huang  
Print or Type Name

*J.C. Huang*  
Signature

1-15-96  
Date



## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID    | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40? | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|--------------|--------|--|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 27   | 5      | 1-QT-119-CD  | 0      | DIESEL LUBE OIL / CD EMERG DIESEL BYPASS LUBE OIL FILTER (QT-118-CD) PUMP  | AUXILIARY | 579.00      | CD EDG LUBE OIL PIT,   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 28   | 5      | 1-QT-130-AB1 | 0      | DIESEL JACKET WATER / AB EMERG DIESEL JACKET WATER PUMP 1  | AUXILIARY | 587.00      | AB EDG RM,   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 29   | 5      | 1-QT-130-AB2 | 0      | DIESEL JACKET WATER / AB EMERG DIESEL JACKET WATER PUMP 2  | AUXILIARY | 587.00      | AB EDG RM,   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 30   | 5      | 1-QT-130-CD1 | 0      | DIESEL JACKET WATER / CD EMERG DIESEL JACKET WATER PUMP 1  | AUXILIARY | 587.00      | CD EDG RM,   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 31   | 5      | 1-QT-130-CD2 | 0      | DIESEL JACKET WATER / CD EMERG DIESEL JACKET WATER PUMP 2  | AUXILIARY | 587.00      | CD EDG RM,   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 32   | 5      | 1-QT-135-AB  | 0      | DIESEL JACKET WATER / AB EMERG DIESEL AUX JACKET WATER PUMP  | AUXILIARY | 587.00      | AB EDG RM,   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 33   | 5      | 1-QT-135-CD  | 0      | DIESEL JACKET WATER / CD EMERG DIESEL AUX JACKET WATER PUMP  | AUXILIARY | 587.00      | CD EDG RM,   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 34   | 7      | 1-SV-120-AB  | 0      | DIESEL STARTING AIR / 1-XTC-301 AND 1-XTC-302 CONTROL AIR SAFETY VALVE   | AUXILIARY | 587.00      | AB EMER DSL GEN RM   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 35   | 7      | 1-SV-120-CD  | 0      | DIESEL STARTING AIR / 1-XTC-306 AND 1-XTC-307 CONTROL AIR SAFETY VALVE   | AUXILIARY | 587.00      | CD EMER DSL GEN RM   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 36   | 7      | 1-SV-139-AB  | 0      | DIESEL STARTING AIR / AB EMERG DIESEL STARTING AIR TO TURBOCHARGER SAFETY VALVE                                      | AUXILIARY | 587.00      | AB EMER DSL GEN RM   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 37   | 7      | 1-SV-139-CD  | 0      | DIESEL STARTING AIR / CD EMERG DIESEL STARTING AIR TO TURBOCHARGER SAFETY VALVE                                      | AUXILIARY | 587.00      | CD EMER DSL GEN RM   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 38   | 7      | 1-SV-16-AB   | 0      | ESSENTIAL SERVICE WA / AB EMERGENCY DIESEL JACKET WATER COOLER QT-131-AB ESSENTIAL SERVICE WATER OUTLET SAFETY VALVE | AUXILIARY | 587.00      | AB EMER DSL GEN RM, SE PART OF THE RM, AT THE WEST END OF AB EMERG. DIESEL JACKET WATER COOLER #1-QT-131-AB, 10 FT ABOVE THE | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 39   | 7      | 1-SV-16-CD   | 0      | ESSENTIAL SERVICE WA / CD EMERGENCY DIESEL JACKET WATER COOLER QT-131-CD ESSENTIAL SERVICE WATER OUTLET SAFETY VALVE | AUXILIARY | 587.00      | CD EMER DSL GEN RM, SE PART OF THE RM, 5 FT EAST OF THE CD EMERG. DIESEL GENERATOR RM DOORWAY, 10 FT ABOVE THE FLR           | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 40   | 7      | 1-SV-200-AB  | 0      | DIESEL FUEL OIL / AB EMERG DIESEL FUEL OIL MANIFOLDS TO FUEL OIL DAY TANK SAFETY VALVE                               | AUXILIARY | 587.00      | AB EMER DSL GEN RM   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 41   | 7      | 1-SV-200-CD  | 0      | DIESEL FUEL OIL / CD EMERG DIESEL FUEL OIL MANIFOLDS TO FUEL OIL DAY TANK SAFETY VALVE                               | AUXILIARY | 587.00      | CD EMER DSL GEN RM   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/16/95  
Date

I.C. Huang  
Print or Type Name

*I.C. Huang*  
Signature

1-15-96  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl. | Equip. ID    | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40? | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|---------|--------------|--------|--|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 42   | 7       | 1-SV-201-AB1 | 0      | DIESEL FUEL OIL / AB EMERG DIESEL FRONT BANK FUEL OIL MANIFOLD SAFETY VALVE                    | AUXILIARY | 587.00      | CD EMER DSL GEN RM  | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 43   | 7       | 1-SV-201-AB2 | 0      | DIESEL FUEL OIL / AB EMERG DIESEL REAR BANK FUEL OIL MANIFOLD SAFETY VALVE                     | AUXILIARY | 587.00      | AB EMER DSL GEN RM, IN MIDDLE WEST REGION OF THE RM, ON THE TOP SIDE OF AB EDG, 10' ABOVE THE FLR.                      | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 44   | 7       | 1-SV-201-CD1 | 0      | DIESEL FUEL OIL / CD EMERG DIESEL FRONT BANK FUEL OIL MANIFOLD SAFETY VALVE                    | AUXILIARY | 587.00      | CD EMER DSL GEN RM  | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 45   | 7       | 1-SV-201-CD2 | 0      | DIESEL FUEL OIL / CD EMERG. DIESEL REAR BANK FUEL OIL MANIFOLD SAFETY VALVE                    | AUXILIARY | 587.00      | CD EMER DSL GEN RM, IN NE CORNER OF CD EDG, 10' ABOVE FLR.  | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 46   | 7       | 1-SV-61-AB   | 0      | DIESEL JACKET WATER / AB EMERGENCY DIESEL AUXILIARY JACKET WATER HEATER QT-134-AB SAFETY VALVE | AUXILIARY | 587.00      | AB EMER DSL GEN RM, IN THE NE CORNER OF THE RM, 1 FT SOUTH OF AB EMERG. DIESEL AUXILIARY JACKET WATER HEATER            | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 47   | 7       | 1-SV-61-CD   | 0      | DIESEL JACKET WATER / CD EMERGENCY DIESEL AUXILIARY JACKET WATER HEATER QT-134-CD SAFETY VALVE | AUXILIARY | 587.00      | CD EMER DSL GEN RM, IN THE NE PART OF THE RM, NEAR THE EAST WALL  | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 48   | 7       | 1-SV-78-AB1  | 0      | DIESEL STARTING AIR / AB EMERG DIESEL STARTING AIR RECEIVER 1 QT-141-AB1 SAFETY VALVE          | AUXILIARY | 587.00      | AB EMER DSL GEN RM  | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 49   | 7       | 1-SV-78-AB2  | 0      | DIESEL STARTING AIR / AB EMERG DIESEL STARTING AIR RECEIVER QT-141-AB2 SAFETY VALVE            | AUXILIARY | 587.00      | AB EMER DSL GEN RM, IN SW REGION OF RM, ON THE NE SIDE OF AB EDG STARTING AIR RECEIVER #1-QT-141-AB2, 5' ABOVE THE FLR. | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 50   | 7       | 1-SV-78-CD1  | 0      | DIESEL STARTING AIR / CD EMERG DIESEL STARTING AIR RECEIVER QT-141CD1 SAFETY VALVE             | AUXILIARY | 587.00      | CD EMER DSL GEN RM, IN THE NW PART OF THE RM, SW OF CD EMERG. DIESEL STARTING AIR RECEIVER #1-QT-141-CD1                | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 51   | 7       | 1-SV-78-CD2  | 0      | DIESEL STARTING AIR / CD EMERGENCY DIESEL STARTING AIR RECEIVER(QT-141-CD2) SAFETY VALVE       | AUXILIARY | 587.00      | CD EMER DSL GEN RM, IN THE NW PART OF THE RM, SW OF CD EMERG. DIESEL STARTING AIR RECEIVER #1-QT-141-CD2                | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 52   | 7       | 1-SV-79-AB1  | 0      | DIESEL STARTING AIR / AB EMERG DIESEL CONTROL AIR DRYER QT-143-AB1 SAFETY VALVE                | AUXILIARY | 587.00      | AB EMER DSL GEN RM  | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 53   | 7       | 1-SV-79-AB2  | 0      | DIESEL STARTING AIR / AB EMERG DIESEL CONTROL AIR DRYER QT-143-AB2 SAFETY VALVE                | AUXILIARY | 587.00      | AB EMER DSL GEN RM  | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 54   | 7       | 1-SV-79-CD1  | 0      | DIESEL STARTING AIR / CD EMERG DIESEL CONTROL AIR DRYER QT-143-CD1 SAFETY VALVE                | AUXILIARY | 587.00      | CD EMER DSL GEN RM, 15 FT WEST OF THE CD EMERG. DIESEL GENERATOR RM DOORWAY, NEAR THE SO. WALL                          | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/16/95  
Date

I.C. Huang  
Print or Type Name

*I. Chen Huang*  
Signature

1-15-96  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID    | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40? | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|--------------|--------|--|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 55   | 7      | 1-SV-79-CD2  | 0      | DIESEL STARTING AIR / CD EMERG DIESEL CONTROL AIR DRYER QT-143-CD2 SAFETY VALVE                                    | AUXILIARY | 587.00      | CD EMER DSL GEN RM   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 56   | 7      | 1-WRV-721    | 0      | ESW / AB EMERG DIESEL SOUTH COMBUSTIONAIR AFTERCOOLER HE-47ABS ESW INLET/BYPASS VALVE                              | AUXILIARY | 587.00      | AB EDG RM,   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 57   | 7      | 1-WRV-723    | 0      | ESW / AB EMERG DIESEL GENERATOR NORTH COMBUSTION AIR AFTERCOOLER HE-47ABN ESW INLET/BYPASS VALVE                   | AUXILIARY | 587.00      | AB EDG RM,   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 58   | 7      | 1-WRV-725    | 0      | ESW / CD EMERG DIESEL SOUTH COMBUSTION AIR AFTERCOOLER HE-47CDS ESW INLET/BYPASS VALVE                             | AUXILIARY | 587.00      | CD EDG RM,   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 59   | 7      | 1-WRV-727    | 0      | ESW / CD EMERGENCY DIESEL NORTH COMBUSTION AIR AFTERCOOLER HE-47-CDN ESW INLET/BYPASS VALVE                        | AUXILIARY | 587.00      | CD EDG RM, IN MIDDLE OF N. REGN OF RM, 4' N. OF E. END OF CD EMERGENCY DIESEL, 4' ABOVE FLR          | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 60   | 7      | 1-XRV-220    | 0      | DIESEL STARTING AIR / AB EMERG DIESEL STARTING AIR JET ASSIST CONTROL VALVE  | AUXILIARY | 587.00      | AB EDG RM,   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 61   | 7      | 1-XRV-221    | 0      | DIESEL STARTING AIR / AB EMERG DIESEL FRONT BANK STARTING AIR SHUTOFF VALVE  | AUXILIARY | 587.00      | AB EDG RM,   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 62   | 7      | 1-XRV-222    | 0      | DIESEL STARTING AIR / AB EMERG DIESEL REAR BANK STARTING AIR SHUTOFF VALVE   | AUXILIARY | 587.00      | AB EDG RM,   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 63   | 7      | 1-XRV-225    | 0      | DIESEL STARTING AIR / CD EMERG DIESEL STARTING AIR JET ASSIST CONTROL VALVE  | AUXILIARY | 587.00      | CD EDG RM,   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 64   | 7      | 1-XRV-226    | 0      | DIESEL STARTING AIR / CD EMERG DIESEL FRONT BANK STARTING AIR SHUTOFF VALVE  | AUXILIARY | 587.00      | CD EDG RM,   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 65   | 7      | 1-XRV-227    | 0      | DIESEL STARTING AIR / CD EMERG DIESEL REAR BANK STARTING AIR SHUTOFF VALVE   | AUXILIARY | 587.00      | CD EDG RM,   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 66   | 8      | 1-HV-DDP-AB1 | 0      | DIESEL ROOM VENTILAT / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FAN HV-DGX-1 TEMPERING AIR DAMPER    | AUXILIARY | 587.00      | AB EDG RM, 12' W OF THE RM'S ENTRANCE, 9' NW OF AB EMERGENCY DIESEL FUEL OIL DAY TANK # 1-QT-107AB   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 67   | 8      | 1-HV-DDP-AB2 | 0      | DIESEL ROOM VENTILAT / DIESEL GENERATOR ROOM 1AB VENTILATION SUPPLY FAN HV-DGS-1 TEMPERING AIR DAMPER 1-HV-DDP-ABZ | AUXILIARY | 587.00      | AB EDG RM, 22 FEET E OF AB EMERGENCY DIESEL FUEL OIL DAY TANK # 1-QT-107-AB, 12 FEET FROM THE N WALL | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 68   | 8      | 1-HV-DDP-CD1 | 0      | DIESEL ROOM VENTILAT / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FAN HV-DGX-2 TEMPERING AIR DAMPER    | AUXILIARY | 587.00      | CD EDG RM, IN MIDDLE SW REGN OF RM, NEAR THE S WALL, 10' ABOVE FLR                                   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 69   | 8      | 1-HV-DDP-CD2 | 0      | DIESEL ROOM VENTILAT / DIESEL GEN ROOM 1 CD VENTILATION SUPPLY FAN 1-HV-DGS-2 TEMPERING AIR DAMPER 1-HV-DDP-CD2    | AUXILIARY | 587.00      | CD EDG RM, IN SE REGN OF RM, NEAR E WALL, 10' ABOVE FLR  | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 70   | 8      | 1-LSO-240    | 0      | DIESEL LUBE OIL / AB EMERG DIESEL UPPER VALVE GEAR LUBRICATION CONTROL SOLENOID 1                                  | AUXILIARY | 587.00      | AB EMER DSL GEN RM   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/16/95  
Date

I.C. Huang  
Print or Type Name

*I. Chen Huang*  
Signature

1-15-96  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID   | Rev No | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40? | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|-------------|--------|---|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 71   | 8      | 1-LSO-241   | 0      | DIESEL LUBE OIL / AB EMERG DIESEL UPPER VALVE GEAR LUBRICATION CONTROL SOLENOID 2           | AUXILIARY | 587.00      | AB EMER DSL GEN RM  | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 72   | 8      | 1-LSO-245   | 0      | DIESEL LUBE OIL / CD EMERG DIESEL GENERATOR UPPER VALVE GEAR LUBRICATION CONTROL SOLENOID 1 | AUXILIARY | 587.00      | CD EMER DSL GEN RM  | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 73   | 8      | 1-LSO-246   | 0      | DIESEL LUBE OIL / CD EMERG DIESEL GENERATOR UPPER VALVE GEAR LUBRICATION CONTROL SOLENOID 2 | AUXILIARY | 587.00      | CD EMER DSL GEN RM  | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 74   | 9      | 1-HV-DGS-1  | 0      | DIESEL ROOM VENTILAT / AB EMERG DIESEL GENERATOR VENTILATION SUPPLY FAN                     | AUXILIARY | 587.00      | AB EDG RM, IN THE SE REGN OF THE RM, 36' SE OF THE RMS ENTRANCE, 13' ABOVE THE FLR.                         | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 75   | 9      | 1-HV-DGS-2  | 0      | DIESEL ROOM GENERATO / CD EMERG DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN                | AUXILIARY | 587.00      | CD EDG RM, IN SE REGN OF THE RM, 20' E OF CD EDG, 10' ABOVE THE FLR.  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 76   | 9      | 1-HV-DGS-3  | 0      | DIESEL ROOM VENTILAT / AB EMERG DIESEL GENERATOR ROOM CONTROL PANEL VENTILATION SUPPLY FAN  | AUXILIARY | 587.00      | AB EDG RM,  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 77   | 9      | 1-HV-DGS-4  | 0      | DIESEL ROOM VENTILAT / CD EMERG DIESEL GENERATOR ROOM CONTROL PANEL VENTILATION SUPPLY FAN  | AUXILIARY | 587.00      | CD EDG RM,  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 78   | 9      | 1-HV-DGX-1  | 0      | DIESEL ROOM VENTILAT / AB EMERG DIESEL GENERATOR ROOM VENTILATION EXHAUST FAN               | AUXILIARY | 587.00      | AB EDG RM, IN THE NW REGN OF THE RM, ABOVE AB EDG STARTING AIR COMPRESSOR #1-QT-142-AB2, 13' ABOVE THE FLR. | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 79   | 9      | 1-HV-DGX-2  | 0      | DIESEL ROOM VENTILAT / CD EMERG DIESEL GENERATOR VENTILATION EXHAUST FAN                    | AUXILIARY | 587.00      | CD EDG RM, IN THE MIDDLE SW REGN OF THE RM, 10' SW OF CD EDG, 10' ABOVE THE FLR.                            | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 80   | 12     | 1-QT-502-AB | 0      | DIESEL COMBUSTION AI / AB EMERG DIESEL TURBOCHARGER   | AUXILIARY | 587.00      | AB EDG RM, IN THE NW REGN OF THE RM, 5' NE OF THE ENGINE END OF AB-EDG, 10' ABOVE THE FLR.                  | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 81   | 12     | 1-QT-502-CD | 0      | DIESEL COMBUSTION AI / CD EMERG DIESEL TURBOCHARGER   | AUXILIARY | 587.00      | CD EDG RM, IN THE MIDDLE E PART OF THE RM, ON THE DIESEL END OF CD EDG, 10' ABOVE THE FLR.                  | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 82   | 14     | 1-AFW       | 0      | 120/208V MISC. SAFTE / POWER PANEL  | AUXILIARY | 587.00      | CD EDG RM, 10 FEET NW OF CD EMERGENCY DIESEL GENERATOR #1-OME-150-CD, ON THE N WALL                         | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/16/95  
Date

I.C. Huang  
Print or Type Name

*I. Chen Huang*  
Signature

1-15-96  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq Cl | Equip. ID    | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40°? | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|-------|--------------|--------|--|-----------|-------------|---|------------|-------|--|---------------|-------------|------------|--------------|-----------|
| 83   | 14    | 1-AFWX       | 0      | 120/208V MISC SAFETY / 120/208 VAC AUXILIARY FEEDWATER DISTR PNL                             | AUXILIARY | 587.00      | CD EDG RM, IN NW REGN OF RM, 5 FT. N OF NE END OF EMERG DIESEL GEN CD, ON THE N WALL, 5 FT. ABOVE FLR | 587.00     | Yes   | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 84   | 14    | 1-ELSC       | 0      | 120/208V MISC SAFETY / POWER PANEL   | AUXILIARY | 587.00      | AB EDG RM, IN THE NE REGN OF THE RM, ON THE N WALL, 20 FEET E OF THE RMS ENTRANCE DOOR                | 587.00     | Yes   | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 85   | 14    | 1-ELSCX      | 0      | 120/208V MISC SAFETY / 120/208VAC EMERG LOCAL SHUTDOWN AUXILIARY DISTRIBUTION PANEL          | AUXILIARY | 587.00      | AB EDG RM, IN SE REGN OF RM, ON S WALL, 10 FT. S OF AB EMERG DIESEL GEN                               | 587.00     | Yes   | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 86   | 17    | 1-OME-150-AB | 0      | DIESEL GENERATOR CON / AB EMERG DIESEL GENERATOR   | AUXILIARY | 587.00      | AB EDG RM, IN THE CENTER OF THE RM  | 587.00     | Yes   | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 87   | 17    | 1-OME-150-CD | 0      | DIESEL GENERATION CO / CD EMERG DIESEL GENERATOR   | AUXILIARY | 587.00      | CD EDG RM, IN THE CENTER OF THE RM  | 587.00     | Yes   | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 88   | 18    | 1-CPS-312    | 0      | DIESEL JACKET WATER / AB EMERG DIESEL JACKET WATER PUMP QT-130-AB1 DISCHARGE PRESSURE SWITCH | AUXILIARY | 587.00      | AB EMER DSL GEN RM, 5 FT SE OF DGAB RM DOORWAY, IN THE WEST DOOR OF PANEL DGAB, 6 FT ABOVE THE FLR    | 587.00     | Yes   | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 89   | 18    | 1-CPS-314    | 0      | DIESEL JACKET WATER / AB EMERG DIESEL JACKET WATER PUMP QT-130-AB2 DISCHARGE PRESSURE SWITCH | AUXILIARY | 587.00      | AB EMER DSL GEN RM, 5 FT SE OF DGAB RM DOORWAY, IN THE WEST DOOR OF PANEL DGAB, 7 FT ABOVE THE FLR    | 587.00     | Yes   | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | No          | Yes        | Yes          | No        |
| 90   | 18    | 1-CPS-317    | 0      | DIESEL JACKET WATER / CD EMERG DIESEL JACKET WATER PUMP QT-130-CD1 DISCHARGE PRESSURE SWITCH | AUXILIARY | 587.00      | CD EMER DSL GEN RM, 5 FT WEST OF THE DGCD DOORWAY, IN THE DGCD PANEL                                  | 587.00     | Yes   | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 91   | 18    | 1-CPS-319    | 0      | DIESEL JACKET WATER / CD EMERG DIESEL JACKET WATER PUMP QT-130-CD2 DISCHARGE PRESSURE SWITCH | AUXILIARY | 587.00      | CD EMER DSL GEN RM, 5 FT WEST OF DGCD DOORWAY, IN THE DGCD PANEL                                      | 587.00     | Yes   | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 92   | 18    | 1-LLS-120    | 0      | DIESEL FUEL OIL / AB EMERG DIESEL FUEL OIL DAY TANK QT-107-AB HIGH LEVEL SWITCH 1            | AUXILIARY | 587.00      | AB EDG RM, "RELAY CHATTER ANALYSIS IS DONE UNDER FUEL TRANSFER PUMP                                   | 587.00     | N/A   | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | No         | Yes          | No        |
| 93   | 18    | 1-LLS-121    | 0      | DIESEL FUEL OIL / AB EMERG DIESEL FUEL OIL DAY TANK QT-107-AB LOW LEVEL SWITCH 1             | AUXILIARY | 587.00      | AB EDG RM, "RELAY CHATTER ANALYSIS IS DONE UNDER FUEL TRANSFER PUMP                                   | 587.00     | N/A   | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | No         | Yes          | No        |
| 94   | 18    | 1-LLS-122    | 0      | DIESEL FUEL OIL / AB EMERG DIESEL FUEL OIL DAY TANK QT-107-AB HIGH LEVEL SWITCH 2            | AUXILIARY | 587.00      | AB EDG RM, "RELAY CHATTER ANALYSIS IS DONE UNDER FUEL TRANSFER PUMP                                   | 587.00     | N/A   | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | No         | Yes          | No        |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/14/95  
Date

I.C. Huang  
Print or Type Name

*I.C. Huang*  
Signature

1-15-96  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq<br>CI | Equip. ID | Rev<br>No | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40? | Capacity vs.<br>Demand Basis   | Cap ><br>Demand? | Caveats<br>OK? | Anchor<br>OK? | Interact<br>OK? | Equip<br>OK? |
|------|----------|-----------|-----------|---|-----------|-------------|---|------------|------|--|------------------|----------------|---------------|-----------------|--------------|
| 95   | 18       | 1-LLS-123 | 0         | DIESEL FUEL OIL / AB EMERG DIESEL FUEL OIL DAY TANK QT-107-AB LOW LEVEL SWITCH 2                            | AUXILIARY | 587.00      | AB EDG RM, "RELAY CHATTER ANALYSIS IS DONE UNDER FUEL TRANSFER PUMP   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes              | Yes            | No            | Yes             | No           |
| 96   | 18       | 1-LLS-125 | 0         | DIESEL FUEL OIL / CD EMERG DIESEL FUEL OIL DAY TANK QT-107-CD HIGH LEVEL SWITCH 1                           | AUXILIARY | 587.00      | CD EDG RM, "RELAY CHATTER ANALYSIS IS DONE UNDER FUEL TRANSFER PUMP   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes              | Yes            | Yes           | Yes             | Yes          |
| 97   | 18       | 1-LLS-126 | 0         | DIESEL FUEL OIL / CD EMERG DIESEL FUEL OIL DAY TANK QT-107-CD LOW LEVEL SWITCH 1                            | AUXILIARY | 587.00      | CD EDG RM, "RELAY CHATTER ANALYSIS IS DONE UNDER FUEL TRANSFER PUMP   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes              | Yes            | Yes           | Yes             | Yes          |
| 98   | 18       | 1-LLS-127 | 0         | DIESEL FUEL OIL / CD EMERG DIESEL FUEL OIL DAY TANK QT-107-CD HIGH LEVEL SWITCH 2                           | AUXILIARY | 587.00      | CD EDG RM, "RELAY CHATTER ANALYSIS IS DONE UNDER FUEL TRANSFER PUMP   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes              | Yes            | Yes           | Yes             | Yes          |
| 99   | 18       | 1-LLS-128 | 0         | DIESEL FUEL OIL / CD EMERG DIESEL FUEL OIL DAY TANK QT-107-CD LOW LEVEL SWITCH 2                            | AUXILIARY | 587.00      | CD EDG RM, "RELAY CHATTER ANALYSIS IS DONE UNDER FUEL TRANSFER PUMP   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes              | Yes            | Yes           | Yes             | Yes          |
| 100  | 18       | 1-XPS-300 | 0         | DIESEL COMBUSTION AI / AB EMERGENCY DIESEL FRONT BANK AIR CHEST EXTREME HIGH PRESSURE SWITCH                | AUXILIARY | 587.00      | AB EMER DSL GEN RM, 5 FT SE OF AB EMERG. DIESEL GEN. RM DOORWAY, ON THE NORTH WALL, INSIDE AB EMERG. DIESEL GENERATOR CONTROL SUBPANEL #1-DGAB  | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes              | Yes            | Yes           | Yes             | Yes          |
| 101  | 18       | 1-XPS-305 | 0         | DIESEL COMBUSTION AI / CD EMERGENCY DIESEL FRONT BANK AIR CHEST EXTREME HIGH PRESSURE SWITCH                | AUXILIARY | 587.00      | CD EMER DSL GEN RM, 5 FT WEST OF CD EDG RM DOORWAY, INSIDE CD EMERG. DIESEL GENERATOR SUBPANEL #1-DGCD  | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes              | Yes            | Yes           | Yes             | Yes          |
| 102  | 19       | 1-VTS-341 | 0         | DIESEL ROOM VENTILAT / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION FANS HV-DGX-1 AND HV-DGS-1 THERMOSTAT | AUXILIARY | 587.00      | AB EDG RM, 24" W OF RM ENTRANCE, 15' ABOVE FLR, ON AB EMERGENCY DSL GENERATOR RM VENTILATION EXHAUST FIRE DAMPER 1-HV-DGX-FD-1                  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes              | Yes            | N/A           | Yes             | Yes          |
| 103  | 19       | 1-VTS-345 | 0         | DIESEL ROOM VENTILAT / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION FANS OUTSIDE AIR THERMOSTAT           | AUXILIARY | 596.00      | AB EDG RM,  | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes              | Yes            | N/A           | Yes             | Yes          |
| 104  | 19       | 1-VTS-346 | 0         | DIESEL ROOM VENTILAT / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION FANS HV-DGX-2 AND HV-DGS-2 THERMOSTAT | AUXILIARY | 587.00      | CD EDG RM, IN SW REGN OF RM, 15' S. OF THE GENERATOR END OF CD GENERATOR 1-OME-1SO-CD, ON THE W. SIDE OF EXHAUST FAN 1-HV-DGX-2, 12' ABOVE FLR. | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes              | Yes            | N/A           | Yes             | Yes          |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

Signature

Date

I.C. Huang  
Print or Type Name

Signature

Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID   | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40? | Capacity vs. Demand Basis                                     | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|-------------|--------|--|-----------|-------------|---|------------|------|---|---------------|-------------|------------|--------------|-----------|
| 105  | 20     | 1-DGAB-X    | 0      | EQUIP CTRL AND INDIC / AB EMERGENCY DIESEL GENERATOR OME-150-AB AUXILIARY PANEL      | AUXILIARY | 587.00      | AB EMER DSL GEN RM, IN THE MIDDLE WEST REGION OF THE RM, NEAR THE CENTER OF THE WEST WALL, 5 FT NORTH OF AB EDG STARTING AIR RECEIVER #1-QT-141-AB1 | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum            | Yes           | Yes         | Yes        | Yes          | Yes       |
| 106  | 20     | 1-DGCD-X    | 0      | EQUIP CTRL AND INDIC / CD EMERGENCY DIESEL GENERATOR OME-150-CD AUXILIARY SUBPANEL   | AUXILIARY | 587.00      | CD EMER DSL GEN RM, IN THE WEST REGION OF THE RM, 4 FT SOUTH OF CD EMERG. DIESEL STARTING AIR RECEIVER #1-QT-141-CD1                                | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum            | Yes           | Yes         | Yes        | Yes          | Yes       |
| 107  | 0      | 1-POV-2-AB  | 0      | STARTING AIR SYST / PILOT OPERATED 4 WAY VALVE FOR AIR START XRV'S FOR DIESEL ENGINE | AUXILIARY | 587.00      | AB EDG RM, IN THE SE REGN OF THE RM, ON THE SE END OF THE DIESEL END OF AB EDG  | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | N/A         | Yes        | Yes          | Yes       |
| 108  | 0      | 1-POV-2-CD  | 0      | STARTING AIR SYST / PILOT OPERATED 4 WAY VALVE FOR AIR START XRV'S FOR DIESEL ENGINE | AUXILIARY | 587.00      | CD EDG RM,  | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | N/A         | Yes        | Yes          | Yes       |
| 109  | 5      | 1-QT-111-AB | 0      | AB EMERG DIESEL LUBE OIL BEFORE AND AFTER PUMP                                       | AUXILIARY | 579.00      | AB EDG LUBE OIL PIT, IN THE MIDDLE REGN OF THE PIT, NEAR THE FLR.   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum            | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*Henry B. J...*  
Signature

11/19/96  
Date

I.C. Huang  
Print or Type Name

*Chen Huang*  
Signature

1-20-96  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq Cl | Equip ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|-------|--------------|--------|--|-----------|-------------|--|------------|------|---|---------------|-------------|------------|--------------|-----------|
| 1    | 14    | 1-BATT-AB-SH | 0      | 250V DC DISTRIBUTION / PLANT BATTERY BATT-AB AMMETER SHUNT                         | AUXILIARY | 613.00      | 4KV RM, Mezzanine Area, IN CENTER OF THE RM, ON PLANT BATTERY AB CONTROL PANEL #1-BC-AB                              | 609.00     | Yes  | Bounding Spectrum vs SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 2    | 14    | 1-BATT-CD-SH | 0      | 250V DC DISTRIBUTION / PLANT BATTERY BATT-CD AMMETER SHUNT                         | AUXILIARY | 626.00      | CD BATT EQUIP AREA, IN N END OF THE RM, ON PLANT BATTERY CD CONTROL PANEL #1-BC-CD                                   | 633.00     | Yes  | Bounding Spectrum vs SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 3    | 14    | 1-BATT-N-SH  | 0      | 250VDC CONTROL AND I / METERING SHUNT  | AUXILIARY | 633.00      | HALLWAY,   | 633.00     | N/A  | 1.5 x Bounding Spectrum vs Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 4    | 14    | 1-BC-AB-SH   | 0      | 250 VDC DISTRIBUTION / PLANT BATTERY CHARGER AMMETER BC-AB SHUNT CABINET           | AUXILIARY | 613.00      | 4KV RM, Mezzanine Area, IN CENTER OF RM, ON PLANT BATTERY AB CONTROL PANEL 1-BC-AB                                   | 609.00     | Yes  | Bounding Spectrum vs SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 5    | 14    | 1-BC-CD-SH   | 0      | 250V DC DISTRIBUTION / PLANT BATTERY CHARGER BC-CD SHUNT CABINET                   | AUXILIARY | 626.00      | CD BATT EQUIP AREA, IN N END OF THE RM, ON THE PLANT BATTERY CD CONTROL PANEL #1-BC-CD                               | 633.00     | Yes  | Bounding Spectrum vs SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 6    | 14    | 1-BCTC-AB    | 0      | 250V DC DISTRIBUTION / PLANT BATTERY CHARGERS BC-AB1 AND BC-AB2 TRANSFER PANEL     | AUXILIARY | 613.00      | 4KV RM, Mezzanine Area, IN SW REGN OF THE RM, 2 FT E OF PLANT BATTERY CHARGER #1-BC-AB2, 4 FT W OF THE E WALL        | 609.00     | Yes  | Bounding Spectrum vs SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 7    | 14    | 1-BCTC-CD    | 0      | 250V DC DISTRIBUTION / PLANT BATTERY CHARGERS BC-CD1 AND BC-CD2 TRANSFER PANEL     | AUXILIARY | 626.00      | CD BATT EQUIP AREA, IN N END OF THE RM, 4 FT NE OF PLANT BATTERY CHARGER #1-BC-CD1                                   | 633.00     | Yes  | Bounding Spectrum vs SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 8    | 14    | 1-CCV-AB     | 0      | 250VDC DISTRIBUTION / POWER PANEL  | AUXILIARY | 633.00      | CONTROL RM, IN THE NE CORNER OF THE RM, ON THE E WALL, 15 FEET S OF THE N WALL                                       | 633.00     | Yes  | Bounding Spectrum vs SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 9    | 14    | 1-CCV-CD     | 0      | 250VDC DISTRIBUTION / 250VDC TRAIN 'A' CRITICAL SOLENOID VALVES DISTRIBUTION PANEL | AUXILIARY | 633.00      | CONTROL RM, IN THE NE CORNER OF THE RM, ON THE E WALL, ON CONTROL RM E REAR INSTRUMENT RELAY RACK #1-ERR             | 633.00     | Yes  | Bounding Spectrum vs SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 10   | 14    | 1-CRAB       | 0      | 250VDC DISTRIBUTION / POWER PANEL  | AUXILIARY | 633.00      | CONTROL RM, ON THE REAR SIDE OF NON-ESSENTIAL SERVICE WATER CONTROL PANEL #1-NSW                                     | 633.00     | Yes  | Bounding Spectrum vs SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 11   | 14    | 1-CRCD       | 0      | 250VDC DISTRIBUTION / POWER PANEL  | AUXILIARY | 633.00      | CONTROL RM, IN THE SW PART OF THE RM, 2 FEET NE OF UNIT 2 HOT SHUTDOWN PANEL #2-HSD2                                 | 633.00     | Yes  | Bounding Spectrum vs SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 12   | 14    | 1-CRID-I     | 0      | 120VAC CONTROL ROOM / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION CH-I             | AUXILIARY | 633.00      | CONTROL RM, IN THE NE CORNER OF THE RM   | 633.00     | Yes  | Bounding Spectrum vs SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 13   | 14    | 1-CRID-II    | 0      | 120V AC DISTRIBUTION / 120V AC CONTROL ROOM INSTRUMENT DISTRIBUTION CH-II          | AUXILIARY | 633.00      | CONTROL RM, IN NE CORNER OF THE RM, ON E WALL, 8 FT S OF N WALL  | 633.00     | Yes  | Bounding Spectrum vs SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 14   | 14    | 1-CRID-III   | 0      | 120VAC CONTROL ROOM / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION CH-III           | AUXILIARY | 633.00      | CONTROL RM, IN THE NE CORNER OF THE RM, ON THE E WALL, ON CONTROL RM E REAR INSTRUMENT RELAY RACK #1-ERR             | 633.00     | Yes  | Bounding Spectrum vs SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 15   | 14    | 1-CRID-IV    | 0      | 120VAC CONTROL ROOM / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION CH-IV            | AUXILIARY | 633.00      | CONTROL RM, IN THE NE CORNER OF THE RM, ON THE E WALL, ON CONTROL RM E REAR INSTRUMENT/RELAY RACK #1-ERR             | 633.00     | Yes  | Bounding Spectrum vs SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 16   | 14    | 1-DCN        | 0      | 250VDC CONTROL AND I / 250VDC POWER PANEL  | AUXILIARY | 633.00      | HALLWAY, 15 FEET SE OF THE UNIT 1 CONTROL RM EMERGENCY EXIT DOOR, ON THE E WALL, IN THE MIDDLE E PART OF THE HALLWAY | 633.00     | Yes  | Bounding Spectrum vs SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 17   | 14    | 1-MCAB       | 0      | 250V DC DISTRIBUTION / 250V DC DISTRIBUTION PANEL MCAB                             | AUXILIARY | 609.00      | AB BATT EQUIP AREA, IN MIDDLE N REGN OF THE RM, 6 FT N OF AB BATTERY FIRE DOOR, ON THE N WALL                        | 609.00     | Yes  | Bounding Spectrum vs SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Stephen Anagnostis  
Print or Type Name

Signature

Date

I.C. Huang  
Print or Type Name

Signature

Date

12/14/95

1-15-96



## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq Cl | Equip ID No | Rev No | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|-------|-------------|--------|---|-----------|-------------|---|------------|------|---|---------------|-------------|------------|--------------|-----------|
| 18   | 14    | 1-MCCD      | 0      | 250V DC DISTR / 250V DC DISTRIBUTION POWER PANEL                        | AUXILIARY | 626.00      | CD BATT EQUIP AREA, IN S END OF THE HALLWAY, ON THE WESST WALL, 2 FT N OF THE RMS ENTRANCE DOOR.  | 633.00     | Yes  | Bounding Spectrum vs SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 19   | 14    | 1-MDAB      | 0      | 250VDC DISTRIBUTION / 250 VDC POWER PANEL                               | AUXILIARY | 609.00      | AB BATT EQUIP AREA, IN THE MIDDLE N REGN OF THE RM, 6 FEET N OF AB BATTERY EQUIPMENT AREA FIRE DOOR, ON THE N WALL                                | 609.00     | Yes  | Bounding Spectrum vs SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 20   | 14    | 1-MDCD      | 0      | 250VDC DISTRIBUTION / POWER PANEL                                       | AUXILIARY | 626.00      | CD BATT EQUIP AREA, IN THE S END OF THE HALLWAY, ON THE W WALL, 8 FEET NW OF THE RMS ENTRANCE DOOR  | 633.00     | Yes  | Bounding Spectrum vs SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 21   | 14    | 1-SSV-A1    | 0      | 250VAC DISTRIBUTION / 250VDC TRAIN 'A' NUCLEAR SAMPLING FEEDER PANEL #1 | AUXILIARY | 587.00      | NUCLEAR SAMPLING RM, IN THE MIDDLE S REGN OF THE RM, ON THE S END OF THE NUCLEAR SAMPLING SYSTEM SMAPLING CONTROL PANEL #1-SCP, 5FT ABOVE THE FLR | 587.00     | Yes  | Bounding Spectrum vs SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 22   | 14    | 1-SSV-A2    | 0      | 250VDC / 250VDC NUCLEAR SAMPLING FEEDER PANEL #2                        | AUXILIARY | 587.00      | NUCLEAR SAMPLING RM, IN THE MIDDLE OF THE RM, ON THE S END OF THE NUCLEAR SAMPLING CONTROL PANEL #1-SCP, 3 FEET ABOVE THE FLR                     | 587.00     | Yes  | Bounding Spectrum vs SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 23   | 14    | 1-SSV-B     | 0      | 250VDC DISTRIBUTION / POWER PANEL                                       | AUXILIARY | 587.00      | NUCLEAR SAMPLING RM, IN THE MIDDLE N REGN OF THE RM, ON THE N END OF THE RM PANEL #1-SCP, 4 FEET ABOVE THE FLR                                    | 587.00     | Yes  | Bounding Spectrum vs SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 24   | 14    | 1-TDAB      | 0      | 250VDC DISTRIBUTION / 250 VDC POWER PANEL                               | AUXILIARY | 609.00      | AB BATT EQUIP AREA, IN THE NEASST REGN OF THE RM, 2 FEET N OF THE ENTRANCE DOOR, ON THE N WALL  | 609.00     | Yes  | Bounding Spectrum vs SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 25   | 14    | 1-TDCD      | 0      | 250VDC DISTRIBUTION / POWER PANEL, TRAIN A TRANSFER CABINET             | AUXILIARY | 626.00      | CD BATT EQUIP AREA, AT THE SOTH END OF THE HALLWAY, ON THE W WALL, 10 FEET NW OF THE RMS ENTRANCE DOOR  | 633.00     | Yes  | Bounding Spectrum vs SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 26   | 14    | 1-VDAB-1    | 0      | 250V DC DISTR / 250V DC VALVE DISTRIBUTION PANEL VDAB-1                 | AUXILIARY | 633.00      | CONTROL RM, BEHIND CONDENSATE CONTROL PUMP PANEL #1-CP  | 633.00     | Yes  | Bounding Spectrum vs SSE Ground Response Spectrum | Yes           | Yes         | Yes        | No           | No        |
| 27   | 14    | 1-VDAB-2    | 0      | 250VDC DISTR / 250V DC VALVE DISTRIBUTION PANEL VDAB-2                  | AUXILIARY | 633.00      | CONTROL RM, ON THE REAR SIDE OF CONDENSATE PUMP CONTROL PANEL #1-CP   | 633.00     | Yes  | Bounding Spectrum vs SSE Ground Response Spectrum | Yes           | Yes         | Yes        | No           | No        |
| 28   | 14    | 1-VDCD-1    | 0      | 250VDC DISTR / 250V DC VALVE DISTRIBUTION PANEL VDCD-1                  | AUXILIARY | 633.00      | CONTROL RM, ON REAR SIDE OF S.G. AND AUX FEED PUMP CONTROL PANEL #1-SG, ON THE N WALL   | 633.00     | Yes  | Bounding Spectrum vs SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 29   | 14    | 1-VDCD-2    | 0      | 250V DC DISTR / 250V DC DISTRIBUTION PANEL VDCD-2                       | AUXILIARY | 633.00      | CONTROL RM, BEHIND S.G. AND AFW PUMP CONTROL PANEL #1-SG, ON THE N WALL OF THE RM   | 633.00     | Yes  | Bounding Spectrum vs SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 30   | 15    | 1-BATT-AB   | 0      | 250V DC DISTRIBUTION / PLANT BATT AB                                    | AUXILIARY | 609.00      | AB BATT EQUIP AREA, IN THE CENTER OF THE RM, S OF THE PARTITION WALL  | 609.00     | Yes  | Bounding Spectrum vs SSE Ground Response Spectrum | Yes           | No          | Yes        | Yes          | No        |
| 31   | 15    | 1-BATT-CD   | 0      | 250V DC DISTRIBUTION / PLANT BATT CD                                    | AUXILIARY | 626.00      | CD BATT EQUIP AREA, IN THE CENTER OF THE N END OF THE RM  | 650.00     | Yes  | Bounding Spectrum vs SSE Ground Response Spectrum | Yes           | No          | Yes        | Yes          | No        |
| 32   | 15    | 1-BATT-N    | 0      | 250VDC CONTROL AND I / TRAIN N PLANT BATTERY                            | AUXILIARY | 633.00      | HALLWAY,  | 633.00     | Yes  | Bounding Spectrum vs SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Stephen Anagnostis  
Print or Type Name

Signature

Date

I.C. Huang  
Print or Type Name

Signature

Date

1-15-96

## SCREENING VERIFICATION DATA SHEET (SVDS)

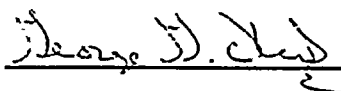
| Item | Eq Cl | Equip ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|-------|--------------|--------|--|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 1    | 7     | 1-CRV-410    | 0      | CCW / DEMINERALIZED MAKEUP WATER TO CCW SURGE TANK 'A' 1.5 AIR OPERATED SHUTOFF VALVE    | AUXILIARY | 650.00      | HALLWAY,   | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 2    | 7     | 1-CRV-411    | 0      | CCW / DEMINERALIZED MAKEUP WATER TO CCW SURGE TANK 'B' 1.5 AIR OPERATED SHUTOFF VALVE    | AUXILIARY | 650.00      | HALLWAY,   | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 3    | 7     | 1-DCR-301    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 1 BLOWDOWN SAMPLE DSR-301 CONTAINMENT ISOLATION VALVE | AUXILIARY | 591.00      | VESTIBULE, ON THE E END, BELOW THE PLATFORM GRATING.   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 4    | 7     | 1-DCR-302    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 2 BLOWDOWN SAMPLE DSR-302 CONTAINMENT ISOLATION VALVE | AUXILIARY | 591.00      | VESTIBULE, ON THE E END, BELOW THE PLATFORM GRATING.   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 5    | 7     | 1-DCR-303    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 3 BLOWDOWN SAMPLE DSR-303 CONTAINMENT ISOLATION VALVE | AUXILIARY | 591.00      | VESTIBULE, ON THE E END, BELOW THE PLATFORM GRATING.   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 6    | 7     | 1-DCR-304    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 4 BLOWDOWN SAMPLE DSR-304 CONTAINMENT ISOLATION VALVE | AUXILIARY | 591.00      | VESTIBULE, ON THE E END, BELOW THE PLATFORM GRATING.   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 7    | 7     | 1-DCR-310    | 0      | BLOWDOWN / STEAM GENERATOR OME-3-1 BLOWDOWN CONTAINMENT ISOLATION VALVE                  | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM, IN THE SE PART OF RM, ON THE CONT WALL SIDE OF THE 601 EL. PLATFORM, 5' ABOVE THE PLATFORM. | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | No          | N/A        | No           | No        |
| 8    | 7     | 1-DCR-320    | 0      | BLOWDOWN / STEAM GENERATOR OME-3-2 BLOWDOWN CONTAINMENT ISOLATION VALVE                  | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM, IN THE SE REGN OF RM, ON THE CONT WALL SIDE OF THE 601 EL. PLATFORM, 5' ABOVE THE PLATFORM. | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | No          | N/A        | No           | No        |
| 9    | 7     | 1-DCR-330    | 0      | BLOWDOWN / STEAM GENERATOR OME-3-3 BLOWDOWN CONTAINMENT ISOLATION VALVE                  | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM, IN THE SE REGN OF THE RM, ON THE CONT WALL SIDE OF 601 EL. PLATFORM, 5' ABOVE THE FLR.      | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 10   | 7     | 1-DCR-340    | 0      | BLOWDOWN / STEAM GENERATOR OME-3-4 BLOWDOWN CONTAINMENT ISOLATION VALVE                  | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM, IN THE SE REGN OF THE RM, ON THE CONT WALL SIDE OF THE 601 EL. PLATFORM, 5' ABOVE THE FLR.  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 11   | 7     | 1-GCR-314    | 0      | NITROGEN (REACTOR PL / NITROGEN SUPPLY TO ACCUMULATOR TANKS CONTAINMENT ISOLATION VALVE  | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM, IN SE REGN OF RM, NEAR CONT PENETRATION #1-CPN-32, 5' ABOVE THE 601 EL. PLATFORM.           | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 12   | 7     | 1-IRV-260    | 0      | SAFETY INJECTION / SAFETY INJECTION TEST LINE SHUTOFF 0.75 AIR OPERATED VALVE            | AUXILIARY | 587.00      | N SAFETY INJECTION PUMP RM, 5' NE OF N U#2 SI PUMP, IN THE NE CORNER OF THE RM, 3' ABOVE FLR.                              | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

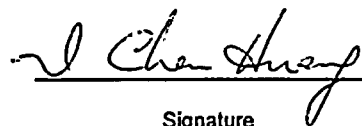
Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas



12/10/95

I.C. Huang



1-15-96

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|---|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 13   | 7      | 1-MCR-251     | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 1 STEAM SAMPLE MSX-101 0.5 AIR OPERATED CONTAINMENT ISOLATION VALVE                              | AUXILIARY | 591.00      | VESTIBULE, IN E REGN OF RM, ON THE 596 EL. PLATFORM, 1' UNDERNEATH THE 601 ELEV. PLATFORM.                       | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 14   | 7      | 1-MCR-252     | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 2 STEAM SAMLPE MSX-102 0.5 AIR OPERATED CONTAINMENT ISOLATION VALVE                              | AUXILIARY | 591.00      | VESTIBULE, IN E REGN OF RM, ON THE 596 ELEV. PLATFORM, 1' UNDERNEATH THE 601 ELEV. PLATFORM.                     | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 15   | 7      | 1-MCR-253     | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 3 STEAM SAMPLE MSX-103 0.5 AIR OPERATED CONTAINMENT ISOLATION VALVE                              | AUXILIARY | 591.00      | VESTIBULE, IN THE E REGN OF RM, ON THE 596 ELEV. PLATFORM, 1' UNDERNEATH THE 601 ELEV. PLATFORM.                 | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 16   | 7      | 1-MCR-254     | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 4 STEAM SAMPLE MSX-104 0.5 AIR OPERATED CONTAINMENT ISOLATION VALVE                              | AUXILIARY | 591.00      | VESTIBULE, IN THE E REGN OF RM, ON THE 596 ELEV. PLATFORM, 1' UNDERNEATH THE 601 ELEV. PLATFORM.                 | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 17   | 7      | 1-QRV-251     | 0      | CVCS / SEAL INJECTION WATER FLOW 2 AIR OPERATED CONTROL VALVE   | AUXILIARY | 587.00      | RECIPROCATING CHARGING PUMP RM, IN THE SW REGN OF THE RM, 5' W OF RECIPROCATING CHG PP, 5' ABOVE FLR             | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 18   | 7      | 1-QRV-411     | 0      | CVCS (BORON MAKEUP) / NORTH BORIC ACID FILTER TO CVCS CHARGING PUMPS AND NORTH BORIC ACID BLENDER 1 AIR OPERATED FLOW CONTROL VALVE | AUXILIARY | 587.00      | BORIC ACID STORAGE TANK AREA, IN NE REGN OF RM, 4' E OF N BAST 1-TK-12N, 4' ABOVE FLR.                           | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 19   | 7      | 1-SV-101      | 0      | NITROGEN (REACTOR PL / NITROGEN SUPPLY HEADER TO ACCUMULATOR TANKS SAFETY VALVE   | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM, 18 FT NORTH OF THE SO. WALL, 601 ELEVATION PLATFORM, BELOW CPN-32                 | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 20   | 7      | 1-SV-121      | 0      | CCW / 1-DRA-300 SAMPLE HEAT EXCHANGERS CCW RETURN HEADER SAFETY VALVE   | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM, 10 FT NW OF THE VESTIBULE DOORWAY   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 21   | 7      | 1-SV-56       | 0      | CVCS / CHARGING PUMPS SUCTION HEADER SAFETY VALVE   | AUXILIARY | 587.00      | RECIPROCATING CHRG PMP RM, AT THE NW CORNER OF THE RECIPROCATING CHARGING PUMP #1-PP-49.8 FT ABOVE THE FLR       | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 22   | 7      | 1-SV-60       | 0      | COMPONENT COOLING WA / COMPONENT COOLING WATER SURGE TANK TK-37 SAFETY VALVE  | AUXILIARY | 650.00      | HALLWAY, IN THE NW PART OF THE HALLWAY, ON TOP OF THE CCW SURGE TANK 1-TK-37                                     | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 23   | 7      | 1-SV-66       | 0      | COMPONENT COOLING WA / CCW TO NORTH BORIC ACID EVAP DRUM 12-HE-19-DN SAFETY VALVE   | AUXILIARY | 587.00      | HALLWAY, 10 FT ABOVE NORTH BORIC ACID EVAPORATOR RM DOOR, NORTH OF THE 598 EL PLATFORM.                          | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 24   | 7      | 1-SV-72W      | 0      | COMPONENT COOLING WA / WEST RESIDUAL HEAT REMOVAL HEAT EXCHANGER COMPONENT COOLING WATER OUTLET SAFETY VALVE                        | AUXILIARY | 633.00      | HALLWAY, 20 FT SOUTH OF THE N-TRAIN BATTERY RM, ON THE SE PART OF THE 645 ELEVATION PLATFORM, NEAR THE EAST WALL | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 25   | 7      | 1-SV-96       | 0      | REFUELING WATER STOR / SAFETY INJECTION PUMPS SUCTION HEADER SAFETY VALVE   | AUXILIARY | 587.00      | N SAFETY INJ PMP RM, 3 FT SE OF THE PUMP, 5 FT ABOVE THE FLR   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |

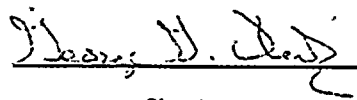
## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas

Print or Type Name



Signature

12/16/95

Date

I.C. Huang

Print or Type Name



Signature

1-15-96

Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip ID No. | Rev No | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|--------------|--------|---|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 26   | 7      | 1-SV-98N     | 0      | SAFETY INJECTION / NORTH SAFETY INJECTION PUMP PP-26N DISCHARGE HEADER SAFETY VALVE                                 | AUXILIARY | 587.00      | N SAFETY INJ PMP RM, 5 FT NE OF THE EAST END OF THE PUMP, IN THE NE CORNER OF THE RM  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 27   | 7      | 1-SV-98S     | 0      | SAFETY INJECTION / SOUTH SAFETY INJECTION PUMP PP-26S DISCHARGE HEADER SAFETY VALVE                                 | AUXILIARY | 587.00      | S SAFETY INJ PMP RM, 4 FT EAST OF THE SOUTH SAFETY INJECTION PUMP #1-PP-26S   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 28   | 7      | 12-QRV-410   | 0      | CVCS / NORTH BAST TK-12N 2 AIR OPERATED INLET FLOW CONTROL VALVE  | AUXILIARY | 587.00      | BORIC ACID STORAGE TANK AREA, IN NE REGN OF RM, 3' SE OF N BORIC ACID STORAGE TANK 1-TK-12N, 4' ABOVE FLR.                      | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 29   | 7      | 12-QRV-420   | 0      | CVCS (BORON MAKEUP) / MIDDLES BAST TK-12M 2 AIR OPERATED INLET FLOW CONTROL VALVE                                   | AUXILIARY | 587.00      | BORIC ACID STORAGE TANK AREA, IN MIDDLE E REGN OF RM, 3' SE OF MIDDLE BAST 12-TK-12M, 2' ABOVE FLR.                             | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 30   | 8      | 1-CCM-451    | 0      | CCW / REACTOR COOLANT PUMPS BEARING OIL COOLERS CCW RETURN HEADER 'A' CONTAINMENT 8 MOTOR OPERATED ISOLATION VALVE  | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM, 12' NE OF STARTUP BLOWDOWN FLASHTANK #1-TK-49, ON THE 596 EL. PLATFORM.                          | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 31   | 8      | 1-CCM-452    | 0      | CCW / RC PUMPS BEARING OIL COOLERS CCW RETURN HEADER 'B' CONTAINMENT 8 MOTOR OPERATED ISOLATION VALVE               | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM, 20' NE OF STARTUP BLOWDOWN FLASHTANK #1-TK-49, ON 596 EL. PLATFORM.                              | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 32   | 8      | 1-CCM-453    | 0      | CCW / RCP THERMAL BARRIER CCW OUTLET 'A' CONTAINMENT 4 MOTOR OPERATED ISOLATION VALVE                               | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM, 12' SE OF THE WALKWAY OVER THE PIPE TUNNEL, 1' ABOVE THE 596 EL. PLATFORM.                       | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 33   | 8      | 1-CCM-454    | 0      | CCW / RC PUMPS THERMAL BARRIER CCW RETURN HEADER 'B' CONTAINMENT 4 MOTOR OPERATED ISOLATION VALVE                   | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM, 8' SE OF THE WALKWAY OVER THE PIPE TUNNEL, 1' ABOVE 596 EL. PLATFORM.                            | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 34   | 8      | 1-CCM-458    | 0      | CCW / CCW TO REACTOR COOLANT PUMPS TRAIN 'A' CONTAINMENT ISOLATION VALVE  | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM, 18' NW OF SG STARTUP BLOWDOWN FLASHTANK # 1-TK-49, NEAR PIPE TUNNEL, NEAR FLR.                   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 35   | 8      | 1-CCM-459    | 0      | CCW / CCW TO REACTOR COOLANT PUMPS TRAIN 'B' CONTAINMENT ISOLATION VALVE  | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM,  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 36   | 8      | 1-CMO-429    | 0      | CCW / WEST RHR HEAT EXCHANGER HE-17W CCW OUTLET SHUTOFF VALVE   | AUXILIARY | 633.00      | HALLWAY,  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 37   | 8      | 1-FMO-221    | 0      | AUX FEEDWATER / TURBINE DRIV AUX FEED PUMP PP-4 DISCHARGE TO STEAM GENERATOR OME-3-2 4 MOTOR OPERATED CONTROL VALVE | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM, 18' S OF THE N WALL, ON THE E SIDE OF THE PIPE TUNNEL, 3' N OF THE WALKWAY OVER THE PIPE TUNNEL. | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas

George G. Thomas 12/16/95

I.C. Huang

I.C. Huang 1-15-96

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|---|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 38   | 8      | 1-FMO-222     | 0      | AUX FEEDWATER / EAST MOTOR DRIV AUX FEED PUMP PP-3E SUPPLY TO STEAM GENERATOR OME 3-2-4 MOTOR OPERATED CONTROL VALVE                | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM, 10' S OF THE N WALL, ON THE E SIDE OF THE PIPE TUNNEL, 12' S OF THE N END WALL     | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 39   | 8      | 1-FMO-231     | 0      | AUX FEEDWATER / TURBINE DRIV AUX FEED PP-4 PUMP SUPPLY TO STEAM GENERATOR OME 3-3-4 MOTOR OPERATED CONTROL VALVE                    | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM, ON THE N END OF THE RM, ON THE E SIDE OF THE PIPE TUNNEL, 7' S OF THE N END WALL   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 40   | 8      | 1-FMO-232     | 0      | AUX FEEDWATER / EAST MOTOR DRIV AUX FEED PUMP PP-3E SUPPLY TO STEAM GENERATOR 3-3-4 MOTOR OPERATED CONTROL VALVE                    | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM, IN THE NW AREA OF THE RM, ON THE E SIDE OF THE PIPE TUNNEL, 3' S OF THE N END WALL | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 41   | 8      | 1-ICM-260     | 0      | SAFETY INJECTION / NORTH SAFETY INJECTION PUMP PP-26N DISCHARGE CONTAINMENT ISOLATION 4 MOTOR OPERATED VALVE                        | AUXILIARY | 587.00      | N SAFETY INJECTION PUMP RM, 5' E OF THE E END OF N SAFETY INJECTION PUMP 1-PP-26N, 3' ABOVE FLR.                  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 42   | 8      | 1-ICM-265     | 0      | SAFETY INJECTION / SOUTH SAFETY INJECTION PUMP PP-26S DISCHARGE CONTAINMENT ISOLATION 4 MOTOR OPERATED VALVE                        | AUXILIARY | 587.00      | S SAFETY INJECTION PUMP RM, IN SE PART OF RM, 5' SE OF S SAFETY INJECTION PUMP 1-PP-26S, 3' ABOVE FLR.            | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 43   | 8      | 1-ICM-305     | 0      | RHR / RECIRCULATION SUMP TO EAST RHR/CTS PUMPS SUCTION CONTAINMENT ISOLATION 18 MOTOR OPERATED VALVE                                | AUXILIARY | 591.00      | VESTIBULE, INSIDE OF THE E RECIRC SUMP VALVE INCLOSURE # 1-TK-84  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 44   | 8      | 1-ICM-306     | 0      | RHR / RECIRCULATION SUMP TO WEST RHR/CTS PUMPS SUCTION CONTAINMENT ISOLATION 18 MOTOR OPERATED VALVE                                | AUXILIARY | 591.00      | VESTIBULE, INSIDE OF THE W RECIRC SUMP VLV ENCLOSURE # 1-TK-85  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 45   | 8      | 1-IMO-261     | 0      | REFUELING WATER STOR / TK-33 SUPPLY TO SAFETY INJECTION PUMP SHUTOFF 8 MOTOR OPERATED VALVE   | AUXILIARY | 587.00      | N SAFETY INJECTION PUMP RM, 7' SE OF N S.I. PUMP, IN THE SE CORNER OF THE RM.                                     | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 46   | 8      | 1-IMO-262     | 0      | REFUELING WATER STOR / SAFETY INJECTION PUMPS RECIRC TO REFUELING WATER STORAGE TANK TK-33 TRAIN 'A' SHUTOFF 2 MOTOR OPERATED VALVE | AUXILIARY | 587.00      | S SAFETY INJECTION PUMP RM, IN NE AREA OF RM, 3' NE OF S SAFETY INJECTION PUMP 1-PP-26S, 3' ABOVE FLR.            | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 47   | 8      | 1-IMO-263     | 0      | REFUELING WATER STOR / SAFETY INJECTION PUMPS RECIRC TO REFUELING WATER STORAGE TANK TK-33 TRAIN 'B' SHUTOFF 2 MOTOR OPERATED VALVE | AUXILIARY | 587.00      | S SAFETY INJECTION PUMP RM, IN SE PART OF RM, 6' E OF S SAFETY INJECTION PUMP 1-PP-26S, 3' ABOVE FLR.             | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas

*George G. Thomas*

12/16/95

I.C. Huang

*I Chen Huang*

1-15-96

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

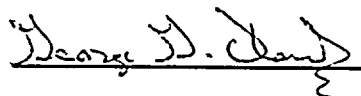
| Item | Eq. Ct | Equip ID No. | Rev No | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|--------------|--------|---|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 48   | 8      | 1-IMO-270    | 0      | SAFETY INJECTION / SAFETY INJECTION PUMPS DISCHARGE CROSSTIE TRAIN 'A' SHUTOFF 4 MOTOR OPERATED VALVE                   | AUXILIARY | 587.00      | N SAFETY INJECTION PUMP RM, 5' SE OF N SAFETY INJECTION PUMP 1-PP-26N, NEAR S WALL, 3' ABOVE FLR.                         | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 49   | 8      | 1-IMO-275    | 0      | SAFETY INJECTION / SAFETY INJECTION PUMPS DISCHARGE CROSSTIE TRAIN 'B' SHUTOFF 4 MOTOR OPERATED VALVE                   | AUXILIARY | 587.00      | S SAFETY INJECTION PUMP RM, IN SE PART OF RM, 5' S OF S SAFETY INJECTION PUMP 1-PP-26S, NEAR S WALL, 3' ABOVE FLR.        | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 50   | 8      | 1-IMO-360    | 0      | SAFETY INJECTION / SAFETY INJECTION PUMPS TO CVCS CHARGING PUMPS SUCTION HEADER CROSSTIE SHUTOFF VALVE                  | AUXILIARY | 587.00      | W CENTRIFUGAL CHARGING PUMP RM, ON THE MIDDLE OF THE W WALL, 3 FT W OF W CENTRIFUGAL PP, 4 FT ABOVE FLR                   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 51   | 8      | 1-IMO-361    | 0      | SAFETY INJECTION / SAFETY INJECTION PUMPS SUCTION TO AND FROM CHARGING PUMPS SUCTION 'A' SHUTOFF 4 MOTOR OPERATED VALVE | AUXILIARY | 587.00      | N SAFETY INJECTION PUMP RM, 3' N OF W END OF N SAFETY INJECTION PUMP.   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 52   | 8      | 1-IMO-362    | 0      | SAFETY INJECTION / SAFETY INJECTION PUMPS SUCTION TO AND FROM CHARGING PUMP 'B' SHUTOFF 4 MOTOR OPERATED VALVE          | AUXILIARY | 587.00      | N SAFETY INJECTION PUMP RM, 3' N OF MIDDLE OF N S.I. PUMP, 3' ABOVE FLR.  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 53   | 8      | 1-IMO-390    | 0      | RHR / RWST TK-33 TO RHR PUMPS SUCTION SHUTOFF 12 MOTOR OPERATED VALVE   | AUXILIARY | 591.00      | VESTIBULE, 20' SE OF THE VESTIBULE'S DOORWAY, S OF THE VALVE TANKS.   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 54   | 8      | 1-IMO-910    | 0      | CVCS / RWST TO CHARGING PUMP SUCTION SHUTOFF VALVE  | AUXILIARY | 587.00      | E CENTRIFUGAL CHARGING PUMP RM, 5 FT NW OF RECIPROCATING CHG PP, NEAR W WALL, 5 FT ABOVE THE FLR                          | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 55   | 8      | 1-IMO-911    | 0      | CVCS / RWST TO CHARGING PUMP SUCTION SHUTOFF VALVE  | AUXILIARY | 587.00      | E CENTRIFUGAL CHARGING PUMP RM, IN THE NE PART OF THE RM, 3 FT E OF E CENTRIFUGAL CHG PP, 3 FT ABOVE THE FLR              | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 56   | 8      | 1-QCM-350    | 0      | REACTOR COOLANT PUMP / RCP SEAL WATER RETURN 'B' CONTAINMENT ISOLATION 4 MOTOR OPERATED VALVE                           | AUXILIARY | 591.00      | VESTIBULE, AT THE NE PART OF 601 EL. PLATFORM   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 57   | 8      | 1-QMO-200    | 0      | CVCS / CHARGING TO REGENERATIVE HEAT EXCHANGER 'A' SHUTOFF VALVE  | AUXILIARY | 587.00      | RECIPROCATING CHARGING PUMP RM, IN THE NE CORNER OF THE RM, 4 FT NE OF RECIPROCATING CHG PUMP, 4 FT ABOVE THE FLR         | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 58   | 8      | 1-QMO-201    | 0      | CVCS / CHARGING TO REGENERATIVE HEAT EXCHANGER 'B' SHUTOFF VALVE  | AUXILIARY | 587.00      | RECIPROCATING CHARGING PUMP RM, IN THE NE REGN OF THE RM, 4 FT E OF RECIPROCATING CHG PP, NEAR E WALL, 4 FT ABOVE THE FLR | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 59   | 8      | 1-QMO-225    | 0      | CVCS / EAST CENTRIFUGAL CHARGING PUMP MINI FLOW TO RCP SEAL WATER HEAT EXCHANGER HE-11 2 MOTOR OPERATED SHUTOFF VALVE   | AUXILIARY | 587.00      | W CENTRIFUGAL CHARGING PUMP RM, IN NW AREA OF RM, ON THE W WALL, 3 FT W OF W CENTRIFUGAL CHG PP, 4 FT ABOVE FLR           | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas



12/16/95

I.C. Huang



1-15-96

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|---|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 60   | 8      | 1-QMO-226     | 0      | CVCS / WEST CENTRIFUGAL CHARGING PUMP MINI FLOW TO RCP SEAL WATER HEAT EXCHANGER HE-11.2 MOTOR OPERATED SHUTOFF VALVE | AUXILIARY | 587.00      | W CENTRIFUGAL CHARGING PUMP RM, IN NW AREA OF RM, 3 FT W OF W CENTRIFUGAL CHG PP, 4 FT ABOVE FLR          | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 61   | 8      | 1-QMO-410     | 0      | CVCS / EMERG. BORATION TO CHARGING PUMP SUCTION SHUTOFF VALVE   | AUXILIARY | 587.00      | BORIC ACID STORAGE TANK AREA, IN NE PART OF RM, 3' E OF N BORIC ACID STORAGE TANK 1-TK-12N, 2' ABOVE FLR. | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 62   | 8      | 1-WMO-711     | 0      | ESW / EAST CONTAINMENT SPRAY HEAT EXCHANGER HE-18E ESW INLET 12 MOTOR OPERATED SHUTOFF VALVE                          | AUXILIARY | 633.00      | HALLWAY,  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 63   | 8      | 1-WMO-715     | 0      | ESW / WEST CONTAINMENT SPRAY HEAT EXCHANGER HE-18W ESW INLET 12 MOTOR OPERATED SHUTOFF VALVE                          | AUXILIARY | 633.00      | HALLWAY,  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas



12/16/95

I.C. Huang



1-15-96

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl. | Equip. ID No. | Rev No. | System/Equipment Description  | Building    | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|---------|---------------|---------|---|-------------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 1    | 7       | 1-SV-65       | 0       | CCW / LETDOWN HEAT EXCHANGER HE-14 CCW OUTLET SAFETY VALVE                              | AUXILIARY   | 633.00      | 633 HALLWAY, 20 FT. NORTH OF THE FREIGHT ELEVATOR, 12 FT. ABOVE FLOOR.  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 2    | 7       | 1-QRV-170     | 0       | CVCS / EXCESS LETDOWN HEAT EXCHANGER HE-13 1 AIR OPERATED OUTLET PRESSURE CONTROL VALVE | CONTAINMENT | 612.00      | REGENERATIVE HEAT EXCHANGER RM, ON THE CONTNMENT WALL SIDE OF THE RM, 1' FROM EXCESS LETDOWN HEAT EXCHANGER # 1-HE-13, 2' ABOVE THE FLR | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 3    | 7       | 1-QRV-171     | 0       | CVCS / EXCESS LETDOWN HEAT EXCHANGER HE-13 1 AIR OPERATED OUTLET DIVERSION VALVE        | CONTAINMENT | 612.00      | REGENERATIVE HEAT EXCHANGER RM, ON THE CONTNMENT WALL SIDE OF THE RM, 1' FROM EXCESS LETDOWN HEAT EXCHANGER # 1-HE-13 2' ABOVE THE FLR  | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*Henry H. J...*  
Signature

1/19/96  
Date

I.C. Huang  
Print or Type Name

*J Chen Huang*  
Signature

1-20-96  
Date



## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No.   | Rev No | System/Equipment Description  | Building    | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|-----------------|--------|---|-------------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 1    | 7      | 1-GRV-341       | 0      | NITROGEN (REACTOR PL / NITROGEN SUPPLY TO ACCUMULATOR TANKS VENT TO ATMOS. VALVE          | CONTAINMENT | 598.00      | ANNULUS, QUAD. #2, D2, F13,14. OK. ON CONT WALL SIDE OF WALKWAY, 1' FROM COLUMN #22, 3' ABOVE FLR.           | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 2    | 7      | 1-SV-102        | 0      | / SAFETY RELIEF VALVE   | CONTAINMENT | 598.00      | ANNULUS, QUAD 2  | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 3    | 7      | 1-SV-103        | 0      | / SAFETY RELIEF VALVE   | CONTAINMENT | 598.00      | ANNULUS, QUAD 2  | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 4    | 7      | 1-SV-122-37     | 0      | CCW / REACTOR SUPPORT COOLERS CCW RETURN HEADER SAFETY VALVE                              | CONTAINMENT | 598.00      | ANNULUS QUAD 3, AZ:181 ON THE CONTAINMENT WALL SIDE OF THE WALKWAY, 1 FOOT FROM COLUMN 21, NEAR THE CEILING. | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 5    | 7      | 1-SV-62-1,2,3,4 | 0      | CCW / REACTOR COOLANT PUMP PP-45-1,2,3,4 THERMAL BARRIER CCW OUTLET SAFETY VALVE          | CONTAINMENT | 617.00      | LOWER CONT, QUAD1  | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 6    | 7      | 1-SV-63         | 0      | CCW / REACTOR COOLANT PUMP MOTORS BEARING OIL COOLERS CCW RETURN HEADER SAFETY VALVE      | CONTAINMENT | 598.00      | ANNULUS, QUAD2   | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 7    | 8      | 1-NSO-21        | 0      | REACTOR COOLANT SYST / REACTOR VESSEL HEAD VENT 1 SOLENOID VALVE                          | CONTAINMENT | 622.00      | REACTOR VESSEL HEAD AREA   | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 8    | 8      | 1-NSO-22        | 0      | REACTOR COOLANT SYST / REACTOR VESSEL HEAD VENT 1 SOLENOID VALVE                          | CONTAINMENT | 622.00      | REACTOR VESSEL HEAD AREA   | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 9    | 8      | 1-NSO-23        | 0      | REACTOR COOLANT SYST / REACTOR VESSEL HEAD VENT 1 SOLENOID VALVE                          | CONTAINMENT | 621.00      | REACTOR VESSEL HEAD AREA   | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 10   | 8      | 1-NSO-24        | 0      | REACTOR COOLANT SYST / REACTOR VESSEL HEAD VENT 1 SOLENOID VALVE                          | CONTAINMENT | 621.00      | REACTOR VESSEL HEAD AREA   | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 11   | 19     | 1-NTR-220       | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP 2 COLD LEG WIDE RANGE TEMP RECORDER THERMAL SENSOR | CONTAINMENT | 617.00      | LOWER CONT QUAD 2, AZ 132, BETWEEN THE RCP #2 & THE SHIELD WALL, ON 617 EL. PLATFORM                         | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 12   | 7      | 1-SV-64         | 0      | CCW / EXCESS LETDOWN HEAT EXCHANGER HE-13 CCW OUTLET SAFETY VALVE                         | CONTAINMENT | 598.00      | ANNULUS, QUAD3   | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Stephen Anagnostis  
Print or Type Name

Signature

Date

1/17/96

I.C. Huang  
Print or Type Name

Signature

Date

1-20-96

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40? | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|-----------|--------|--|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 1    | 7      | 1-SV-67-2 | 0      | CCW / NUCLEAR SAMPLING SAMPLE RACK A CCW RETURN HEADER SAFETY VALVE                      | AUXILIARY | 587.00      | NUCLEAR SAMPLING RM- ON UNIT 1 SAMPLE RACK A LOCATED IN THE NORTHWEST AREA OF THE ROOM, NORTHER END OF THE RACK                            | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 2    | 7      | 1-SV-67-3 | 0      | CCW / NUCLEAR SAMPLING SAMPLE RACK B CCW RETURN HEADER SAFETY VALVE                      | AUXILIARY | 587.00      | NUCLEAR SAMPLING RM - ON UNIT 1 SAMPLE RACK B LOCATED ON THE EAST END WALL, SOUTHERN END OF THE RACK                                       | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 3    | 20     | 1-CG1     | 0      | EQUIP CTRL AND INDIC / REACTOR PROTECTION CONTROL GROUP #1 CABINET #14, #15, & #16       | AUXILIARY | 633.00      | CONTROL RM, IN THE MIDDLE OF THE SOUTH REGION OF THE RM, ON THE SO. WALL   | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 4    | 20     | 1-CG2     | 0      | / REACTOR PROTECTION CONTROL GROUP #2 CABINET #19  | AUXILIARY | 633.00      | CONTROL RM, SW CORNER OF THE RM NEAR S WALL. *FULL WALKDOWN DONE DURING RHR WALKDOWN.  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 5    | 20     | 1-CG3     | 0      | EQUIP CTRL AND INDIC / REACTOR PROTECTION CONTROL GROUP #3, CABINET #20 AND #21          | AUXILIARY | 633.00      | CONTROL RM, IN THE SE REGION OF THE RM.  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 6    | 20     | 1-CG4     | 0      | EQUIP CTRL AND INDIC / REACTOR PROTECTION CONTROL GROUP #4, CABINET #22, #23, #24, & #25 | AUXILIARY | 633.00      | CONTROL RM, IN THE SE REGION OF THE RM.  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 7    | 20     | 1-RPC-I   | 0      | / REACTOR PROTECTION CHANNEL I CAB #1  | AUXILIARY | 633.00      | CONTROL RM, ON THE REAR SIDE OF CONDENSATE HEATER LEVEL CONTROL PANEL #1-C, E OF CONDENSATE PANEL REAR INSTRUMENT/RELAY RACK #1-CR.        | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 8    | 20     | 1-RPC-II  | 0      | / REACTOR PROTECTION CHANNEL II CABINET #5   | AUXILIARY | 633.00      | CONTROL RM, IN THE NE REGN OF THE RM, ON THE REAR SIDE OF TURBINE CONTROL PANEL #1-T, NEAR TURBINE PANEL REAR INSTRUMENT/RELAY RACK #1-TR. | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 9    | 20     | 1-RPC-III | 0      | / REACTOR PROTECTION CHANNEL III CABINET #10   | AUXILIARY | 633.00      | CONTROL RM, IN THE NE REGN OF THE RM, ON THE REAR SIDE OF STEAM GENERATOR AND AUX FEED PUMP CONTROL PANEL #1-SG.                           | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | No           | No        |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/16/95  
Date

I.C. Huang  
Print or Type Name

*I.C. Huang*  
Signature

1-15-96  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. CI | Equip. ID | Rev No | System/Equipment Description              | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40°? | Capacity vs. Demand. Basis   | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|-----------|--------|---|-----------|-------------|--|------------|-------|--|---------------|-------------|------------|--------------|-----------|
| 10   | 20     | 1-RPC-IV  | 0      | REACTOR PROTECTION CHANNEL IV CABINET #12 | AUXILIARY | 633.00      | CONTROL RM, ON THE REAR SIDE OF CONDENSATE HEATER LEVEL CONTROL PANEL #1-C, NE OF CONDENSATE PANEL REAR INSTRUMENT/RELAY RACK #1-CR. | 633.00     | N/A   | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | No          | Yes        | No           | No        |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/16/95  
Date

I.C. Huang  
Print or Type Name

*I Chen Huang*  
Signature

1-15-96  
Date

**APPENDIX B**

**DONALD C. COOK NUCLEAR PLANT - UNIT 2**

**SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC REVIEW**

## Donald C. Cook Nuclear Plant - Unit 2

### SSEL Certification:

The information identifying the equipment required to bring the plant to a safe shutdown condition on this safe shutdown equipment list is, to be the best of our knowledge and belief, correct and accurate.

| <u>Name</u>                            | <u>Signature</u>           | <u>Date</u>        |
|--|----------------------------|--------------------|
| B. A. Svensson<br>Operations           | <u>B. A. Svensson</u>      | <u>1/21/96</u>     |
| G. P. Arent<br>Operations              | <u>G. P. Arent</u>         | <u>12-15-95</u>    |
| J. V. Ruparel<br>Systems               | <u>J. V. Ruparel</u>       | <u>Dec 15, 95.</u> |
| H. W. Young<br>Systems                 | <u>H. W. Young III</u>     | <u>12/15/95</u>    |
| R. C. Steele<br>Electrical             | <u>R. C. Steele</u>        | <u>12-15-95</u>    |
| T. R. Satyan Sharma<br>Project Manager | <u>T. R. Satyan Sharma</u> | <u>12/15/95</u>    |

**DONALD C. COOK NUCLEAR PLANT UNIT # 2**  
**SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**  
**FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description   | Building    | Floor Elev | Room or Row Col                    |
|-------------|-------|--------------|--------|--|-------------|------------|------------------------------------|
| 0           | 12    | 12-HE-18S    | 0      | BORON RECOVERY (CVCS) / SOUTH BORIC ACID EVAPORATOR SKID   | AUXILIARY   | 587.00     | S BORIC ACID EVAP RM               |
| 0           | 12    | 12-HE-25A    | 0      | RADIOACTIVE WASTE EVAPORATOR (15GPM) / 15GPM RADIOACTIVE WASTE EVAPORATOR HE-25 CONDENSER            | AUXILIARY   | 587.00     | 15 GPM WASTE EVAP RM               |
| 0           | 12    | 12-HE-25B    | 0      | RADIOACTIVE WASTE EVAPORATOR (15GPM) / 15 GPM RADIOACTIVE WASTE EVAPORATOR HE-25 DISTILLATE COOLER   | AUXILIARY   | 587.00     | 15 GPM WASTE EVAP RM               |
| 0           | 12    | 12-HE-25C    | 0      | RADIOACTIVE WASTE EVAPORATOR (15GPM) / 15 GPM RADIOACTIVE WASTE EVAPORATOR HE-25 CONCENTRATES COOLER | AUXILIARY   | 587.00     | 15 GPM WASTE EVAP RM               |
| 0           | 2     | 2-MRV-210    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 STOP VALVE  | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL               |
| 0           | 1     | 2-MRV-220    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2 STOP VALVE  | AUXILIARY   | 633.00     | W MN STM STOP ENCL                 |
| 0           | 1     | 2-MRV-230    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3 STOP VALVE  | AUXILIARY   | 633.00     | W MN STM STOP ENCL                 |
| 0           | 2     | 2-MRV-240    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 STOP VALVE  | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL               |
| 0           | 2     | 2-OME-34E    | 0      | ESSENTIAL SERVICE WATER / EAST ESSENTIAL SERVICE WATER PUMP PP-7E DISCHARGE STRAINER                 | SCREENHOUSE | 501.00     | E ESSNTL SERV WTR PMP RM           |
| 0           | 1     | 2-OME-34W    | 0      | ESSENTIAL SERVICE WATER / WEST ESSENTIAL SERVICE WATER PUMP PP-7W DISCHARGE STRAINER                 | SCREENHOUSE | 501.00     | W ESSNTL SERV WTR PMP RM           |
| 0           | 12    | 2-OME-39     | 0      | MAIN STEAM / AUXILIARY FEED PUMP TURBINE   | TURBINE     | 501.00     | TB DRIVEN AUX FDWTR PMP            |
| 0           | 1     | 2-POV-1-AB   | 0      | STARTING AIR / PILOT OPERATED 4 WAY VALVE FOR AIR START XRV'S FOR DIESEL ENGINE                      | AUXILIARY   | 587.00     | AB EMER DSL GEN RM                 |
| 0           | 2     | 2-POV-1-CD   | 0      | STARTING AIR / PILOT OPERATED 4 WAY VALVE FOR AIR START XRV'S FOR DIESEL ENGINE                      | AUXILIARY   | 587.00     | CD EMER DSL GEN RM                 |
| 0           | 1     | 2-POV-2-AB   | 0      | STARTING AIR SYSTEM / PILOT OPERATED 4-WAY VALVE FOR AIR START XRV'S FOR DIESEL ENGINE               | AUXILIARY   | 587.00     | AB DIESEL GENERATOR ROOM           |
| 0           | 2     | 2-POV-2-CD   | 0      | STARTING AIR SYSTEM / PILOT OPERATED 4-WAY VALVE FOR AIR START XRV'S FOR DIESEL ENGINE               | AUXILIARY   | 587.00     | CD EMERGENCY DIESEL GENERATOR ROOM |
| 0           | 12    | 2-QC-12      | 0      | BORON MAKEUP (CVCS) / SOUTH BORIC ACID FILTER  | AUXILIARY   | 587.00     | BORIC ACID STOR TANK AREA          |
| 0           | 1     | 2-QT-100-AB  | 0      | DIESEL COMBUSTION AIR / AB EMERGENCY DIESEL AIR INTAKE FILTER  | GROUND      | 609.00     | INNER PLANT GROUND                 |
| 0           | 2     | 2-QT-100-CD  | 0      | DIESEL COMBUSTION AIR / CD EMERGENCY DIESEL AIR INTAKE FILTER  | GROUND      | 609.00     | INNER PLANT GROUND                 |
| 0           | 1     | 2-QT-101-AB  | 0      | DIESEL COMBUSTION AIR / AB EMERGENCY DIESEL AIR INTAKE SILENCER                                      | AUXILIARY   | 587.00     | AB EMER DSL GEN RM                 |
| 0           | 2     | 2-QT-101-CD  | 0      | DIESEL COMBUSTION AIR / CD EMERGENCY DIESEL AIR INTAKE SILENCER                                      | AUXILIARY   | 587.00     | CD EMER DSL GEN RM                 |
| 0           | 1     | 2-QT-104-AB  | 0      | DIESEL COMBUSTION AIR / AB EMERGENCY DIESEL EXHAUST SILENCER   | GROUND      | 609.00     | INNER PLANT GROUND                 |
| 0           | 2     | 2-QT-104-CD  | 0      | DIESEL COMBUSTION AIR / CD EMERGENCY DIESEL EXHAUST SILENCER   | GROUND      | 609.00     | INNER PLANT GROUND                 |
| 0           | 1     | 2-QT-112-AB  | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL FULL FLOW LUBE OIL FILTER                                      | AUXILIARY   | 579.00     | AB EMER DSL LUBE OIL PIT           |
| 0           | 2     | 2-QT-112-CD  | 0      | DIESEL LUBE OIL / CD EMERGENCY DIESEL FULL FLOW LUBE OIL FILTER                                      | AUXILIARY   | 579.00     | CD EMER DSL LUBE OIL PIT           |
| 0           | 1     | 2-QT-113-AB1 | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL FULL FLOW LUBE OIL STRAINER #1                                 | AUXILIARY   | 579.00     | AB EMER DSL LUBE OIL PIT           |
| 0           | 1     | 2-QT-113-AB2 | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL FULL FLOW LUBE OIL STRAINER #2                                 | AUXILIARY   | 579.00     | AB EMER DSL LUBE OIL PIT           |
| 0           | 2     | 2-QT-113-CD1 | 0      | DIESEL LUBE OIL / CD EMERGENCY DIESEL FULL FLOW LUBE OIL STRAINER #1                                 | AUXILIARY   | 579.00     | CD EMER DSL LUBE OIL PIT           |
| 0           | 2     | 2-QT-113-CD2 | 0      | DIESEL LUBE OIL / CD EMERGENCY DIESEL FULL FLOW LUBE OIL STRAINER #2                                 | AUXILIARY   | 579.00     | CD EMER DSL LUBE OIL PIT           |
| 0           | 2     | 2-QT-116-AB  | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL LUBE OIL HEATER TANK   | AUXILIARY   | 579.00     | AB EMER DSL LUBE OIL PIT           |
| 0           | 2     | 2-QT-116-CD  | 0      | DIESEL LUBE OIL / CD EMERGENCY DIESEL LUBE OIL HEATER TANK   | AUXILIARY   | 579.00     | CD EMER DSL LUBE OIL PIT           |
| 0           | 1     | 2-QT-118-AB  | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL BYPASS LUBE OIL FILTER   | AUXILIARY   | 579.00     | AB EMER DSL LUBE OIL PIT           |
| 0           | 2     | 2-QT-118-CD  | 0      | DIESEL LUBE OIL / CD EMERGENCY DIESEL BYPASS LUBE OIL FILTER   | AUXILIARY   | 579.00     | CD EMER DSL LUBE OIL PIT           |
| 0           | 1     | 2-QT-143-AB1 | 0      | DIESEL CONTROL AIR / AB EMERGENCY DIESEL CONTROL AIR DRYER #1  | AUXILIARY   | 587.00     | AB EMER DSL GEN RM                 |
| 0           | 1     | 2-QT-143-AB2 | 0      | DIESEL CONTROL AIR / AB EMERGENCY DIESEL CONTROL AIR DRYER #2  | AUXILIARY   | 587.00     | AB EMER DSL GEN RM                 |
| 0           | 2     | 2-QT-143-CD1 | 0      | DIESEL CONTROL AIR / CD EMERGENCY DIESEL CONTROL AIR DRYER #1  | AUXILIARY   | 587.00     | CD EMER DSL GEN RM                 |
| 0           | 2     | 2-QT-143-CD2 | 0      | DIESEL CONTROL AIR / CD EMERGENCY DIESEL CONTROL AIR DRYER #2  | AUXILIARY   | 587.00     | CD EMER DSL GEN RM                 |
| 0           | 1     | 2-QT-144-AB  | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL TRANSFER FILTER                                       | AUXILIARY   | 587.00     | AB EMER DSL GEN RM                 |
| 0           | 2     | 2-QT-144-CD  | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL FUEL OIL TRANSFER FILTER                                       | AUXILIARY   | 587.00     | CD EMER DSL GEN RM                 |
| 0           | 12    | 2-TK-253-1   | 0      | CONTROL AIR / PRESSURIZER TRAM 'A' PRESSURE RELIEF VLV NRV-153 RESERVE CONTROL AIR BOTTLE RACK       | CONTAINMENT | 612.00     | LOWER CONT, QUAD NO. 3             |

**DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description  | Building    | Floor Elev | Room or Row Col              |
|-------------|-------|--------------|--------|---|-------------|------------|------------------------------|
| 0           | 12    | 2-TK-253-2   | 0      | CONTROL AIR / PRESSURIZER TRAIN 'A'<br>PRESSURE RELIEF VALVE NRV-153<br>RESERVE CONTROL AIR BOTTLE RACK           | CONTAINMENT | 612.00     | LOWER CONT, QUAD NO. 4       |
| 0           | 12    | 2-TK-253-3   | 0      | CONTROL AIR / PRESSURIZER TRAIN 'B'<br>PRESSURE RELIEF VLV NRV-152<br>EMERGENCY AIR BOTTLE RACK                   | CONTAINMENT | 650.00     | UPPER CONT, QUAD 4           |
| 0           | 12    | 2-TK-253-4   | 0      | CONTROL AIR / PRESSURIZER TRAIN 'A'<br>PRESSURE RELIEF VLV NRV-153<br>EMERGENCY AIR BOTTLE RACK                   | CONTAINMENT | 650.00     | UPPER CONT, QUAD 4           |
| 0           | 1     | 2-TT-DGAB    | 0      | STARTING AIR / 2AB DIESEL GENERATOR<br>TUBE TRACK   | AUXILIARY   | 587.00     | AB EMER DSL GEN RM           |
| 0           | 2     | 2-TT-DGCD    | 0      | STARTING AIR / 2CD DIESEL GENERATOR<br>TUBE TRACK   | AUXILIARY   | 587.00     | CD EMER DSL GEN RM           |
| 1           | 1     | 2-AB-A       | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>600VAC MOTOR CONTROL CENTER AB-A   | AUXILIARY   | 587.00     | 587 HALLWAY                  |
| 1           | 2     | 2-AB-D       | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>600VAC MOTOR CONTROL CENTER AB-D   | AUXILIARY   | 587.00     | 587 HALLWAY                  |
| 1           | 12    | 2-AB-N       | 0      | 250VDC CONTROL AND INSTRUMENTATION /<br>CONTROL CENTER VALVE  | AUXILIARY   | 587.00     | 587 HALLWAY                  |
| 1           | 1     | 2-ABD-A      | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>600VAC MOTOR CONTROL CENTER ABD-A  | AUXILIARY   | 587.00     | AB EMER DSL GEN RM           |
| 1           | 1     | 2-ABD-B      | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>600VAC MOTOR CONTROL CENTER ABD-B  | AUXILIARY   | 587.00     | AB EMER DSL GEN RM           |
| 1           | 2     | 2-ABD-C      | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>600VAC MOTOR CONTROL CENTER ABD-C  | AUXILIARY   | 587.00     | CD EMER DSL GEN RM           |
| 1           | 2     | 2-ABD-D      | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>600VAC MOTOR CONTROL CENTER ABD-D  | AUXILIARY   | 587.00     | CD EMER DSL GEN RM           |
| 1           | 2     | 2-ABV-A      | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>600VAC VALVE CONTROL CENTER ABV-A  | AUXILIARY   | 587.00     | 587 HALLWAY                  |
| 1           | 2     | 2-ABV-D      | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>600VAC VALVE CONTROL CENTER ABV-D  | AUXILIARY   | 587.00     | 587 HALLWAY                  |
| 1           | 1     | 2-AM-A       | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>600VAC MOTOR CONTROL CENTER AM-A   | AUXILIARY   | 633.00     | 633 HALLWAY                  |
| 1           | 2     | 2-AM-D       | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>600VAC MOTOR CONTROL CENTER AM-D   | AUXILIARY   | 633.00     | 633 HALLWAY                  |
| 1           | 1     | 2-AZV-A      | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>600VAC VALVE CONTROL CENTER AZV-A  | AUXILIARY   | 609.00     | 609 HALLWAY                  |
| 1           | 1     | 2-EZC-A      | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>600VAC MOTOR CONTROL CENTER EZC-A  | AUXILIARY   | 613.00     | 4KV ROOM -<br>MEZZANINE AREA |
| 1           | 1     | 2-EZC-B      | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>600VAC MOTOR CONTROL CENTER EZC-B  | AUXILIARY   | 613.00     | 4KV ROOM -<br>MEZZANINE AREA |
| 1           | 2     | 2-EZC-C      | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>600VAC MOTOR CONTROL CENTER EZC-C  | AUXILIARY   | 613.00     | 4KV ROOM -<br>MEZZANINE AREA |
| 1           | 2     | 2-EZC-D      | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>600VAC MOTOR CONTROL CENTER EZC-D  | AUXILIARY   | 613.00     | 4KV ROOM -<br>MEZZANINE AREA |
| 1           | 1     | 2-PS-A       | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>600VAC MOTOR CONTROL CENTER PS-A   | SCREENHOUSE | 594.00     | TRAVEL SCRNM MCC<br>UPPER RM |
| 1           | 2     | 2-PS-D       | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>600VAC MOTOR CONTROL CENTER PS-D   | SCREENHOUSE | 594.00     | TRAVEL SCRNM MCC<br>UPPER RM |
| 2           | 1     | 2-21A        | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V<br>BUS 21A SWITCHGEAR  | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR<br>AREA   |
| 2           | 1     | 2-21A1       | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>REACTOR ROD CONTROL SOUTH MOTOR-<br>GENERATOR SET CRDMG-2S SUPPLY<br>BREAKER | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR<br>AREA   |
| 2           | 1     | 2-21A10      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / WEST<br>TURBINE AUXILIARY COOLING WATER<br>PUMP PP-14W SUPPLY BREAKER           | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR<br>AREA   |
| 2           | 1     | 2-21A11      | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>600VAC BUS 21A SUPPLY BREAKER  | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR<br>AREA   |
| 2           | 1     | 2-21A2       | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>600VAC MCC AM-A SUPPLY BREAKER   | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR<br>AREA   |
| 2           | 1     | 2-21A4       | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>SOUTH PLANT LIGHTING TRANSFORMER TR-<br>LTG-8S SUPPLY BREAKER                | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR<br>AREA   |
| 2           | 1     | 2-21A5       | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>600VAC MCC ABD-A SUPPLY BREAKER  | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR<br>AREA   |
| 2           | 1     | 2-21A6       | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>600VAC MCCS AB-A, PS-A, TPP-A, AND<br>VCCS ABV-A, AZV-A SUPPLY BREAKER       | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR<br>AREA   |
| 2           | 1     | 2-21A8       | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>600VAC BORIC ACID HEAT TRACE CONTROL<br>CENTER BHT-A SUPPLY BREAKER          | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR<br>AREA   |
| 2           | 1     | 2-21A9       | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>600VAC MCC EZC-A SUPPLY BREAKER  | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR<br>AREA   |
| 2           | 1     | 2-21AC       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V<br>BUS 21A TO 600V BUS 21C TIE BREAKER                                     | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR<br>AREA   |
| 2           | 1     | 2-21B        | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V<br>BUS 21B SWITCHGEAR  | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR<br>AREA   |
| 2           | 1     | 2-21B1       | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>600VAC MCC ABD-B SUPPLY BREAKER (2-<br>ELSC)                                 | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR<br>AREA   |
| 2           | 1     | 2-21B10      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / PLANT<br>AIR COMPRESSOR OME-41 SUPPLY<br>BREAKER                                | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR<br>AREA   |
| 2           | 1     | 2-21B11      | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>600VAC BUS 21B SUPPLY BREAKER  | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR<br>AREA   |
| 2           | 1     | 2-21B12      | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>SOUTH NON-ESSENTIAL SERVICE WATER<br>PUMP PP-8S SUPPLY BREAKER               | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR<br>AREA   |





**DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description   | Building  | Floor Elev | Room or Row Col                          |
|-------------|-------|--------------|--------|--|-----------|------------|--|
| 2           | 1     | 2-21B13      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / TURBINE ROOM INDUCTION HEATING, STRESS RELIEF AND BOLT HEATERS SUPPLY BREAKER          | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 1     | 2-21B2       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MCC EZC-B SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 1     | 2-21B3       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21B SPARE CIRCUIT BREAKER   | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 1     | 2-21B5       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V MOTOR CONTROL CENTERS T8G-BW AND T8P-8N SUPPLY BREAKER                            | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 1     | 2-21B6       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / EAST TURBINE AUXILIARY COOLING WATER PUMP PP-14E SUPPLY BREAKER                        | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21B0       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21B TO 600V BUS 21D TIE BREAKER   | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21C        | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21C SWITCHGEAR  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21C1       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21C SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21C10      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MCC ABD-C AND 2-AFW SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21C11      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21C SPARE CIRCUIT BREAKER   | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21C12      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / SOUTH SPENT FUEL PIT PUMP 12-PP-31S SUPPLY BREAKER                                     | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21C13      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / RECIPROCATING CHARGING PUMP PP-49 SUPPLY BREAKER                                       | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21C14      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / FIRE PROTECTION WATER HIGH DEMAND PUMP PP-11 SUPPLY BREAKER                            | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21C16      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER T8C-CN SUPPLY BREAKER                                      | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21C17      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / NORTH NON-ESSENTIAL SERVICE WATER PUMP PP-8N SUPPLY BREAKER                            | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21C18      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / MAIN TURBINE AUXILIARY LUBE OIL PUMP QT-201 SUPPLY BREAKER                             | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21C2       | 0      | CONTAINMENT POLAR CR / ELECTRICAL DISTRIBUTION   | AUXILIARY | 609.00     | AIR COOLED CIRCUIT BREAKER (METAL FRAME) |
| 2           | 2     | 2-21C3       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21C SPARE CIRCUIT BREAKER   | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21C4       | 0      | ELECTRICAL DISTRIBUTION 600VAC / CIRCULATING WATER TRAVELING SCREEN SOUTH WASH PUMP PP-15S SUPPLY BREAKER                | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21C6       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MCC EZC-C SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21C7       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21C SPARE CIRCUIT BREAKER   | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR AREA                |
| 2           | 2     | 2-21C8       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / PLANT AND CHMT STANDBY LIGHTING TRANSFORMER TR-LTG-8 SUPPLY BREAKER                    | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21C9       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / MAIN AND SPARE TRANSFORMER AUXILIARIES NORMAL DISTRIBUTION CABINET TCSN SUPPLY BREAKER | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21D        | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21D SWITCHGEAR  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21D1       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21D SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21D10      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / NORTH PLANT LIGHTING TRANSFORMER TR-LTG-9N SUPPLY BREAKER                              | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21D11      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BORIC ACID HEAT TRACE CONTROL CENTER BHT-D SUPPLY BREAKER                         | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21D13      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / REACTOR ROD CONTROL NORTH MOTOR-GENERATOR SET CRDMG-2N SUPPLY BREAKER                  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21D14      | 0      | 600VAC DISTRIBUTION / 600VAC MCC 2-AB-D, VCC 2-ABV-D, MCC 2-PS-D SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21D3       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / CONTAINMENT LIGHTING TRANSFORMER TR-LTG-10 SUPPLY BREAKER                              | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21D4       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21D SPARE CIRCUIT BREAKER   | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21D5       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MCC ABD-D SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21D6       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MCC EZC-D SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |

**DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description  | Building  | Floor Elev | Room or Row Col           |
|-------------|-------|--------------|--------|---|-----------|------------|---------------------------|
| 2           | 2     | 2-21D8       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MCC AM-D SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA   |
| 2           | 2     | 2-21D9       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / MAIN AND SPARE TRANSFORMER AUXILIARIES EMERGENCY DISTRIBUTION CABINET TCSE SUPPLY BREAKER | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA   |
| 2           | 2     | 2-52-BYA     | 0      | REACTOR TRIP BREAKER (ROD CONTROL & INST.) / REACTOR ROD CONTROL TR-A REACTOR TRIP BYPASS CIRCUIT BREAKER                   | AUXILIARY | 609.00     | CRD EQUIP RM              |
| 2           | 1     | 2-52-BYB     | 0      | REACTOR TRIP BREAKER (ROD CONTROL & INST.) / REACTOR ROD CONTROL TRAIN B REACTOR TRIP BYPASS CIRCUIT BREAKER                | AUXILIARY | 609.00     | CRD EQUIP RM              |
| 2           | 2     | 2-52-RTA     | 0      | ROD CONTROL AND INSTRUMENTATION / REACTOR ROD CONTROL TRAIN 'A' REACTOR TRIP CIRCUIT BREAKER                                | AUXILIARY | 609.00     | CRD EQUIP RM              |
| 2           | 1     | 2-52-RTB     | 0      | ROD CONTROL AND INSTRUMENTATION / REACTOR ROD CONTROL TRAIN 'B' REACTOR TRIP CIRCUIT BREAKER                                | AUXILIARY | 609.00     | CRD EQUIP RM              |
| 3           | 1     | 2-T21A       | 0      | 4KV ELECTRICAL DISTRIBUTION / 4KV BUS T21A SWITCHGEAR   | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR AREA |
| 3           | 1     | 2-T21A1      | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / SOUTH SAFETY INJECTION PUMP PP-26S SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR AREA |
| 3           | 1     | 2-T21A10     | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 600V BUS 21A SUPPLY TRANSFORMER TR21A SUPPLY BREAKER                                     | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR AREA |
| 3           | 1     | 2-T21A11     | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / AB EMERGENCY DIESEL GENERATOR TO 4KV BUS T21A SUPPLY BREAKER                             | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR AREA |
| 3           | 1     | 2-T21A12     | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / CIRCUIT BREAKER FROM 69KV TO BUS T21A  | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR AREA |
| 3           | 1     | 2-T21A2      | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / WEST MOTOR DRIVEN AUX FEEDWATER PUMP PP-3W SUPPLY BREAKER                                | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR AREA |
| 3           | 1     | 2-T21A3      | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC / WEST CONTAINMENT SPRAY PUMP PP-9W SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR AREA |
| 3           | 1     | 2-T21A4      | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / WEST RESIDUAL HEAT REMOVAL PUMP PP-33W SUPPLY BREAKER                                    | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR AREA |
| 3           | 1     | 2-T21A5      | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / WEST ESSENTIAL SERVICE WATER PUMP PP-7W SUPPLY BREAKER                                   | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR AREA |
| 3           | 1     | 2-T21A6      | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC / 4KV BUS T21A TO 480V PRESSURIZER HEATER BUS SUPPLY TRANSFORMER TR21PHA SUPPLY BREAKER   | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR AREA |
| 3           | 1     | 2-T21A7      | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / WEST COMPONENT COOLING WATER PUMP PP-10W SUPPLY BREAKER                                  | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR AREA |
| 3           | 1     | 2-T21A8      | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / WEST CENTRIFUGAL CHARGING PUMP PP-50W SUPPLY BREAKER                                     | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR AREA |
| 3           | 1     | 2-T21A9      | 0      | ELECTRICAL DISTRIBUTION 4160VAC / 4KV BUS 2A TO BUS T21A TIE BREAKER  | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR AREA |
| 3           | 1     | 2-T21B       | 0      | 4KV ELECTRICAL DISTRIBUTION / 4KV BUS T21A SWITCHGEAR   | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR AREA |
| 3           | 1     | 2-T21B1      | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 4KV BUS 2B TO 4KV BUS T21B TIE BREAKER   | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR AREA |
| 3           | 1     | 2-T21B2      | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / CIRCUIT BREAKER FROM 69KV BUS TO BUS T21B  | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR AREA |
| 3           | 1     | 2-T21B4      | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / AB EMERGENCY DIESEL GENERATOR TO 4KV BUS T21B SUPPLY BREAKER                             | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR AREA |
| 3           | 2     | 2-T21C       | 0      | 4KV ELECTRICAL DISTRIBUTION / 4KV BUS T21C SWITCHGEAR   | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR AREA |
| 3           | 2     | 2-T21C1      | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 4KV BUS 2C TO 4KV BUS T21C TIE BREAKER   | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR AREA |
| 3           | 2     | 2-T21C2      | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / CIRCUIT BREAKER - 4KV FROM 69KV TO BUS T21C  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA   |
| 3           | 2     | 2-T21C3      | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / CD EMERGENCY DIESEL GENERATOR TO 4KV BUS T21C SUPPLY BREAKER                             | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR AREA |
| 3           | 2     | 2-T21D       | 0      | 4KV ELECTRICAL DISTRIBUTION / 4KV BUS T21D SWITCHGEAR   | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR AREA |
| 3           | 2     | 2-T21D1      | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 4KV EMERGENCY POWER BUS EP TO 4KV BUS T21D SUPPLY BREAKER                                | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR AREA |
| 3           | 2     | 2-T21D10     | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / EAST ESSENTIAL SERVICE WATER PUMP PP-7E SUPPLY BREAKER                                   | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR AREA |
| 3           | 2     | 2-T21D11     | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP PP-3E SUPPLY BREAKER                          | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR AREA |
| 3           | 2     | 2-T21D12     | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 4KV BUS 2D TO 4KV BUS T21D TIE BREAKER   | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR AREA |



**DONALD C. COOK NUCLEAR PLANT UNIT # 2**  
**SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**  
**FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID   | Rev No | System / Equipment Description  | Building      | Floor Elev | Room or Row Col              |
|-------------|-------|----------------|--------|---|---------------|------------|------------------------------|
| 3           | 2     | 2-T21D2        | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 600V BUS 21D SUPPLY TRANSFORMER TR21D SUPPLY BREAKER                                   | AUXILIARY     | 609.00     | 4KV RM - CD 4KV SWGR AREA    |
| 3           | 2     | 2-T21D3        | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / EAST COMPONENT COOLING WATER PUMP PP-10E SUPPLY BREAKER                                | AUXILIARY     | 609.00     | 4KV RM - CD 4KV SWGR AREA    |
| 3           | 2     | 2-T21D4        | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC / EAST CONTAINMENT SPRAY PUMP PP-9E SUPPLY BREAKER                                      | AUXILIARY     | 609.00     | 4KV RM - CD 4KV SWGR AREA    |
| 3           | 2     | 2-T21D5        | 0      | ELECTRICAL DISTRIBUTION PANEL, 4160 VAC / NORTH SAFETY INJECTION PUMP PP-26N SUPPLY BREAKER                               | AUXILIARY     | 609.00     | 4KV RM - CD 4KV SWGR AREA    |
| 3           | 2     | 2-T21D6        | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / EAST RHR PUMP PP-35E SUPPLY BREAKER  | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR AREA      |
| 3           | 2     | 2-T21D7        | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / EAST CENTRIFUGAL CHARGING PUMP PP-50E SUPPLY BREAKER                                   | AUXILIARY     | 609.00     | 4KV RM - CD 4KV SWGR AREA    |
| 3           | 2     | 2-T21D8        | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / CD EMERGENCY DIESEL GENERATOR TO 4KV BUS T21D SUPPLY BREAKER                           | AUXILIARY     | 609.00     | 4KV RM - CD 4KV SWGR AREA    |
| 3           | 2     | 2-T21D9        | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC / 4KV BUS T21D TO 480V PRESSURIZER HEATER BUS SUPPLY TRANSFORMER TR21PHC SUPPLY BREAKER | AUXILIARY     | 609.00     | 4KV RM - CD 4KV SWGR AREA    |
| 4           | 2     | 2-CRID-I-CVT   | 0      | 120V CONTROL ROOM INSTRUMENTATION DISTRIBUTION / 10KVA TRANSFORMER - CONSTANT VOLTAGE                                     | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR AREA      |
| 4           | 2     | 2-CRID-II-CVT  | 0      | 120VAC DISTRIBUTION / 120V AC CR INST DISTR CH-II ISOL CONT VOLT TRANSFORMER  | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR AREA      |
| 4           | 1     | 2-CRID-III-CVT | 0      | 120V CONTROL ROOM INSTRUMENTATION DISTR / 10KVA ISOLIMETER - CONSTANT VOLTAGE - TRANSFORMER                               | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR AREA      |
| 4           | 1     | 2-CRID-IV-CVT  | 0      | 120V CONTROL ROOM INSTRUMENTATION DISTR / 10KVA ISOLIMETER - CONSTANT VOLTAGE - TRANSFORMER                               | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR AREA      |
| 4           | 1     | 2-DGAB-FFCKT   | 0      | DIESEL GENERATION, CONTROL AND INSTRUMENTATION / AB EMERGENCY DIESEL GENERATOR OME-150-AB FIELD FLASH CIRCUIT TRANSFORMER | AUXILIARY     | 587.00     | AB EMER DSL GEN RM           |
| 4           | 2     | 2-DGCD-FFCKT   | 0      | DIESEL GENERATION, CONTROL AND INSTRUMENTATION / CD EMERGENCY DIESEL GENERATOR OME-150-CD FIELD FLASH CKT TRANSFORMER     | AUXILIARY     | 587.00     | CD EMER DSL GEN RM           |
| 4           | 2     | 2-TR-AFW       | 0      | 120V/220 CONTROL AND INSTRUMENTATION / AUXILIARY FEEDWATER 120/208VAC DISTRIBUTION PANEL AFW SUPPLY TRANSFORMER           | AUXILIARY     | 587.00     | CD EMER DSL GEN RM           |
| 4           | 1     | 2-TR-ELSC      | 0      | 120V/220 CONTROL AND INSTRUMENTATION / 120/208VAC EMERGENCY LOCAL SHUTDOWN DISTRIBUTION TRANSFORMER                       | AUXILIARY     | 587.00     | AB EMER DSL GEN RM           |
| 4           | 1     | 2-TR21A        | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21A SUPPLY TRANSFORMER   | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR AREA      |
| 4           | 1     | 2-TR21B        | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21B SUPPLY TRANSFORMER   | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR AREA      |
| 4           | 2     | 2-TR21C        | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21C SUPPLY TRANSFORMER   | AUXILIARY     | 609.00     | 4KV RM - CD 4KV SWGR AREA    |
| 4           | 2     | 2-TR21D        | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21D SUPPLY TRANSFORMER   | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR AREA      |
| 5           | 12    | 12-PP-31S      | 0      | SPENT FUEL PIT COOLING/CLEANUP / SOUTH SPENT FUEL PIT PUMP  | U#2 AUXILIARY | 609.00     | SPENT FUEL PIT HEAT XCHGR RM |
| 5           | 2     | 2-PP-10E       | 0      | COMPONENT COOLING WATER / EAST COMPONENT COOLING WATER PUMP   | AUXILIARY     | 609.00     | 609 HALLWAY                  |
| 5           | 1     | 2-PP-10W       | 0      | COMPONENT COOLING WATER / WEST COMPONENT COOLING WATER PUMP   | AUXILIARY     | 609.00     | 609 HALLWAY                  |
| 5           | 2     | 2-PP-26N       | 0      | SAFETY INJECTION / NORTH SAFETY INJECTION PUMP  | AUXILIARY     | 587.00     | N SAFETY INJ PMP RM          |
| 5           | 1     | 2-PP-26S       | 0      | SAFETY INJECTION / SOUTH SAFETY INJECTION PUMP  | AUXILIARY     | 587.00     | S SAFETY INJ PMP RM          |
| 5           | 2     | 2-PP-3E        | 0      | AUXILIARY FEEDWATER / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP  | TURBINE       | 591.00     | E MTR DRIV AUX FEEDWTR PMP   |
| 5           | 1     | 2-PP-3W        | 0      | AUXILIARY FEEDWATER / WEST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP  | TURBINE       | 591.00     | W MTR DRIVEN AUX FEEDWTR PMP |
| 5           | 12    | 2-PP-4         | 0      | AUXILIARY FEEDWATER / TURBINE DRIVEN AUXILIARY FEED PUMP  | TURBINE       | 591.00     | TB DRIVEN AUX FEEDWTR PMP    |
| 5           | 2     | 2-PP-46-3      | 0      | BORON MAKEUP (CVCS) / BORIC ACID STORAGE TANKS TRANSFER PUMP #3   | AUXILIARY     | 587.00     | BORIC ACID STOR TANK AREA    |
| 5           | 1     | 2-PP-46-4      | 0      | BORON MAKEUP (CVCS) / BORIC ACID STORAGE TANKS TRANSFER PUMP #4   | AUXILIARY     | 587.00     | BORIC ACID STOR TANK AREA    |
| 5           | 12    | 2-PP-49        | 0      | CHARGING (CVCS) / RECIPROCATING CHARGING PUMP   | AUXILIARY     | 587.00     | RECIPROCATING CHARG PMP RM   |
| 5           | 2     | 2-PP-50E       | 0      | CHARGING (CVCS) / EAST CENTRIFUGAL CHARGING PUMP  | AUXILIARY     | 587.00     | E CENTRIFUGAL CHARG PMP ROOM |
| 5           | 1     | 2-PP-50W       | 0      | CHARGING (CVCS) / WEST CENTRIFUGAL CHARGING PUMP  | AUXILIARY     | 587.00     | W CENTRIFUGAL CHARG PMP RM   |
| 5           | 2     | 2-PP-82N       | 0      | CONTROL ROOM AIR CONDITIONING CHILL WATER / CONTROL ROOM AIR CONDITIONING NORTH CHILL WATER CIRCULATION PUMP              | AUXILIARY     | 650.00     | CTRL RM AIR CONDIT RM        |

**DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description  | Building    | Floor Elev | Room or Row Col               |
|-------------|-------|--------------|--------|---|-------------|------------|-------------------------------|
| 5           | 1     | 2-PP-82S     | 0      | CONTROL ROOM AIR CONDITIONING CHILL WATER / CONTROL ROOM AIR CONDITIONING SOUTH CHILL WATER CIRCULATION PUMP      | AUXILIARY   | 850.00     | CTRL RM AIR CONDIT RM         |
| 5           | 1     | 2-QT-106-AB1 | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL TRANSFER PUMP #1   | AUXILIARY   | 587.00     | AB EMER DSL FUEL OIL XFER PMP |
| 5           | 1     | 2-QT-106-AB2 | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL TRANSFER PUMP #2   | AUXILIARY   | 587.00     | AB EMER DSL FUEL OIL XFER PMP |
| 5           | 2     | 2-QT-106-CD1 | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL FUEL OIL TRANSFER PUMP #1   | AUXILIARY   | 587.00     | CD EMER DSL FUEL OIL XFER PMP |
| 5           | 2     | 2-QT-106-CD2 | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL FUEL OIL TRANSFER PUMP #2   | AUXILIARY   | 587.00     | CD EMER DSL FUEL OIL XFER PMP |
| 5           | 1     | 2-QT-111-AB  | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL LUBE OIL BEFORE AND AFTER PUMP  | AUXILIARY   | 579.00     | AB EMER DSL LUBE OIL PIT      |
| 5           | 2     | 2-QT-111-CD  | 0      | DIESEL LUBE OIL / CD EMERGENCY DIESEL LUBE OIL BEFORE AND AFTER PUMP  | AUXILIARY   | 579.00     | CD EMER DSL LUBE OIL PIT      |
| 5           | 1     | 2-QT-117-AB  | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL LUBE OIL HEATER QT-118-AB PUMP  | AUXILIARY   | 579.00     | AB EMER DSL LUBE OIL PIT      |
| 5           | 2     | 2-QT-117-CD  | 0      | DIESEL LUBE OIL / CD EMERGENCY DIESEL LUBE OIL HEATER QT-118-CD PUMP  | AUXILIARY   | 579.00     | CD EMER DSL LUBE OIL PIT      |
| 5           | 1     | 2-QT-119-AB  | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL BYPASS LUBE OIL FILTER QT-118-AB PUMP                                       | AUXILIARY   | 579.00     | AB EMER DSL LUBE OIL PIT      |
| 5           | 2     | 2-QT-119-CD  | 0      | DIESEL LUBE OIL / CD EMERGENCY DIESEL BYPASS LUBE OIL FILTER QT-118-CD PUMP                                       | AUXILIARY   | 579.00     | CD EMER DSL LUBE OIL PIT      |
| 5           | 1     | 2-QT-130-AB1 | 0      | DIESEL JACKET WATER / AB EMERGENCY DIESEL JACKET WATER PUMP #1  | AUXILIARY   | 587.00     | AB EMER DSL GEN RM            |
| 5           | 1     | 2-QT-130-AB2 | 0      | DIESEL JACKET WATER / AB EMERGENCY DIESEL JACKET WATER PUMP #2  | AUXILIARY   | 587.00     | AB EMER DSL GEN RM            |
| 5           | 2     | 2-QT-130-CD1 | 0      | DIESEL JACKET WATER / CD EMERGENCY DIESEL JACKET WATER PUMP 1   | AUXILIARY   | 587.00     | CD EMER DSL GEN RM            |
| 5           | 2     | 2-QT-130-CD2 | 0      | DIESEL JACKET WATER / CD EMERGENCY DIESEL JACKET WATER PUMP 2   | AUXILIARY   | 587.00     | CD EMER DSL GEN RM            |
| 5           | 1     | 2-QT-135-AB  | 0      | DIESEL JACKET WATER / AB EMERGENCY DIESEL AUXILIARY JACKET WATER PUMP   | AUXILIARY   | 587.00     | AB EMER DSL GEN RM            |
| 5           | 2     | 2-QT-135-CD  | 0      | DIESEL JACKET WATER / CD EMERGENCY DIESEL AUXILIARY JACKET WATER PUMP   | AUXILIARY   | 587.00     | CD EMER DSL GEN RM            |
| 6           | 2     | 2-PP-35E     | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL PUMP   | AUXILIARY   | 573.00     | EAST RHR PUMP RM              |
| 6           | 1     | 2-PP-35W     | 0      | RESIDUAL HEAT REMOVAL / WEST RESIDUAL HEAT REMOVAL PUMP   | AUXILIARY   | 573.00     | W RHR PMP RM                  |
| 6           | 2     | 2-PP-7E      | 0      | ESSENTIAL SERVICE WATER / EAST ESSENTIAL SERVICE WATER PUMP   | SCREENHOUSE | 591.00     | E SSNTL SERV WTR PMP RM       |
| 6           | 1     | 2-PP-7W      | 0      | ESSENTIAL SERVICE WATER / WEST ESSENTIAL SERVICE WATER PUMP   | SCREENHOUSE | 591.00     | W SSNTL SERV WTR PMP RM       |
| 6           | 2     | 2-PP-9E      | 0      | CONTAINMENT SPRAY / EAST CONTAINMENT SPRAY PUMP   | AUXILIARY   | 573.00     | E CONT SPRAY PMP RM           |
| 6           | 1     | 2-PP-9W      | 0      | CONTAINMENT SPRAY / WEST CONTAINMENT SPRAY PUMP   | AUXILIARY   | 573.00     | W CONT SPRAY PMP RM           |
| 7           |       | 2-CRV-410    | 0      | DEMNERIALIZED MAKEUP /  | AUXILIARY   | 850.00     |                               |
| 7           |       | 2-CRV-411    | 0      | DEMNERIALIZED MAKEUP /  | AUXILIARY   | 850.00     |                               |
| 7           | 2     | 2-DCR-301    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #1 BLOWDOWN SAMPLE DSR-301 CONTAINMENT ISOLATION VALVE                         | AUXILIARY   | 591.00     | VESTIBULE                     |
| 7           | 1     | 2-DCR-302    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #2 BLOWDOWN SAMPLE DSR-302 CONTAINMENT ISOLATION VALVE                         | AUXILIARY   | 591.00     | VESTIBULE                     |
| 7           | 1     | 2-DCR-303    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #3 BLOWDOWN SAMPLE DSR-303 CONTAINMENT ISOLATION VALVE                         | AUXILIARY   | 591.00     | VESTIBULE                     |
| 7           | 2     | 2-DCR-304    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #4 BLOWDOWN SAMPLE DSR-304 CONTAINMENT ISOLATION VALVE                         | AUXILIARY   | 591.00     | VESTIBULE                     |
| 7           | 2     | 2-DCR-310    | 0      | BLOWDOWN / STEAM GENERATOR OME-3-1 BLOWDOWN CONTAINMENT ISOLATION VALVE   | AUXILIARY   | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 7           | 1     | 2-DCR-320    | 0      | BLOWDOWN / STEAM GENERATOR OME-3-2 BLOWDOWN CONTAINMENT ISOLATION VALVE   | AUXILIARY   | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 7           | 1     | 2-DCR-330    | 0      | BLOWDOWN / STEAM GENERATOR OME-3-3 BLOWDOWN CONTAINMENT ISOLATION VALVE   | AUXILIARY   | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 7           | 2     | 2-DCR-340    | 0      | BLOWDOWN / STEAM GENERATOR OME-3-4 BLOWDOWN CONTAINMENT ISOLATION VALVE   | AUXILIARY   | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 7           | 12    | 2-DRV-407    | 0      | STEAM LINE DRAINS / MAIN STEAM LEADS CONDENSATION DRAIN TANK TK-150 OUTLET SHUTOFF VALVE                          | AUXILIARY   | 600.00     | MN STM LINES VERT PIPE CHASE  |
| 7           | 1     | 2-FRV-245    | 0      | AUXILIARY FEEDWATER / WEST MOTOR DRIVEN AUXILIARY FEED PUMP PP-3W 2 in AIR OPERATED TEST VALVE                    | TURBINE     | 591.00     | W MTR DRIVEN AUX FDWTR PMP    |
| 7           | 1     | 2-FRV-247    | 0      | AUXILIARY FEEDWATER / WEST MOTOR DRIVEN AUXILIARY FEED PUMP PP-3W EMERGENCY 1 in AIR OPERATED LEAKOFF GLOBE VALVE | TURBINE     | 591.00     | W MTR DRIVEN AUX FDWTR PMP    |
| 7           | 2     | 2-FRV-255    | 0      | AUXILIARY FEEDWATER / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP PP-3E 2 in AIR OPERATED TEST VALVE               | TURBINE     | 591.00     | E MTR DRIV AUX FEEDWTR PMP    |
| 7           | 12    | 2-FRV-256    | 0      | AUXILIARY FEEDWATER / TURBINE DRIVEN AUXILIARY FEED PUMP PP-4 2 in AIR OPERATED TEST VALVE                        | TURBINE     | 591.00     | TB DRIVEN AUX FDWTR PMP       |

**DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID  | Rev No | System / Equipment Description  | Building    | Floor Elev | Room or Row Col               |
|-------------|-------|---------------|--------|---|-------------|------------|-------------------------------|
| 7           | 2     | 2-FRV-257     | 0      | AUXILIARY FEEDWATER / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP PP-3E EMERGENCY 1 in AIR OPERATED LEAKOFF VALVE                    | TURBINE     | 591.00     | E MTR DRIV AUX FEEDWTR PMP    |
| 7           | 12    | 2-FRV-258     | 0      | AUXILIARY FEEDWATER / TURBINE DRIVEN AUXILIARY FEED PUMP EMERGENCY 1 in AIR OPERATED LEAKOFF GLOBE VALVE                            | TURBINE     | 591.00     | TB DRIVEN AUX FDWTR PMP       |
| 7           | 12    | 2-GCR-314     | 0      | NITROGEN (REACTOR PLANT SERVICE) / NITROGEN SUPPLY TO ACCUMULATOR TANKS CONTAINMENT ISOLATION VALVE                                 | AUXILIARY   | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 7           | 12    | 2-GRV-341     | 0      | NITROGEN (REACTOR PLANT SERVICE) / NITROGEN SUPPLY TO ACCUMULATOR TANKS VENT VALVE  | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 2           |
| 7           | 12    | 2-HV-SGR-MD-1 | 0      | AUXILIARY BUILDING VENTILATION / CONTROL ROD DRIVE EQUIPMENT ROOM AND INVERTER AREA VENTILATION RECIRCULATING AIR INLET DAMPER      | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR AREA       |
| 7           | 12    | 2-HV-SGR-MD-2 | 0      | AUXILIARY BUILDING VENTILATION / CONTROL ROD DRIVE EQUIPMENT ROOM AND INVERTER AREA VENTILATION OUTSIDE AIR INLET DAMPER            | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR AREA       |
| 7           | 2     | 2-IRV-112     | 0      | NITROGEN (REACTOR PLANT SERVICE) / ACCUMULATOR TANK OME-6-1 NITROGEN SUPPLY/VENT VALVE  | CONTAINMENT | 612.00     | ACCUMULATOR TANK #1 AREA      |
| 7           | 1     | 2-IRV-122     | 0      | NITROGEN (REACTOR PLANT SERVICE) / ACCUMULATOR TANK OME-6-2 NITROGEN SUPPLY/VENT VALVE  | CONTAINMENT | 612.00     | ACCUMULATOR TANK #2 AREA      |
| 7           | 12    | 2-IRV-132     | 0      | NITROGEN (REACTOR PLANT SERVICE) / ACCUMULATOR TANK OME-6-3 NITROGEN SUPPLY/VENT VALVE  | CONTAINMENT | 612.00     | ACCUMULATOR TANK #3 AREA      |
| 7           | 12    | 2-IRV-142     | 0      | NITROGEN (REACTOR PLANT SERVICE) / ACCUMULATOR TANK OME-6-4 NITROGEN SUPPLY/VENT VALVE  | CONTAINMENT | 612.00     | ACCUMULATOR TANK #4 AREA      |
| 7           | 1     | 2-IRV-149     | 0      | RESIDUAL HEAT REMOVAL / WEST RESIDUAL HEAT REMOVAL TO REACTOR COOLANT LOOPS #2 AND #3 0.75 in AIR OPERATED TEST (GLOBE) VALVE       | CONTAINMENT | 612.00     | HV-CEQ-2 FAN RM               |
| 7           | 2     | 2-IRV-150     | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL TO REACTOR COOLANT LOOPS #1 AND #4 0.75 in AIR OPERATED TEST VALVE               | CONTAINMENT | 612.00     | HV-CEQ-2 FAN RM               |
| 7           | 2     | 2-IRV-156     | 0      | RESIDUAL HEAT REMOVAL / ACCUMULATOR TANK OME-6-1 0.75 in AIR OPERATED OUTLET AND SAFETY INJECTION TO RC LOOP #1 COLD LEG TEST VALVE | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 1           |
| 7           | 1     | 2-IRV-157     | 0      | RESIDUAL HEAT REMOVAL / WEST RHR AND SAFETY INJECTION TO REACTOR COOLANT LOOPS #2 AND #3 0.75 in AIR OPERATED TEST VALVE            | CONTAINMENT | 612.00     | HV-CEQ-2 FAN RM               |
| 7           | 2     | 2-IRV-158     | 0      | RESIDUAL HEAT REMOVAL / EAST RHR AND NORTH SAFETY INJECTION TO REACTOR COOLANT PUMPS #1 AND #4 0.75 in AIR OPERATED TEST VALVE      | CONTAINMENT | 612.00     | HV-CEQ-2 FAN RM               |
| 7           | 1     | 2-IRV-166     | 0      | RESIDUAL HEAT REMOVAL / ACCUMULATOR TANK OME-6-2 0.75 in AIR OPERATED OUTLET AND SAFETY INJECTION TO RC LOOP #2 COLD LEG TEST VALVE | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 2           |
| 7           | 2     | 2-IRV-176     | 0      | RESIDUAL HEAT REMOVAL / ACCUMULATOR TANK OME-6-3 0.75 in AIR OPERATED OUTLET AND SAFETY INJECTION TO RC LOOP #3 COLD LEG TEST VALVE | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 3           |
| 7           | 1     | 2-IRV-186     | 0      | RESIDUAL HEAT REMOVAL / ACCUMULATOR TANK OME-6-4 1 in AIR OPERATED OUTLET AND SAFETY INJECTION TO RC LOOP #4 COLD LEG TEST VALVE    | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 4           |
| 7           | 12    | 2-IRV-280     | 0      | SAFETY INJECTION / SAFETY INJECTION TEST LINE SHUTOFF VALVE   | AUXILIARY   | 587.00     | S SAFETY INJ PMP RM           |
| 7           | 2     | 2-IRV-310     | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17E 8 in AIR OPERATED OUTLET FLOW CONTROL VALVE                | AUXILIARY   | 609.00     | E RHR HEAT XCHGR RM           |
| 7           | 12    | 2-IRV-311     | 0      | RESIDUAL HEAT REMOVAL / RESIDUAL HEAT REMOVAL HEAT EXCHANGERS BYPASS FLOW 8 in AIR OPERATED CONTROL VALVE                           | AUXILIARY   | 609.00     | E RHR HEAT XCHGR RM           |
| 7           | 1     | 2-IRV-320     | 0      | RESIDUAL HEAT REMOVAL / WEST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17W 8 in AIR OPERATED OUTLET FLOW CONTROL VALVE                | AUXILIARY   | 609.00     | W RHR HEAT XCHGR RM           |
| 7           | 12    | 2-IRV-50      | 0      | BORON INJECTION / BORON INJECTION TO ACCUMULATOR FILL LINE CONTROL VALVE  | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 2           |
| 7           | 12    | 2-IRV-60      | 0      | SAFETY INJECTION / SAFETY INJECTION TO ACCUMULATOR FILL LINE CONTROL VALVE  | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 2           |
| 7           | 2     | 2-MCR-251     | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #1 STEAM SAMPLE MSX-101 CONTAINMENT ISOLATION VALVE  | AUXILIARY   | 591.00     | VESTIBULE                     |
| 7           | 1     | 2-MCR-252     | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #2 STEAM SAMPLE MSX-102 CONTAINMENT ISOLATION VALVE  | AUXILIARY   | 591.00     | VESTIBULE                     |

**DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description  | Building    | Floor Elev | Room or Row Col            |
|-------------|-------|--------------|--------|---|-------------|------------|----------------------------|
| 7           | 1     | 2-MCR-253    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #3 STEAM SAMPLE MSX-103 CONTAINMENT ISOLATION VALVE  | AUXILIARY   | 591.00     | VESTIBULE                  |
| 7           | 2     | 2-MCR-254    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #4 STEAM SAMPLE MSX-104 CONTAINMENT ISOLATION VALVE  | AUXILIARY   | 591.00     | VESTIBULE                  |
| 7           | 2     | 2-MRV-151    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #1 STEAM SAMPLE MSX-101 SAMPLE SHUTOFF VALVE   | CONTAINMENT | 612.00     | E CONT LOWER VENT RM       |
| 7           | 1     | 2-MRV-152    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #2 STEAM SAMPLE MSX-102 SAMPLE SHUTOFF VALVE   | CONTAINMENT | 612.00     | W CONT LOWER VENT RM       |
| 7           | 1     | 2-MRV-153    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #3 STEAM SAMPLE MSX-103 SAMPLE SHUTOFF VALVE   | CONTAINMENT | 612.00     | W CONT LOWER VENT RM       |
| 7           | 2     | 2-MRV-154    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #4 STEAM SAMPLE MSX-104 SAMPLE SHUTOFF VALVE   | CONTAINMENT | 612.00     | E CONT LOWER VENT RM       |
| 7           | 2     | 2-MRV-211    | 0      | MAIN STEAM / STEAM GENERATOR #1 STOP VALVE MRV-210 STEAM CYLINDER TRAIN 'A' DUMP VALVE  | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL       |
| 7           | 2     | 2-MRV-212    | 0      | MAIN STEAM / STEAM GENERATOR #1 STOP VALVE MRV-210 STEAM CYLINDER TRAIN 'B' DUMP VALVE  | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL       |
| 7           | 2     | 2-MRV-213    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 POWER OPERATED RELIEF VALVE  | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL       |
| 7           | 1     | 2-MRV-221    | 0      | MAIN STEAM / STEAM GENERATOR #2 STOP VALVE MRV-220 STEAM CYLINDER TRAIN 'A' DUMP VALVE  | AUXILIARY   | 633.00     | W MN STM STOP ENCL         |
| 7           | 1     | 2-MRV-222    | 0      | MAIN STEAM / STEAM GENERATOR #2 STOP VALVE MRV-220 STEAM CYLINDER TRAIN 'B' DUMP VALVE  | AUXILIARY   | 633.00     | W MN STM STOP ENCL         |
| 7           | 1     | 2-MRV-223    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2 POWER OPERATED RELIEF VALVE  | AUXILIARY   | 633.00     | W MN STM STOP ENCL         |
| 7           | 1     | 2-MRV-231    | 0      | MAIN STEAM / STEAM GENERATOR #3 STOP VALVE MRV-230 STEAM CYLINDER TRAIN 'A' DUMP VALVE  | AUXILIARY   | 633.00     | W MN STM STOP ENCL         |
| 7           | 1     | 2-MRV-232    | 0      | MAIN STEAM / STEAM GENERATOR #3 STOP VALVE MRV-230 STEAM CYLINDER TRAIN 'B' DUMP VALVE  | AUXILIARY   | 633.00     | W MN STM STOP ENCL         |
| 7           | 1     | 2-MRV-233    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3 POWER OPERATED RELIEF VALVE  | AUXILIARY   | 633.00     | W MN STM STOP ENCL         |
| 7           | 2     | 2-MRV-241    | 0      | MAIN STEAM / STEAM GENERATOR #4 STOP VALVE MRV-240 STEAM CYLINDER TRAIN 'A' DUMP VALVE  | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL       |
| 7           | 2     | 2-MRV-242    | 0      | MAIN STEAM / STEAM GENERATOR #4 STOP VALVE MRV-240 STEAM CYLINDER TRAIN 'B' DUMP VALVE  | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL       |
| 7           | 2     | 2-MRV-243    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 POWER OPERATED RELIEF VALVE  | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL       |
| 7           | 2     | 2-NRV-101    | 0      | NUCLEAR SAMPLING / REACTOR COOLANT LOOP #1 HOT LEG SAMPLE NSX-101 SHUTOFF VALVE   | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 1        |
| 7           | 12    | 2-NRV-102    | 0      | NUCLEAR SAMPLING / PRESSURIZER LIQUID SPACE SAMPLE NSX-102 SHUTOFF VALVE  | CONTAINMENT | 612.00     | INSTRUMENTATION RM         |
| 7           | 1     | 2-NRV-103    | 0      | NUCLEAR SAMPLING / REACTOR COOLANT LOOP #3 HOT LEG SAMPLE NSX-103 SHUTOFF VALVE   | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 3        |
| 7           | 12    | 2-NRV-104    | 0      | NUCLEAR SAMPLING / PRESSURIZER STEAM SPACE SAMPLE NSX-104 SHUTOFF VALVE   | CONTAINMENT | 612.00     | INSTRUMENTATION RM         |
| 7           | 1     | 2-NRV-151    | 0      | PRESSURIZER / PRESSURIZER TRAIN 'B' PRESSURE RELIEF VALVE   | CONTAINMENT | 650.00     | PRESSURIZER ENCL, INTERIOR |
| 7           | 1     | 2-NRV-152    | 0      | PRESSURIZER / PRESSURIZER TRAIN 'B' PRESSURE RELIEF VALVE   | CONTAINMENT | 650.00     | PRESSURIZER ENCL, INTERIOR |
| 7           | 2     | 2-NRV-153    | 0      | PRESSURIZER / PRESSURIZER OME-4 TRAIN 'A' PRESSURE RELIEF VALVE   | CONTAINMENT | 650.00     | PRESSURIZER ENCL, INTERIOR |
| 7           | 1     | 2-NRV-163    | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP #3 TO PRESSURIZER SPRAY CONTROL 4 IN AIR OPERATED GLOBE VALVE  | CONTAINMENT | 612.00     | LOWER CONT, QUAD NO. 3     |
| 7           | 2     | 2-NRV-164    | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP #4 TO PRESSURIZER SPRAY CONTROL 4 IN AIR OPERATED GLOBE VALVE  | CONTAINMENT | 612.00     | LOWER CONT, QUAD NO. 3     |
| 7           | 12    | 2-QRV-10     | 0      | REACTOR COOLANT PUMP SEAL WATER IN/LEAKOFF / REACTOR COOLANT PUMP #1 SEAL #1 LEAKOFF TO RCP SEAL WATER RETURN FILTER QC-109 2 IN AIR OPERATED SHUTOFF VALVE | CONTAINMENT | 617.00     | LOWER CONT, QUAD NO. 1     |
| 7           | 2     | 2-QRV-111    | 0      | LETDOWN (CVCS) / REACTOR COOLANT NORMAL LETDOWN TRAIN 'A' SHUTOFF VALVE   | CONTAINMENT | 612.00     | LOWER CONT, QUAD NO. 4     |
| 7           | 2     | 2-QRV-112    | 0      | LETDOWN (CVCS) / REACTOR COOLANT NORMAL LETDOWN TRAIN 'B' SHUTOFF VALVE   | CONTAINMENT | 612.00     | LOWER CONT, QUAD NO. 4     |
| 7           | 1     | 2-QRV-113    | 0      | LETDOWN (CVCS) / REACTOR COOLANT EXCESS LETDOWN TO EXCESS LETDOWN HEAT EXCHANGER HE-13 1 IN AIR OPERATED TRAIN 'B' SHUTOFF VALVE                            | CONTAINMENT | 612.00     | LOWER CONT, QUAD NO. 4     |

**DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description  | Building    | Floor Elev | Room or Row Col                 |
|-------------|-------|--------------|--------|---|-------------|------------|---------------------------------|
| 7           | 2     | 2-QRV-114    | 0      | LETDOWN (CVCS) / REACTOR COOLANT EXCESS LETDOWN TO EXCESS LETDOWN HEAT EXCHANGER HE-13 1 IN AIR OPERATED TRAIN 'A' SHUTOFF VALVE                                    | CONTAINMENT | 612.00     | LOWER CONT, QUAD NO. 4          |
| 7           | 12    | 2-QRV-150    | 0      | REACTOR COOLANT PUMP SEAL WATER IN/LEAKOFF / REACTOR COOLANT PUMPS STARTUP SEAL SYSTEM BYPASS TO SEAL WATER RETURN FILTER QC-109 0.75 IN AIR OPERATED SHUTOFF VALVE | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 2             |
| 7           | 12    | 2-QRV-170    | 0      | LETDOWN (CVCS) / EXCESS LETDOWN HEAT EXCHANGER HE-13 1 IN AIR OPERATED OUTLET PRESSURE CONTROL VALVE  | CONTAINMENT | 612.00     | REGEN HEAT XCHGR RM             |
| 7           | 12    | 2-QRV-171    | 0      | LETDOWN (CVCS) / EXCESS LETDOWN HEAT EXCHANGER HE-13 1 IN AIR OPERATED OUTLET DIVERSION VALVE   | CONTAINMENT | 612.00     | REGEN HEAT XCHGR RM             |
| 7           | 12    | 2-QRV-20     | 0      | REACTOR COOLANT PUMP SEAL WATER IN/LEAKOFF / REACTOR COOLANT PUMP #2 SEAL #1 LEAKOFF TO RCP SEAL WATER RETURN FILTER QC-109 2 IN AIR OPERATED SHUTOFF GLOBE VALVE   | CONTAINMENT | 625.00     | LOWER CONT, QUAD NO. 2          |
| 7           | 12    | 2-QRV-251    | 0      | CHARGING (CVCS) / CVCS CENTRIFUGAL CHARGING PUMPS DISCHARGE FLOW 3 IN AIR OPERATED CONTROL GLOBE VALVE  | AUXILIARY   | 587.00     | RECIPROCATING CHARG PMP RM      |
| 7           | 12    | 2-QRV-30     | 0      | REACTOR COOLANT PUMP SEAL WATER IN/LEAKOFF / REACTOR COOLANT PUMP #3 SEAL #1 LEAKOFF TO RCP SEAL WATER RETURN FILTER QC-109 2 IN AIR OPERATED SHUTOFF GLOBE VALVE   | CONTAINMENT | 612.00     | LOWER CONT, QUAD NO. 3          |
| 7           | 12    | 2-QRV-40     | 0      | REACTOR COOLANT PUMP SEAL WATER IN/LEAKOFF / REACTOR COOLANT PUMP #4 SEAL #1 LEAKOFF TO RCP SEAL WATER RETURN FILTER QC-109 2 IN AIR OPERATED SHUTOFF GLOBE VALVE   | CONTAINMENT | 612.00     | LOWER CONT, QUAD NO. 4          |
| 7           | 12    | 2-QRV-400    | 0      | BORON MAKEUP (CVCS) / SOUTH BORIC ACID BLENDER OP-21 2 IN AIR OPERATED TO CVCS CHARGING PUMPS SUCTION SHUTOFF VALVE   | AUXILIARY   | 609.00     | VOL CTRL TANK E HALLWAY         |
| 7           | 12    | 2-QRV-421    | 0      | BORON MAKEUP (CVCS) / SOUTH BORIC ACID FILTER TO CVCS CHARGING PUMPS AND SOUTH BORIC ACID BLENDER 1 IN AIR OPERATED FLOW CONTROL GLOBE VALVE                        | AUXILIARY   | 587.00     | BORIC ACID STOR TANK AREA       |
| 7           | 12    | 2-QRV-430    | 0      | BORON MAKEUP (CVCS) / SOUTH BORIC ACID STORAGE TANK TK-12S 2 IN AIR OPERATED INLET FLOW CONTROL GLOBE VALVE   | AUXILIARY   | 587.00     | BORIC ACID STOR TANK AREA       |
| 7           | 12    | 2-QRV-451    | 0      | BORON MAKEUP (CVCS) / SOUTH BORIC ACID BLENDER OP-21 TO REACTOR COOLANT LETDOWN VOLUME CONTROL TANK SHUTOFF VALVE   | AUXILIARY   | 609.00     | VOL CTRL TANK E HALLWAY         |
| 7           | 12    | 2-SV-101     | 0      | NITROGEN (REACTOR PLANT SERVICE) / NITROGEN SUPPLY HEADER TO ACCUMULATOR TANKS SAFETY VALVE   | AUXILIARY   | 591.00     | STARTUP BLOWDOWN FLASHTANK RM   |
| 7           | 12    | 2-SV-102     | 0      | RESIDUAL HEAT REMOVAL / RESIDUAL HEAT REMOVAL TO REACTOR COOLANT LOOPS #2 & #3 COLD LEGS SAFETY VALVE   | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 2             |
| 7           | 12    | 2-SV-103     | 0      | RESIDUAL HEAT REMOVAL / REACTOR COOLANT LOOP #2 HOT LEG TO RESIDUAL HEAT REMOVAL PUMPS SAFETY VALVE   | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 2             |
| 7           | 2     | 2-SV-104E    | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17E OUTLET SAFETY VALVE  | AUXILIARY   | 609.00     | E RHR HEAT XCHGR RM             |
| 7           | 1     | 2-SV-104W    | 0      | RESIDUAL HEAT REMOVAL / WEST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17W OUTLET SAFETY VALVE  | AUXILIARY   | 609.00     | W RHR HEAT XCHGR RM             |
| 7           | 1     | 2-SV-120-AB  | 0      | DIESEL STARTING AIR / 2-XTC-301 & 2-XTC-302 CONTROL AIR SAFETY VALVE  | AUXILIARY   | 587.00     | AB EMER DSL GEN RM              |
| 7           | 2     | 2-SV-120-CD  | 0      | DIESEL STARTING AIR / 2-XTC-308 AND 2-XTC-307 CONTROL AIR SAFETY VALVE  | AUXILIARY   | 587.00     | CD EMER DSL GEN RM              |
| 7           | 12    | 2-SV-121     | 0      | COMPONENT COOLING WATER / 2-DRA-300 SAMPLE HEAT EXCHANGERS CCW RETURN HEADER SAFETY VALVE   | AUXILIARY   | 591.00     | STARTUP BLOWDOWN FLASHTANK ROOM |
| 7           | 12    | 2-SV-122-23  | 0      | CCW / REACTOR SUPPORT COOLERS CCW RETURN HEADER SAFETY VALVE  | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 3             |
| 7           | 1     | 2-SV-122-3   | 0      | CCW / CCW TO CONT VENTILATION FAN HV-CEQ-2 MOTOR AIR COOLER CCW OUTLET SAFETY VALVE   | CONTAINMENT | 625.00     | HV-CEQ-2 FAN RM                 |
| 7           | 2     | 2-SV-122-4   | 0      | CCW / CONTAINMENT VENT FAN HV-CEQ-1 MOTOR AIR COOLER CCW OUTLET SAFETY VALVE  | CONTAINMENT | 625.00     | HV-CEQ-1 FAN RM                 |
| 7           | 1     | 2-SV-139-AB  | 0      | DIESEL STARTING AIR / AB EMERGENCY DIESEL STARTING AIR TO TURBOCHARGER SAFETY VALVE   | AUXILIARY   | 587.00     | AB EMER DSL GEN RM              |
| 7           | 2     | 2-SV-139-CD  | 0      | DIESEL STARTING AIR / CD EMERGENCY DIESEL STARTING AIR TO TURBOCHARGER SAFETY VALVE   | AUXILIARY   | 587.00     | CD EMER DSL GEN RM              |
| 7           | 12    | 2-SV-140-1   | 0      | AUXILIARY FEEDWATER / TURBINE DRIVEN AUX FEED PUMP GOVERNOR OIL COOLER COOLING WATER INLET SAFETY VALVE   | TURBINE     | 591.00     | TB DRIVEN AUX FDWTR PMP         |



**DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description   | Building  | Floor Elev | Room or Row Col               |
|-------------|-------|--------------|--------|--|-----------|------------|-------------------------------|
| 7           | 12    | 2-SV-140-2   | 0      | AUXILIARY FEEDWATER / TURBINE DRIVEN<br>AUX FEED PUMP OIL COOLER COOLING<br>WATER INLET SAFETY VALVE                             | TURBINE   | 591.00     | TB DRIVEN AUX<br>FDWTR PMP    |
| 7           | 2     | 2-SV-14E     | 0      | ESSENTIAL SERVICE WATER / EAST<br>CONTAINMENT SPRAY HEAT EXCHANGER<br>HE-18E SHELL SIDE SAFETY VALVE                             | AUXILIARY | 609.00     | E CONT SPRAY HEAT<br>XCHGR RM |
| 7           | 1     | 2-SV-14W     | 0      | ESSENTIAL SERVICE WATER / WEST<br>CONTAINMENT SPRAY HEAT EXCHANGER<br>HE-18W SHELL SIDE SAFETY VALVE                             | AUXILIARY | 609.00     | W CONT SPRAY<br>HEAT XCHGR RM |
| 7           | 2     | 2-SV-15E     | 0      | ESSENTIAL SERVICE WATER / EAST<br>COMPONENT COOLING WATER HEAT<br>EXCHANGER HE-15E TUBE SIDE SAFETY<br>VALVE                     | AUXILIARY | 609.00     | 609 HALLWAY                   |
| 7           | 1     | 2-SV-15W     | 0      | ESSENTIAL SERVICE WATER / WEST<br>COMPONENT COOLING WATER HEAT<br>EXCHANGER HE-15W TUBE SIDE SAFETY<br>VALVE                     | AUXILIARY | 609.00     | 609 HALLWAY                   |
| 7           | 1     | 2-SV-16-AB   | 0      | ESSENTIAL SERVICE WATER / AB<br>EMERGENCY DIESEL JACKET WATER<br>COOLER QT-131-AB ESSENTIAL SERVICE<br>WATER OUTLET SAFETY VALVE | AUXILIARY | 587.00     | AB EMER DSL GEN<br>RM         |
| 7           | 2     | 2-SV-16-CD   | 0      | ESSENTIAL SERVICE WATER / CD<br>EMERGENCY DIESEL JACKET WATER<br>COOLER QT-131-CD ESSENTIAL SERVICE<br>WATER OUTLET SAFETY VALVE | AUXILIARY | 587.00     | CD EMER DSL GEN<br>RM         |
| 7           | 12    | 2-SV-166     | 0      | CCW / POST-ACCIDENT SAMPLE HEAT<br>EXCHANGER CCW RETURN HEADER<br>SAFETY VALVE   | AUXILIARY | 587.00     | NUCLEAR SAMPLING<br>RM        |
| 7           | 2     | 2-SV-169E    | 0      | AUXILIARY FEEDWATER / EAST MOTOR<br>DRIVEN AUXILIARY FEEDWATER PUMP PP-<br>3E SUCTION SAFETY VALVE                               | TURBINE   | 591.00     | E MTR DRIV AUX<br>FEEDWTR PMP |
| 7           | 1     | 2-SV-169W    | 0      | AUXILIARY FEEDWATER / WEST MOTOR<br>DRIVEN AUXILIARY FEED PUMP PP-3W<br>SUCTION SAFETY VALVE                                     | TURBINE   | 591.00     | W MTR DRIVEN AUX<br>FDWTR PMP |
| 7           | 2     | 2-SV-1A-1    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1<br>SAFETY VALVE 1A  | AUXILIARY | 633.00     | E MAIN STM STOP<br>ENCL       |
| 7           | 1     | 2-SV-1A-2    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2<br>SAFETY VALVE 1A  | AUXILIARY | 633.00     | W MN STM STOP<br>ENCL         |
| 7           | 1     | 2-SV-1A-3    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3<br>SAFETY VALVE 1A  | AUXILIARY | 633.00     | W MN STM STOP<br>ENCL         |
| 7           | 2     | 2-SV-1A-4    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4<br>SAFETY VALVE 1A  | AUXILIARY | 633.00     | E MAIN STM STOP<br>ENCL       |
| 7           | 2     | 2-SV-1B-1    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1<br>SAFETY VALVE 1B  | AUXILIARY | 633.00     | E MAIN STM STOP<br>ENCL       |
| 7           | 1     | 2-SV-1B-2    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2<br>SAFETY VALVE 1B  | AUXILIARY | 633.00     | W MN STM STOP<br>ENCL         |
| 7           | 1     | 2-SV-1B-3    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3<br>SAFETY VALVE 1B  | AUXILIARY | 633.00     | W MN STM STOP<br>ENCL         |
| 7           | 2     | 2-SV-1B-4    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4<br>SAFETY VALVE 1B  | AUXILIARY | 633.00     | E MAIN STM STOP<br>ENCL       |
| 7           | 1     | 2-SV-200-AB  | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL<br>FUEL OIL MANIFOLDS TO FUEL OIL DAY<br>TANK SAFETY VALVE                                 | AUXILIARY | 587.00     | AB EMER DSL GEN<br>RM         |
| 7           | 2     | 2-SV-200-CD  | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL<br>FUEL OIL MANIFOLDS TO FUEL OIL DAY<br>TANK SAFETY VALVE                                 | AUXILIARY | 587.00     | CD EMER DSL GEN<br>RM         |
| 7           | 1     | 2-SV-201-AB1 | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL<br>FRONT BANK FUEL OIL MANIFOLD SAFETY<br>VALVE  | AUXILIARY | 587.00     | AB EMER DSL GEN<br>RM         |
| 7           | 1     | 2-SV-201-AB2 | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL<br>REAR BANK FUEL OIL MANIFOLD SAFETY<br>VALVE   | AUXILIARY | 587.00     | AB EMER DSL GEN<br>RM         |
| 7           | 2     | 2-SV-201-CD1 | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL<br>FRONT BANK FUEL OIL MANIFOLD SAFETY<br>VALVE  | AUXILIARY | 587.00     | CD EMER DSL GEN<br>RM         |
| 7           | 2     | 2-SV-201-CD2 | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL<br>REAR BANK FUEL OIL MANIFOLD SAFETY<br>VALVE   | AUXILIARY | 587.00     | CD EMER DSL GEN<br>RM         |
| 7           | 2     | 2-SV-2A-1    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1<br>SAFETY VALVE 2A  | AUXILIARY | 633.00     | E MAIN STM STOP<br>ENCL       |
| 7           | 1     | 2-SV-2A-2    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2<br>SAFETY VALVE 2A  | AUXILIARY | 633.00     | W MN STM STOP<br>ENCL         |
| 7           | 1     | 2-SV-2A-3    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3<br>SAFETY VALVE 2A  | AUXILIARY | 633.00     | W MN STM STOP<br>ENCL         |
| 7           | 2     | 2-SV-2A-4    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4<br>SAFETY VALVE 2A  | AUXILIARY | 633.00     | E MAIN STM STOP<br>ENCL       |
| 7           | 2     | 2-SV-2B-1    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1<br>SAFETY VALVE 2B  | AUXILIARY | 633.00     | E MAIN STM STOP<br>ENCL       |
| 7           | 1     | 2-SV-2B-2    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2<br>SAFETY VALVE 2B  | AUXILIARY | 633.00     | W MN STM STOP<br>ENCL         |
| 7           | 1     | 2-SV-2B-3    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3<br>SAFETY VALVE 2B  | AUXILIARY | 633.00     | W MN STM STOP<br>ENCL         |
| 7           | 2     | 2-SV-2B-4    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4<br>SAFETY VALVE 2B  | AUXILIARY | 633.00     | E MAIN STM STOP<br>ENCL       |
| 7           | 2     | 2-SV-3-1     | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1<br>SAFETY VALVE #3  | AUXILIARY | 633.00     | E MAIN STM STOP<br>ENCL       |
| 7           | 1     | 2-SV-3-2     | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2<br>SAFETY VALVE #3  | AUXILIARY | 633.00     | W MN STM STOP<br>ENCL         |
| 7           | 1     | 2-SV-3-3     | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3<br>SAFETY VALVE #3  | AUXILIARY | 633.00     | W MN STM STOP<br>ENCL         |



**DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description   | Building    | Floor Elev | Room or Row Col                |
|-------------|-------|--------------|--------|--|-------------|------------|--------------------------------|
| 7           | 2     | 2-SV-3-4     | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 SAFETY VALVE #3   | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL           |
| 7           | 12    | 2-SV-45A     | 0      | PRESSURIZER / PRESSURIZER OME-4 SAFETY VALVE 'A'   | CONTAINMENT | 650.00     | PRESSURIZER ENCL, INTERIOR     |
| 7           | 12    | 2-SV-45B     | 0      | PRESSURIZER / PRESSURIZER OME-4 SAFETY VALVE 'B'   | CONTAINMENT | 650.00     | PRESSURIZER ENCL, INTERIOR     |
| 7           | 12    | 2-SV-45C     | 0      | PRESSURIZER / PRESSURIZER OME-4 SAFETY VALVE 'C'   | CONTAINMENT | 650.00     | PRESSURIZER ENCL, INTERIOR     |
| 7           | 12    | 2-SV-50      | 0      | REACTOR COOLANT PUMP SEAL WATER IN/LEAKOFF / RC PUMPS SEAL #1 AND STARTUP SEAL SYSTEM BYPASS TO SEAL WATER RETURN FILTERS SAFETY VALVE | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 3            |
| 7           | 12    | 2-SV-51      | 0      | LETDOWN (CVCS) / REGENERATIVE HEAT EXCHANGER HE-12 LETDOWN OUTLET SAFETY VALVE   | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 4            |
| 7           | 12    | 2-SV-54      | 0      | REACTOR COOLANT PUMP SEAL WATER IN/LEAKOFF / REACTOR COOLANT PUMP SEAL WATER HEAT EXCHANGER HE-11 SAFETY VALVE                         | AUXILIARY   | 609.00     | SEAL WTR HEAT XCHGR RM         |
| 7           | 12    | 2-SV-56      | 0      | LETDOWN (CVCS) / CVCS CHARGING PUMPS SUCTION HEADER SAFETY VALVE   | AUXILIARY   | 587.00     | RECIPROCATING CHARG PMP RM     |
| 7           | 12    | 2-SV-60      | 0      | COMPONENT COOLING WATER / COMPONENT COOLING WATER SURGE TANK TK-37 SAFETY VALVE  | AUXILIARY   | 650.00     | 650 HALLWAY                    |
| 7           | 1     | 2-SV-61-AB   | 0      | DIESEL JACKET WATER / AB EMERGENCY DIESEL AUXILIARY JACKET WATER HEATER QT-134-AB SAFETY VALVE   | AUXILIARY   | 587.00     | AB EMER DSL GEN RM             |
| 7           | 2     | 2-SV-61-CD   | 0      | DIESEL JACKET WATER / CD EMERGENCY DIESEL AUXILIARY JACKET WATER HEATER QT-134-CD SAFETY VALVE   | AUXILIARY   | 587.00     | CD EMER DSL GEN RM             |
| 7           | 12    | 2-SV-62-1    | 0      | CCW / REACTOR COOLANT PUMP PP-45-1 THERMAL BARRIER CCW OUTLET SAFETY VALVE   | CONTAINMENT | 617.00     | LOWER CONT, QUAD 1 AZ 48       |
| 7           | 12    | 2-SV-62-2    | 0      | CCW / REACTOR COOLANT PUMPS PP-45-2 THERMAL BARRIER CCW OUTLET SAFETY VALV   | CONTAINMENT | 617.00     | LOWER CONT, QUAD NO. 2, AZ 132 |
| 7           | 12    | 2-SV-62-3    | 0      | CCW / REACTOR COOLANT PUMP PP-45-3 THERMAL BARRIER CCW OUTLET SAFETY VALVE   | CONTAINMENT | 617.00     | LOWER CONT., QUAD 3 AZ 231     |
| 7           | 12    | 2-SV-62-4    | 0      | CCW / REACTOR COOLANT PUMP PP-45-4 THERMAL BARRIER CCW OUTLET SAFETY VALVE   | CONTAINMENT | 617.00     | LOWER CONT., QUAD 4, AZ 302    |
| 7           | 12    | 2-SV-63      | 0      | CCW / REACTOR COOLANT PUMP MOTORS BEARING OIL COOLERS CCW RETURN HEADER SAFETY VALVE   | CONTAINMENT | 612.00     | W CONT LOWER VENT RM           |
| 7           | 12    | 2-SV-64      | 0      | CCW / EXCESS LETDOWN HEAT EXCHANGER HE-13 CCW OUTLET SAFETY VALVE  | CONTAINMENT | 612.00     | REGEN HEAT XCHGR RM            |
| 7           | 12    | 2-SV-65      | 0      | CCW / LETDOWN HEAT EXCHANGER HE-14 CCW OUTLET SAFETY VALVE   | AUXILIARY   | 633.00     | 633 HALLWAY                    |
| 7           | 12    | 2-SV-66      | 0      | CCW / CCW TO SOUTH BORIC ACID EVAP DRUM 12-HE-19-DS SAFETY VALVE   | AUXILIARY   | 587.00     | 587 HALLWAY                    |
| 7           | 12    | 2-SV-67-1    | 0      | CCW / FAILED NUCLEAR FUEL DETECTOR SAMPLE HEAT EXCHANGER QC-501-13 CCW OUTLET SAFETY VALVE   | AUXILIARY   | 587.00     | REFUEL WTR PURIFICATION PMP RM |
| 7           | 12    | 2-SV-67-2    | 0      | CCW / NUCLEAR SAMPLING SAMPLE RACK 'A' CCW RETURN HEADER SAFETY VALVE  | AUXILIARY   | 587.00     | NUCLEAR SAMPLING RM            |
| 7           | 12    | 2-SV-67-3    | 0      | CCW / NUCLEAR SAMPLING SAMPLE RACK 'B' CCW RETURN HEADER SAFETY VALVE  | AUXILIARY   | 587.00     | NUCLEAR SAMPLING RM            |
| 7           | 12    | 2-SV-68-15   | 0      | CCW / RCP SEAL WATER HEAT EXCHANGER HE-11 CCW OUTLET SAFETY VALVE  | AUXILIARY   | 609.00     | 609 HALLWAY                    |
| 7           | 12    | 2-SV-71      | 0      | CCW / SOUTH SPENT FUEL PIT HEAT EXCHANGER 12-HE-16S CCW OUTLET SAFETY VALVE  | AUXILIARY   | 609.00     | SPENT FUEL PIT HEAT XCHGR RM   |
| 7           | 2     | 2-SV-72E     | 0      | COMPONENT COOLING WATER / EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17E COMPONENT COOLING WATER OUTLET SAFETY VALVE                 | AUXILIARY   | 609.00     | 609 HALLWAY                    |
| 7           | 1     | 2-SV-72W     | 0      | COMPONENT COOLING WATER / WEST RESIDUAL HEAT REMOVAL HEAT EXCHANGER COMPONENT COOLING WATER OUTLET SAFETY VALVE                        | AUXILIARY   | 633.00     | 633 HALLWAY                    |
| 7           | 1     | 2-SV-78-AB1  | 0      | DIESEL STARTING AIR / AB EMERGENCY DIESEL STARTING AIR RECEIVER QT-141-AB1 SAFETY VALVE  | AUXILIARY   | 587.00     | AB EMER DSL GEN RM             |
| 7           | 1     | 2-SV-78-AB2  | 0      | DIESEL STARTING AIR / AB EMERGENCY DIESEL STARTING AIR RECEIVER QT-141-AB2 SAFETY VALVE  | AUXILIARY   | 587.00     | AB EMER DSL GEN RM             |
| 7           | 2     | 2-SV-78-CD1  | 0      | DIESEL STARTING AIR / CD EMERGENCY DIESEL STARTING AIR RECEIVER QT-141-CD1 SAFETY VALVE  | AUXILIARY   | 587.00     | CD EMER DSL GEN RM             |
| 7           | 2     | 2-SV-78-CD2  | 0      | DIESEL STARTING AIR / CD EMERGENCY DIESEL STARTING AIR RECEIVER QT-141-CD2 SAFETY VALVE  | AUXILIARY   | 587.00     | CD EMER DSL GEN RM             |
| 7           | 1     | 2-SV-79-AB1  | 0      | DIESEL STARTING AIR / AB EMERGENCY DIESEL CONTROL AIR DRYER QT-143-AB1 SAFETY VALVE  | AUXILIARY   | 587.00     | AB EMER DSL GEN RM             |
| 7           | 1     | 2-SV-79-AB2  | 0      | DIESEL STARTING AIR / AB EMERGENCY DIESEL CONTROL AIR DRYER QT-143-AB2 SAFETY VALVE  | AUXILIARY   | 587.00     | AB EMER DSL GEN RM             |

**DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Tran | Equipment ID | Rev No | System / Equipment Description  | Building    | Floor Elev | Room or Row Col             |
|-------------|------|--------------|--------|---|-------------|------------|-----------------------------|
| 7           | 2    | 2-SV-79-CD1  | 0      | DIESEL STARTING AIR / CD EMERGENCY<br>DIESEL CONTROL AIR DRYER QT-143-CD1<br>SAFETY VALVE   | AUXILIARY   | 587.00     | CD EMER DSL GEN<br>RM       |
| 7           | 2    | 2-SV-79-CD2  | 0      | DIESEL STARTING AIR / CD EMERGENCY<br>DIESEL CONTROL AIR DRYER QT-143-CD2<br>SAFETY VALVE   | AUXILIARY   | 587.00     | CD EMER DSL GEN<br>RM       |
| 7           | 2    | 2-SV-94N     | 0      | CONTROL ROOM AIR CONDITIONING CHILL<br>WATER / CONTROL ROOM AIR<br>CONDITIONING NORTH CHILL WATER<br>EXPANSION TANK TK-78N SAFETY VALVE | AUXILIARY   | 650.00     | CTRL RM AIR CONDIT<br>RM    |
| 7           | 1    | 2-SV-94S     | 0      | CONTROL ROOM AIR CONDITIONING CHILL<br>WATER / CONTROL ROOM AIR<br>CONDITIONING SOUTH CHILL WATER<br>EXPANSION TANK TK-78S SAFETY VALVE | AUXILIARY   | 650.00     | CTRL RM AIR CONDIT<br>RM    |
| 7           | 12   | 2-SV-96      | 0      | REFUELING WATER STORAGE TANK<br>SUPPLY / SAFETY INJECTION PUMPS<br>SUCTION HEADER SAFETY VALVE  | AUXILIARY   | 587.00     | S SAFETY INJ PMP<br>RM      |
| 7           | 12   | 2-SV-97      | 0      | BORON INJECTION / BORON INJECTION<br>TANK TK-11 OUTLET SAFETY VALVE   | AUXILIARY   | 612.00     | BORON INJ TANK RM           |
| 7           | 12   | 2-SV-98N     | 0      | SAFETY INJECTION / NORTH SAFETY<br>INJECTION PUMP PP-26N DISCHARGE<br>HEADER SAFETY VALVE   | AUXILIARY   | 587.00     | N SAFETY INJ PMP<br>RM      |
| 7           | 12   | 2-SV-98S     | 0      | SAFETY INJECTION / SOUTH SAFETY<br>INJECTION PUMP PP-26S DISCHARGE<br>HEADER SAFETY VALVE   | AUXILIARY   | 587.00     | S SAFETY INJ PMP<br>RM      |
| 7           | 2    | 2-VRV-315    | 0      | CONTROL ROOM AIR CONDITIONING CHILL<br>WATER / CONTROL ROOM VENTILATION<br>UNIT HV-ACRA-1 CHILL WATER<br>INLET/BYPASS VALVE             | AUXILIARY   | 650.00     | CTRL RM AIR CONDIT<br>RM    |
| 7           | 1    | 2-VRV-325    | 0      | CONTROL ROOM AIR CONDITIONING CHILL<br>WATER / CONTROL ROOM VENTILATION<br>UNIT HV-ACRA-2 CHILL WATER<br>INLET/BYPASS VALVE             | AUXILIARY   | 650.00     | CTRL RM AIR CONDIT<br>RM    |
| 7           | 2    | 2-WRV-722-CD | 0      | ESSENTIAL SERVICE WATER / CD<br>EMERGENCY DIESEL NORTH COMBUSTION<br>AIR AFTERCOOLER HE-47-CDN ESW<br>INLET/BYPASS VALVE                | AUXILIARY   | 587.00     | CD EMER DSL GEN<br>RM       |
| 7           | 2    | 2-WRV-724-CD | 0      | ESSENTIAL SERVICE WATER / CD<br>EMERGENCY DIESEL SOUTH COMBUSTION<br>AIR AFTERCOOLER HE-47-CDS ESW<br>INLET/BYPASS VALVE                | AUXILIARY   | 587.00     | CD EMER DSL GEN<br>RM       |
| 7           | 1    | 2-WRV-726-AB | 0      | ESSENTIAL SERVICE WATER / AB<br>EMERGENCY DIESEL NORTH COMBUSTION<br>AIR AFTERCOOLER HE-47-ABN ESW<br>INLET/BYPASS VALVE                | AUXILIARY   | 587.00     | AB EMER DSL GEN<br>RM       |
| 7           | 1    | 2-WRV-728-AB | 0      | ESSENTIAL SERVICE WATER / AB<br>EMERGENCY DIESEL SOUTH COMBUSTION<br>AIR AFTERCOOLER HE-47-ABS ESW<br>INLET/BYPASS VALVE                | AUXILIARY   | 587.00     | AB EMER DSL GEN<br>RM       |
| 7           | 2    | 2-WRV-763    | 0      | ESSENTIAL SERVICE WATER / EAST<br>ESSENTIAL SERVICE WATER PUMP PP-7E<br>DISCHARGE STRAINER WEST BASKET<br>BACKWASH OUTLET SHUTOFF VALVE | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR<br>PMP RM |
| 7           | 1    | 2-WRV-764    | 0      | ESSENTIAL SERVICE WATER / WEST<br>ESSENTIAL SERVICE WATER PUMP PP-7W<br>DISCHARGE STRAINER WEST BASKET<br>BACKWASH OUTLET SHUTOFF VALVE | SCREENHOUSE | 591.00     | W ESSNTL SERV<br>WTR PMP RM |
| 7           | 2    | 2-WRV-768    | 0      | ESSENTIAL SERVICE WATER / EAST<br>ESSENTIAL SERVICE WATER PUMP PP-7E<br>DISCHARGE STRAINER WEST BASKET<br>BACKWASH INLET SHUTOFF VALVE  | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR<br>PMP RM |
| 7           | 1    | 2-WRV-769    | 0      | ESSENTIAL SERVICE WATER / WEST<br>ESSENTIAL SERVICE WATER PUMP PP-7W<br>DISCHARGE STRAINER WEST BASKET<br>BACKWASH INLET SHUTOFF VALVE  | SCREENHOUSE | 591.00     | W ESSNTL SERV<br>WTR PMP RM |
| 7           | 2    | 2-WRV-773    | 0      | ESSENTIAL SERVICE WATER / EAST<br>ESSENTIAL SERVICE WATER PUMP PP-7E<br>DISCHARGE STRAINER EAST BASKET<br>BACKWASH OUTLET SHUTOFF VALVE | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR<br>PMP RM |
| 7           | 1    | 2-WRV-774    | 0      | ESSENTIAL SERVICE WATER / WEST<br>ESSENTIAL SERVICE WATER PUMP PP-7W<br>DISCHARGE STRAINER EAST BASKET<br>BACKWASH OUTLET SHUTOFF VALVE | SCREENHOUSE | 591.00     | W ESSNTL SERV<br>WTR PMP RM |
| 7           | 2    | 2-WRV-778    | 0      | ESSENTIAL SERVICE WATER / EAST<br>ESSENTIAL SERVICE WATER PUMP PP-7E<br>DISCHARGE STRAINER EAST BASKET<br>BACKWASH INLET SHUTOFF VALVE  | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR<br>PMP RM |
| 7           | 1    | 2-WRV-779    | 0      | ESSENTIAL SERVICE WATER / WEST<br>ESSENTIAL SERVICE WATER PUMP PP-7W<br>DISCHARGE STRAINER EAST BASKET<br>BACKWASH INLET SHUTOFF VALVE  | SCREENHOUSE | 591.00     | W ESSNTL SERV<br>WTR PMP RM |
| 7           | 1    | 2-XRV-220    | 0      | DIESEL STARTING AIR / AB EMERGENCY<br>DIESEL STARTING AIR JET ASSIST CONTROL<br>VALVE   | AUXILIARY   | 587.00     | AB EMER DSL GEN<br>RM       |
| 7           | 1    | 2-XRV-221    | 0      | DIESEL STARTING AIR / AB EMERGENCY<br>DIESEL FRONT BANK STARTING AIR<br>SHUTOFF VALVE   | AUXILIARY   | 587.00     | AB EMER DSL GEN<br>RM       |
| 7           | 1    | 2-XRV-222    | 0      | DIESEL STARTING AIR / AB EMERGENCY<br>DIESEL REAR BANK STARTING AIR<br>SHUTOFF VALVE  | AUXILIARY   | 587.00     | AB EMER DSL GEN<br>RM       |

**DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description  | Building  | Floor Elev | Room or Row Col                     |
|-------------|-------|--------------|--------|---|-----------|------------|-------------------------------------|
| 7           | 2     | 2-XRV-225    | 0      | DIESEL STARTING AIR / CD EMERGENCY<br>DIESEL STARTING AIR JET ASSIST CONTROL<br>VALVE   | AUXILIARY | 587.00     | CD EMER DSL GEN<br>RM               |
| 7           | 2     | 2-XRV-226    | 0      | DIESEL STARTING AIR / CD EMERGENCY<br>DIESEL FRONT BANK STARTING AIR<br>SHUTOFF VALVE   | AUXILIARY | 587.00     | CD EMER DSL GEN<br>RM               |
| 7           | 2     | 2-XRV-227    | 0      | DIESEL STARTING AIR / CD EMERGENCY<br>DIESEL REAR BANK STARTING AIR<br>SHUTOFF VALVE  | AUXILIARY | 587.00     | CD EMER DSL GEN<br>RM               |
| 8           | 2     | 2-CCM-451    | 0      | COMPONENT COOLING WATER / RC PUMPS<br>BEARING OIL COOLERS CCW RETURN<br>HEADER TRAIN 'A' CONTAINMENT<br>ISOLATION VALVE                               | AUXILIARY | 591.00     | STARTUP<br>BLOWDOWN<br>FLASHTANK RM |
| 8           | 1     | 2-CCM-452    | 0      | COMPONENT COOLING WATER / RC PUMPS<br>BEARING OIL COOLERS CCW RETURN<br>HEADER TRAIN 'B' CONTAINMENT<br>ISOLATION VALVE                               | AUXILIARY | 591.00     | STARTUP<br>BLOWDOWN<br>FLASHTANK RM |
| 8           | 2     | 2-CCM-453    | 0      | COMPONENT COOLING WATER / RCP<br>THERMAL BARRIER COMPONENT COOLING<br>WATER OUTLET TRAIN 'A' CONTAINMENT<br>ISOLATION VALVE                           | AUXILIARY | 591.00     | STARTUP<br>BLOWDOWN<br>FLASHTANK RM |
| 8           | 1     | 2-CCM-454    | 0      | COMPONENT COOLING WATER / RC PUMPS<br>THERMAL BARRIER CCW RETURN HEADER<br>TRAIN 'B' CONTAINMENT ISOLATION VALVE                                      | AUXILIARY | 591.00     | STARTUP<br>BLOWDOWN<br>FLASHTANK RM |
| 8           | 2     | 2-CCM-458    | 0      | COMPONENT COOLING WATER /<br>COMPONENT COOLING WATER TO<br>REACTOR COOLANT PUMPS TRAIN 'A'<br>CONTAINMENT ISOLATION VALVE                             | AUXILIARY | 591.00     | STARTUP<br>BLOWDOWN<br>FLASHTANK RM |
| 8           | 1     | 2-CCM-459    | 0      | COMPONENT COOLING WATER /<br>COMPONENT COOLING WATER TO<br>REACTOR COOLANT PUMPS TRAIN 'B'<br>CONTAINMENT ISOLATION VALVE                             | AUXILIARY | 591.00     | STARTUP<br>BLOWDOWN<br>FLASHTANK RM |
| 8           | 2     | 2-CMO-410    | 0      | COMPONENT COOLING WATER / EAST<br>COMPONENT COOLING WATER HEAT<br>EXCHANGER HE-15E COMPONENT<br>COOLING WATER OUTLET SHUTOFF VALVE                    | AUXILIARY | 609.00     | 609 HALLWAY                         |
| 8           | 2     | 2-CMO-411    | 0      | COMPONENT COOLING WATER /<br>COMPONENT COOLING WATER PUMPS<br>SUCTION CROSSTIE TRAIN 'A' SHUTOFF<br>VALVE   | AUXILIARY | 609.00     | 609 HALLWAY                         |
| 8           | 2     | 2-CMO-412    | 0      | COMPONENT COOLING WATER /<br>COMPONENT COOLING WATER PUMPS<br>DISCHARGE CROSSTIE TRAIN 'A' SHUTOFF<br>VALVE   | AUXILIARY | 609.00     | 609 HALLWAY                         |
| 8           | 1     | 2-CMO-413    | 0      | COMPONENT COOLING WATER /<br>COMPONENT COOLING WATER PUMPS<br>SUCTION CROSSTIE TRAIN 'B' SHUTOFF<br>VALVE   | AUXILIARY | 609.00     | 609 HALLWAY                         |
| 8           | 1     | 2-CMO-414    | 0      | COMPONENT COOLING WATER /<br>COMPONENT COOLING WATER PUMPS<br>DISCHARGE CROSSTIE TRAIN 'B' SHUTOFF<br>VALVE   | AUXILIARY | 609.00     | 609 HALLWAY                         |
| 8           | 2     | 2-CMO-415    | 0      | COMPONENT COOLING WATER /<br>COMPONENT COOLING WATER TO<br>MISCELLANEOUS SERVICE TRAIN 'A'<br>SHUTOFF VALVE   | AUXILIARY | 609.00     | 609 HALLWAY                         |
| 8           | 1     | 2-CMO-416    | 0      | COMPONENT COOLING WATER / CCW TO<br>MISCELLANEOUS SERVICE HEADER 'B' 16 in<br>MOTOR OPERATED SHUTOFF VALVE  | AUXILIARY | 609.00     | 609 HALLWAY                         |
| 8           | 2     | 2-CMO-419    | 0      | COMPONENT COOLING WATER / EAST<br>RESIDUAL HEAT REMOVAL HEAT<br>EXCHANGER HE-17E COMPONENT<br>COOLING WATER OUTLET SHUTOFF VALVE                      | AUXILIARY | 609.00     | 609 HALLWAY                         |
| 8           | 1     | 2-CMO-420    | 0      | COMPONENT COOLING WATER / WEST<br>COMPONENT COOLING WATER HEAT<br>EXCHANGER COMPONENT COOLING<br>WATER OUTLET SHUTOFF VALVE                           | AUXILIARY | 609.00     | 609 HALLWAY                         |
| 8           | 1     | 2-CMO-429    | 0      | COMPONENT COOLING WATER / WEST RHR<br>HEAT EXCHANGER HE-17W CCW OUTLET<br>SHUTOFF VALVE   | AUXILIARY | 633.00     | 633 HALLWAY                         |
| 8           | 1     | 2-FMO-211    | 0      | AUXILIARY FEEDWATER / TURBINE DRIVEN<br>AUXILIARY FEED PUMP PP-4 DISCHARGE<br>TO STEAM GENERATOR OME-3-1 4 in<br>MOTOR OPERATED CONTROL VALVE         | AUXILIARY | 612.00     | E MAIN STM STOP<br>ENCL             |
| 8           | 1     | 2-FMO-212    | 0      | AUXILIARY FEEDWATER / WEST MOTOR<br>DRIVEN AUXILIARY FEEDWATER PUMP<br>SUPPLY TO STEAM GENERATOR OME-3-1 4<br>in MOTOR OPERATED CONTROL VALVE         | AUXILIARY | 612.00     | E MAIN STM STOP<br>ENCL             |
| 8           | 2     | 2-FMO-221    | 0      | AUXILIARY FEEDWATER / TURBINE DRIVEN<br>AUXILIARY FEED PUMP PP-4 DISCHARGE<br>TO STEAM GENERATOR OME-3-2 4 in<br>MOTOR OPERATED CONTROL VALVE         | AUXILIARY | 591.00     | STARTUP<br>BLOWDOWN<br>FLASHTANK RM |
| 8           | 2     | 2-FMO-222    | 0      | AUXILIARY FEEDWATER / EAST MOTOR<br>DRIVEN AUXILIARY FEEDWATER PUMP PP-<br>3E SUPPLY TO STEAM GENERATOR OME-3-<br>2 4 in MOTOR OPERATED CONTROL VALVE | AUXILIARY | 591.00     | STARTUP<br>BLOWDOWN<br>FLASHTANK RM |
| 8           | 2     | 2-FMO-231    | 0      | AUXILIARY FEEDWATER / TURBINE DRIVEN<br>AUXILIARY FEED PUMP SUPPLY TO STEAM<br>GENERATOR OME-3-3 4 in MOTOR<br>OPERATED CONTROL VALVE                 | AUXILIARY | 591.00     | STARTUP<br>BLOWDOWN<br>FLASHTANK RM |



**DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Tran | Equipment ID  | Rev No | System / Equipment Description   | Building    | Floor Elev | Room or Row Col               |
|-------------|------|---------------|--------|--|-------------|------------|-------------------------------|
| 8           | 2    | 2-FMO-232     | 0      | AUXILIARY FEEDWATER / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP PP-3E SUPPLY TO STEAM GENERATOR OME-3-3.4 in MOTOR OPERATED CONTROL VALVE | AUXILIARY   | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 8           | 1    | 2-FMO-241     | 0      | AUXILIARY FEEDWATER / TURBINE DRIVEN AUXILIARY FEED PUMP SUPPLY TO STEAM GENERATOR OME-3-4 4 in MOTOR OPERATED CONTROL VALVE               | AUXILIARY   | 612.00     | E MAIN STM STOP ENCL          |
| 8           | 1    | 2-FMO-242     | 0      | AUXILIARY FEEDWATER / WEST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP SUPPLY TO STEAM GENERATOR OME-3-4 4 in MOTOR OPERATED CONTROL VALVE       | AUXILIARY   | 612.00     | E MAIN STM STOP ENCL          |
| 8           | 1    | 2-HV-DDP-AB1  | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FAN HV-DGX-2 TEMPERING AIR DAMPER                         | AUXILIARY   | 587.00     | AB EMER DSL GEN RM            |
| 8           | 1    | 2-HV-DDP-AB2  | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN HV-DGS-2 TEMPERING AIR DAMPER                          | AUXILIARY   | 587.00     | AB EMER DSL GEN RM            |
| 8           | 2    | 2-HV-DDP-CD1  | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FAN HV-DGX-1 TEMPERING AIR DAMPER                         | AUXILIARY   | 587.00     | CD EMER DSL GEN RM            |
| 8           | 2    | 2-HV-DDP-CD2  | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN HV-DGS-1 TEMPERING AIR DAMPER                          | AUXILIARY   | 587.00     | CD EMER DSL GEN RM            |
| 8           | 1    | 2-HV-DGS-DAB  | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN HV-DGS-1 OUTSIDE AIR SHUTOFF DAMPER                    | AUXILIARY   | 598.00     | INNER PLANT GROUNDS           |
| 8           | 2    | 2-HV-DGS-DCD  | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN HV-DGS-2 OUTSIDE AIR SHUTOFF DAMPER                    | AUXILIARY   | 598.00     | RCTR CABLE TUNN, QUAD 2       |
| 8           | 1    | 2-HV-SGR-MD-3 | 0      | AUXILIARY BUILDING VENTILATION / 4KV RM 600 VOLT SWITCHGEAR XFORMERS TR21A & TR21C AREA VENT SUPPLY FAN HV-SGRS-8 SUCTION DAMPER           | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR AREA       |
| 8           | 2    | 2-HV-SGR-MD-4 | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600V SWITCHGEAR TRANSFORMERS AREA VENTILATION SUPPLY FAN HV-SGRS-7 SUCTION DAMPER                | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR AREA       |
| 8           | 1    | 2-HV-SGR-MD-5 | 0      | AUXILIARY BUILDING VENTILATION / 600VAC MOTOR CONTROL CENTER MEZZANINE AREA VENTILATION SUPPLY FAN HV-SGRS-9 VENT DAMPER                   | AUXILIARY   | 613.00     | 4KV ROOM - MEZZANINE AREA     |
| 8           | 12   | 2-ICM-111     | 0      | RESIDUAL HEAT REMOVAL / RHR TO REACTOR COOLANT LOOPS #2 & #3 COLD LEGS CONTAINMENT ISOLATION VALVE   | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 2           |
| 8           | 2    | 2-ICM-129     | 0      | RESIDUAL HEAT REMOVAL / REACTOR COOLANT LOOP #2 HOT LEG TO RESIDUAL HEAT REMOVAL PUMPS SUCTION CONTAINMENT ISOLATION VALVE                 | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 2           |
| 8           | 2    | 2-ICM-250     | 0      | BORON INJECTION / BORON INJECTION TANK TRAIN 'A' OUTLET CONTAINMENT ISOLATION VALVE  | AUXILIARY   | 612.00     | BORON INJ TANK OUTLET VLV RM  |
| 8           | 1    | 2-ICM-251     | 0      | BORON INJECTION / BORON INJECTION TANK TRAIN 'B' OUTLET CONTAINMENT ISOLATION VALVE  | AUXILIARY   | 612.00     | BORON INJ TANK OUTLET VLV RM  |
| 8           | 2    | 2-ICM-260     | 0      | SAFETY INJECTION / NORTH SAFETY INJECTION PUMP PP-26N DISCHARGE CONTAINMENT ISOLATION VALVE  | AUXILIARY   | 587.00     | N SAFETY INJ PMP RM           |
| 8           | 1    | 2-ICM-265     | 0      | SAFETY INJECTION / SOUTH SAFETY INJECTION PUMP PP-26S DISCHARGE CONTAINMENT ISOLATION VALVE  | AUXILIARY   | 587.00     | S SAFETY INJ PMP RM           |
| 8           | 2    | 2-ICM-305     | 0      | RESIDUAL HEAT REMOVAL / RECIRCULATION SUMP TO EAST RHR/CTS PUMPS SUCTION CONTAINMENT ISOLATION VALVE                                       | AUXILIARY   | 591.00     | VESTIBULE                     |
| 8           | 1    | 2-ICM-306     | 0      | RESIDUAL HEAT REMOVAL / RECIRCULATION SUMP TO WEST RHR/CTS PUMPS SUCTION CONTAINMENT ISOLATION VALVE                                       | AUXILIARY   | 591.00     | VESTIBULE                     |
| 8           | 2    | 2-ICM-311     | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL TO RC LOOPS #1 AND #4 COLD LEGS CONTAINMENT ISOLATION VALVE                             | AUXILIARY   | 609.00     | E RHR HEAT XCHGR RM           |
| 8           | 1    | 2-ICM-321     | 0      | RESIDUAL HEAT REMOVAL / WEST RHR TO REACTOR COOLANT LOOPS #2 AND #3 COLD LEGS CONTAINMENT ISOLATION VALVE                                  | AUXILIARY   | 609.00     | W RHR HEAT XCHGR RM           |
| 8           | 1    | 2-IMO-128     | 0      | RESIDUAL HEAT REMOVAL / REACTOR COOLANT LOOP #2 HOT LEG TO RESIDUAL HEAT REMOVAL PUMPS SUCTION SHUTOFF VALVE                               | CONTAINMENT | 617.00     | LOWER CONT, QUAD NO. 2        |
| 8           | 2    | 2-IMO-210     | 0      | CONTAINMENT SPRAY / EAST CONTAINMENT SPRAY PUMP PP-0E 10 in MOTOR OPERATED DISCHARGE SHUTOFF VALVE   | AUXILIARY   | 573.00     | E CONT SPRAY PMP RM           |

**DONALD C. COOK NUCLEAR PLANT UNIT # 2**  
**SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**  
**FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description  | Building    | Floor Elev | Room or Row Col         |
|-------------|-------|--------------|--------|---|-------------|------------|-------------------------|
| 8           | 2     | 2-IMO-211    | 0      | CONTAINMENT SPRAY / EAST<br>CONTAINMENT SPRAY PUMP PP-9E 10 In<br>MOTOR OPERATED DISCHARGE SHUTOFF<br>VALVE   | AUXILIARY   | 573.00     | E CONT SPRAY PMP<br>RM  |
| 8           | 2     | 2-IMO-212    | 0      | CONTAINMENT SPRAY / EAST<br>CONTAINMENT SPRAY PUMP PP-9E 2 In<br>MOTOR OPERATED DISCHARGE TO<br>CONTAINMENT SPRAY ADDITIVE EDUCTOR<br>SHUTOFF VALVE | AUXILIARY   | 573.00     | E CONT SPRAY PMP<br>RM  |
| 8           | 2     | 2-IMO-215    | 0      | CONTAINMENT SPRAY / REFUELING WATER<br>STORAGE TANK TO EAST CONTAINMENT<br>SPRAY PUMP PP-9E SUCTION 12 In MOTOR<br>OPERATED SHUTOFF VALVE           | AUXILIARY   | 573.00     | E CONT SPRAY PMP<br>RM  |
| 8           | 1     | 2-IMO-220    | 0      | CONTAINMENT SPRAY / WEST<br>CONTAINMENT SPRAY PUMP PP-9W 10 In<br>MOTOR OPERATED DISCHARGE SHUTOFF<br>VALVE   | AUXILIARY   | 573.00     | W CONT SPRAY PMP<br>RM  |
| 8           | 1     | 2-IMO-221    | 0      | CONTAINMENT SPRAY / WEST<br>CONTAINMENT SPRAY PUMP PP-9W<br>DISCHARGE SHUTOFF 10 In MOTOR<br>OPERATED VALVE   | AUXILIARY   | 573.00     | W CONT SPRAY PMP<br>RM  |
| 8           | 1     | 2-IMO-222    | 0      | CONTAINMENT SPRAY / WEST<br>CONTAINMENT SPRAY PUMP PP-9W<br>DISCHARGE TO CONTAINMENT SPRAY<br>ADDITIVE EDUCTOR 2 In MOTOR OPERATED<br>SHUTOFF VALVE | AUXILIARY   | 573.00     | W CONT SPRAY PMP<br>RM  |
| 8           | 1     | 2-IMO-225    | 0      | CONTAINMENT SPRAY / REFUELING WATER<br>STORAGE TANK TO WEST CONTAINMENT<br>SPRAY PUMP PP-9W SUCTION 12 In MOTOR<br>OPERATED SHUTOFF VALVE           | AUXILIARY   | 573.00     | W CONT SPRAY PMP<br>RM  |
| 8           | 2     | 2-IMO-255    | 0      | BORON INJECTION / BORON INJECTION<br>TANK TRAIN 'A' INLET SHUTOFF VALVE   | AUXILIARY   | 612.00     | BORON INJ TANK RM       |
| 8           | 1     | 2-IMO-258    | 0      | BORON INJECTION / BORON INJECTION<br>TANK TRAIN 'B' INLET SHUTOFF VALVE   | AUXILIARY   | 612.00     | BORON INJ TANK RM       |
| 8           | 12    | 2-IMO-261    | 0      | REFUELING WATER STORAGE TANK<br>SUPPLY / REFUELING WATER STORAGE<br>TANK TK-33 SUPPLY TO SAFETY INJECTION<br>PUMPS SHUTOFF VALVE                    | AUXILIARY   | 587.00     | S SAFETY INJ PMP<br>RM  |
| 8           | 2     | 2-IMO-262    | 0      | REFUELING WATER STORAGE TANK<br>SUPPLY / SAFETY INJECTION PUMPS<br>RECIRC TO REFUELING WATER STORAGE<br>TANK TK-33 TRAIN 'A' SHUTOFF VALVE          | AUXILIARY   | 587.00     | N SAFETY INJ PMP<br>RM  |
| 8           | 1     | 2-IMO-263    | 0      | REFUELING WATER STORAGE TANK<br>SUPPLY / SAFETY INJECTION PUMPS<br>RECIRC TO REFUELING WATER STORAGE<br>TANK TK-33 TRAIN 'B' SHUTOFF VALVE          | AUXILIARY   | 587.00     | N SAFETY INJ PMP<br>RM  |
| 8           | 2     | 2-IMO-270    | 0      | SAFETY INJECTION / SAFETY INJECTION<br>PUMPS DISCHARGE CROSSTIE TRAIN 'A'<br>SHUTOFF VALVE  | AUXILIARY   | 587.00     | N SAFETY INJ PMP<br>RM  |
| 8           | 1     | 2-IMO-275    | 0      | SAFETY INJECTION / SAFETY INJECTION<br>PUMPS DISCHARGE CROSSTIE TRAIN 'B'<br>SHUTOFF VALVE  | AUXILIARY   | 587.00     | S SAFETY INJ PMP<br>RM  |
| 8           | 2     | 2-IMO-310    | 0      | RESIDUAL HEAT REMOVAL / EAST<br>RESIDUAL HEAT REMOVAL PUMP PP-3SE<br>SUCTION SHUTOFF VALVE  | AUXILIARY   | 573.00     | EAST RHR PUMP RM        |
| 8           | 2     | 2-IMO-312    | 0      | RESIDUAL HEAT REMOVAL / EAST<br>RESIDUAL HEAT REMOVAL HEAT<br>EXCHANGER HE-17E OUTLET MINI-FLOW<br>LINE SHUTOFF VALVE                               | AUXILIARY   | 609.00     | E RHR HEAT XCHGR<br>RM  |
| 8           | 2     | 2-IMO-314    | 0      | RESIDUAL HEAT REMOVAL / EAST<br>RESIDUAL HEAT REMOVAL PUMP PP-3SE<br>DISCHARGE CROSSTIE SHUTOFF VALVE   | AUXILIARY   | 609.00     | E RHR HEAT XCHGR<br>RM  |
| 8           | 2     | 2-IMO-315    | 0      | RESIDUAL HEAT REMOVAL / EAST RHR AND<br>NORTH SAFETY INJECTION TO REACTOR<br>COOLANT LOOPS #1 AND #4 HOT LEGS<br>SHUTOFF VALVE                      | CONTAINMENT | 612.00     | E CONT LOWER<br>VENT RM |
| 8           | 2     | 2-IMO-316    | 0      | RESIDUAL HEAT REMOVAL / EAST RHR AND<br>NORTH SAFETY INJECTION TO REACTOR<br>COOLANT LOOPS #1 AND #4 COLD LEGS<br>SHUTOFF VALVE                     | CONTAINMENT | 612.00     | E CONT LOWER<br>VENT RM |
| 8           | 1     | 2-IMO-320    | 0      | RESIDUAL HEAT REMOVAL / WEST<br>RESIDUAL HEAT REMOVAL PUMP PP-3SW<br>SUCTION SHUTOFF VALVE  | AUXILIARY   | 573.00     | W RHR PMP RM            |
| 8           | 1     | 2-IMO-322    | 0      | RESIDUAL HEAT REMOVAL / WEST<br>RESIDUAL HEAT REMOVAL HEAT<br>EXCHANGER HE-17W OUTLET MINI-FLOW<br>LINE SHUTOFF VALVE                               | AUXILIARY   | 609.00     | W RHR HEAT XCHGR<br>RM  |
| 8           | 1     | 2-IMO-324    | 0      | RESIDUAL HEAT REMOVAL / WEST<br>RESIDUAL HEAT REMOVAL PUMP PP-3SW<br>DISCHARGE CROSSTIE SHUTOFF VALVE   | AUXILIARY   | 609.00     | W RHR HEAT XCHGR<br>RM  |
| 8           | 1     | 2-IMO-325    | 0      | RESIDUAL HEAT REMOVAL / WEST RHR<br>AND SOUTH SAFETY INJECTION TO<br>REACTOR COOLANT LOOPS #2 AND #3 HOT<br>LEGS SHUTOFF VALVE                      | CONTAINMENT | 612.00     | W CONT LOWER<br>VENT RM |
| 8           | 1     | 2-IMO-326    | 0      | RESIDUAL HEAT REMOVAL / WEST RHR<br>AND SOUTH SAFETY INJECTION TO<br>REACTOR COOLANT LOOPS #2 AND #3<br>COLD LEGS SHUTOFF VALVE                     | CONTAINMENT | 612.00     | W CONT LOWER<br>VENT RM |
| 8           | 2     | 2-IMO-330    | 0      | RESIDUAL HEAT REMOVAL / EAST<br>RESIDUAL HEAT REMOVAL TO UPPER<br>CONTAINMENT SPRAY SHUTOFF VALVE   | AUXILIARY   | 609.00     | E RHR HEAT XCHGR<br>RM  |





**DONALD C. COOK NUCLEAR PLANT UNIT # 2**  
**SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**  
**FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description   | Building    | Floor Elev | Room or Row Col              |
|-------------|-------|--------------|--------|--|-------------|------------|------------------------------|
| 8           | 1     | 2-IMO-331    | 0      | RESIDUAL HEAT REMOVAL / WEST RHR TO UPPER CONTAINMENT SPRAY SHUTOFF VALVE  | AUXILIARY   | 609.00     | W RHR HEAT XCHGR RM          |
| 8           | 12    | 2-IMO-340    | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER TO CHARGING PUMPS SUCTION SHUTOFF VALVE                        | AUXILIARY   | 609.00     | E RHR HEAT XCHGR RM          |
| 8           | 12    | 2-IMO-350    | 0      | RESIDUAL HEAT REMOVAL / WEST RHR HEAT EXCHANGER OUTLET TO SAFETY INJECTION PUMP SUCTION SHUTOFF VALVE                            | AUXILIARY   | 609.00     | W RHR HEAT XCHGR RM          |
| 8           | 12    | 2-IMO-360    | 0      | SAFETY INJECTION / SAFETY INJECTION PUMPS TO CVCS CHARGING PUMPS SUCTION HEADER CROSSTIE SHUTOFF VALVE                           | AUXILIARY   | 587.00     | W CENTRIFUGAL CHARG PMP RM   |
| 8           | 2     | 2-IMO-361    | 0      | SAFETY INJECTION / SAFETY INJECTION PUMPS SUCTION TO AND FROM CHARGING PUMPS SUCTION TRAIN 'A' SHUTOFF VALVE                     | AUXILIARY   | 587.00     | N SAFETY INJ PMP RM          |
| 8           | 1     | 2-IMO-362    | 0      | SAFETY INJECTION / SAFETY INJECTION PUMPS SUCTION TO AND FROM CHARGING PUMPS SUCTION TRAIN 'B' SHUTOFF VALVE                     | AUXILIARY   | 587.00     | N SAFETY INJ PMP RM          |
| 8           | 12    | 2-IMO-390    | 0      | RESIDUAL HEAT REMOVAL / REFUELING WATER STORAGE TANK TK-33 TO RESIDUAL HEAT REMOVAL PUMPS SUCTION SHUTOFF VALVE                  | AUXILIARY   | 591.00     | VESTIBULE                    |
| 8           | 2     | 2-IMO-51     | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP #1 SHUTOFF VALVE   | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 1          |
| 8           | 1     | 2-IMO-52     | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP #2 SHUTOFF VALVE   | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 2          |
| 8           | 1     | 2-IMO-53     | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP #3 SHUTOFF VALVE   | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 3          |
| 8           | 2     | 2-IMO-54     | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP #4 SHUTOFF VALVE   | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 4          |
| 8           | 2     | 2-IMO-910    | 0      | REFUELING WATER STORAGE TANK SUPPLY / REFUELING WATER STORAGE TANK TO CVCS CHARGING PUMPS SUCTION HEADER TRAIN 'A' SHUTOFF VALVE | AUXILIARY   | 587.00     | RECIPROCATING CHARG PMP RM   |
| 8           | 1     | 2-IMO-911    | 0      | REFUELING WATER STORAGE TANK SUPPLY / REFUELING WATER STORAGE TANK TO CVCS CHARGING PUMPS SUCTION HEADER TRAIN 'B' SHUTOFF VALVE | AUXILIARY   | 587.00     | E CENTRIFUGAL CHARG PMP ROOM |
| 8           | 1     | 2-LSO-240    | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL UPPER VALVE GEAR LUBRICATION CONTROL SOLENOID #1   | AUXILIARY   | 587.00     | AB EMER DSL GEN RM           |
| 8           | 1     | 2-LSO-241    | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL UPPER VALVE GEAR LUBRICATION CONTROL SOLENOID #2   | AUXILIARY   | 587.00     | AB EMER DSL GEN RM           |
| 8           | 2     | 2-LSO-245    | 0      | DIESEL LUBE OIL / CD EMER DIESEL GEN UPPER VALVE GEAR LUBRICATION CONTROL SOLENOID #1  | AUXILIARY   | 587.00     | CD EMER DSL GEN RM           |
| 8           | 2     | 2-LSO-246    | 0      | DIESEL LUBE OIL / CD EMER DIESEL GEN UPPER VALVE GEAR LUBRICATION CONTROL SOLENOID #2  | AUXILIARY   | 587.00     | CD EMER DSL GEN RM           |
| 8           | 1     | 2-MCM-221    | 0      | MAIN STEAM / MAIN STEAM LEAD #2 TO AUXILIARY FEED PUMP TURBINE 4 IN MOTOR OPERATED SHUTOFF VALVE                                 | AUXILIARY   | 633.00     | W MN STM STOP ENCL           |
| 8           | 1     | 2-MCM-231    | 0      | MAIN STEAM / MAIN STEAM LEAD #3 TO AUXILIARY FEED PUMP TURBINE 4 IN MOTOR OPERATED SHUTOFF VALVE                                 | AUXILIARY   | 633.00     | W MN STM STOP ENCL           |
| 8           | 2     | 2-MMO-210    | 0      | MAIN STEAM / STEAM STOP VALVE MRV-210 STEAM CYLINDER DUMP 4 IN MOTOR OPERATED VALVES SELECTOR VALVE                              | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL         |
| 8           | 1     | 2-MMO-220    | 0      | MAIN STEAM / STEAM STOP VALVE MRV-220 STEAM CYLINDER DUMP 4 IN MOTOR OPERATED VALVES SELECTOR VALVE                              | AUXILIARY   | 633.00     | W MN STM STOP ENCL           |
| 8           | 1     | 2-MMO-230    | 0      | MAIN STEAM / STEAM STOP VALVE MRV-230 STEAM CYLINDER DUMP VALVES 4 IN MOTOR OPERATED SELECTOR VALVE                              | AUXILIARY   | 633.00     | W MN STM STOP ENCL           |
| 8           | 2     | 2-MMO-240    | 0      | MAIN STEAM / STEAM STOP VALVE MRV-240 STEAM CYLINDER DUMP VALVE 4 IN MOTOR OPERATED SELECTOR VALVE                               | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL         |
| 8           | 1     | 2-NMO-151    | 0      | PRESSURIZER / PRESSURIZER RELIEF VALVE NRV-151 UPSTREAM 3 IN MOTOR OPERATED SHUTOFF VALVE  | CONTAINMENT | 650.00     | PRESSURIZER ENCL, INTERIOR   |
| 8           | 1     | 2-NMO-152    | 0      | PRESSURIZER / PRESSURIZER RELIEF VALVE NRV-152 UPSTREAM 3 IN MOTOR OPERATED SHUTOFF VALVE  | CONTAINMENT | 650.00     | PRESSURIZER ENCL, INTERIOR   |
| 8           | 2     | 2-NMO-153    | 0      | PRESSURIZER / PRESSURIZER RELIEF VALVE NRV-153 UPSTREAM 3 IN MOTOR OPERATED SHUTOFF VALVE  | CONTAINMENT | 650.00     | PRESSURIZER ENCL, INTERIOR   |
| 8           | 2     | 2-NSO-21     | 0      | REACTOR COOLANT SYSTEM VENTS / REACTOR VESSEL OME-1 POST-ACCIDENT VENT TRAIN 'A' SOLENOID VALVE                                  | CONTAINMENT | 621.00     | RCTR VESSEL HEAD AREA        |
| 8           | 2     | 2-NSO-22     | 0      | REACTOR COOLANT SYSTEM VENTS / REACTOR VESSEL OME-1 POST-ACCIDENT VENT TRAIN 'A' SOLENOID VALVE                                  | CONTAINMENT | 621.00     | RCTR VESSEL HEAD AREA        |



**DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description   | Building    | Floor Elev | Room or Row Col                 |
|-------------|-------|--------------|--------|--|-------------|------------|---------------------------------|
| 8           | 1     | 2-NSO-23     | 0      | REACTOR COOLANT SYSTEM VENTS / REACTOR VESSEL OME-1 POST-ACCIDENT VENT TRAIN 'B' SOLENOID VALVE  | CONTAINMENT | 621.00     | RCTR VESSEL HEAD AREA           |
| 8           | 1     | 2-NSO-24     | 0      | REACTOR COOLANT SYSTEM VENTS / REACTOR VESSEL OME-1 POST-ACCIDENT VENT TRAIN 'B' SOLENOID VALVE  | CONTAINMENT | 621.00     | RCTR VESSEL HEAD AREA           |
| 8           | 2     | 2-NSO-81     | 0      | REACTOR COOLANT SYSTEM VENTS / PRESSURIZER OME-4 POST-ACCIDENT VENT TRAIN 'A' SOLENOID VALVE   | CONTAINMENT | 650.00     | PRESSURIZER ENCL. INTERIOR      |
| 8           | 2     | 2-NSO-82     | 0      | REACTOR COOLANT SYSTEM VENTS / PRESSURIZER OME-4 POST-ACCIDENT VENT TRAIN 'A' SOLENOID VALVE   | CONTAINMENT | 650.00     | PRESSURIZER ENCL. INTERIOR      |
| 8           | 1     | 2-NSO-83     | 0      | REACTOR COOLANT SYSTEM VENTS / PRESSURIZER OME-4 POST-ACCIDENT VENT TRAIN 'B' SOLENOID VALVE   | CONTAINMENT | 650.00     | PRESSURIZER ENCL. INTERIOR      |
| 8           | 1     | 2-NSO-84     | 0      | REACTOR COOLANT SYSTEM VENTS / PRESSURIZER OME-4 POST-ACCIDENT VENT TRAIN 'B' SOLENOID VALVE   | CONTAINMENT | 650.00     | PRESSURIZER ENCL. INTERIOR      |
| 8           | 2     | 2-QCM-250    | 0      | REACTOR COOLANT PUMP SEAL WATER INLEAKOFF / REACTOR COOLANT PUMP SEAL WATER RETURN TRAIN 'A' CONTAINMENT ISOLATION 4 IN MOTOR OPERATED VALVE | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 2             |
| 8           | 1     | 2-QCM-350    | 0      | REACTOR COOLANT PUMP SEAL WATER INLEAKOFF / REACTOR COOLANT PUMP SEAL WATER RETURN TRAIN 'B' CONTAINMENT ISOLATION 4 IN MOTOR OPERATED VALVE | AUXILIARY   | 591.00     | VESTIBULE                       |
| 8           | 2     | 2-QMO-200    | 0      | CHARGING (CVCS) / CVCS CHARGING TO REGENERATIVE HEAT EXCHANGER TRAIN 'A' SHUTOFF VALVE   | AUXILIARY   | 587.00     | RECIPROCATING CHARG PMP RM      |
| 8           | 1     | 2-QMO-201    | 0      | CHARGING (CVCS) / CVCS CHARGING TO REGENERATIVE HEAT EXCHANGER TRAIN 'B' SHUTOFF VALVE   | AUXILIARY   | 587.00     | RECIPROCATING CHARG PMP RM      |
| 8           | 2     | 2-QMO-225    | 0      | CHARGING (CVCS) / WEST CENTRIFUGAL CHARGING PUMP MINI-FLOW TO RCP SEAL WATER HEAT EXCHANGER HE-11 2 IN MOTOR OPERATED SHUTOFF VALVE          | AUXILIARY   | 587.00     | WEST CENTRIFUGAL CHARG PMP ROOM |
| 8           | 1     | 2-QMO-226    | 0      | CHARGING (CVCS) / WEST CENTRIFUGAL CHARGING PUMP MINI-FLOW TO RCP SEAL WATER HEAT EXCHANGER HE-11 2 IN MOTOR OPERATED SHUTOFF VALVE          | AUXILIARY   | 587.00     | W CENTRIFUGAL CHARG PMP RM      |
| 8           | 12    | 2-QMO-420    | 0      | BORON MAKEUP (CVCS) / EMERGENCY BORATION TO CVCS CHARGING PUMPS SUCTION HEADER SHUTOFF VALVE   | AUXILIARY   | 587.00     | BORIC ACID STOR TANK AREA       |
| 8           | 2     | 2-QMO-451    | 0      | LETDOWN (CVCS) / REACTOR COOLANT LETDOWN VOLUME CONTROL TANK TK-10 TO CVCS CHARGING PUMPS TRAIN 'A' SHUTOFF 4 IN MOTOR OPERATED VALVE        | AUXILIARY   | 609.00     | VOL CTRL TANK E HALLWAY         |
| 8           | 1     | 2-QMO-452    | 0      | LETDOWN (CVCS) / REACTOR COOLANT LETDOWN VOLUME CONTROL TANK TK-10 TO CVCS CHARGING PUMPS TRAIN 'B' SHUTOFF 4 IN MOTOR OPERATED VALVE        | AUXILIARY   | 609.00     | VOL CTRL TANK E HALLWAY         |
| 8           | 12    | 2-QT-508     | 0      | MAIN STEAM / TURBINE DRIVEN AUX FEED PUMP PP-4 TRIP AND THROTTLE VALVE   | TURBINE     | 591.00     | TB DRIVEN AUX FLOWTR PMP        |
| 8           | 2     | 2-WMO-703    | 0      | ESSENTIAL SERVICE WATER / EAST ESSENTIAL SERVICE WATER PUMP PP-7E DISCHARGE SHUTOFF VALVE  | SCREENHOUSE | 591.00     | E SSNTL SERV WTR PMP RM         |
| 8           | 1     | 2-WMO-704    | 0      | ESSENTIAL SERVICE WATER / WEST ESSENTIAL SERVICE WATER PUMP PP-7W DISCHARGE SHUTOFF VALVE  | SCREENHOUSE | 591.00     | W SSNTL SERV WTR PMP RM         |
| 8           | 1     | 2-WMO-708    | 0      | ESSENTIAL SERVICE WATER / WEST ESSENTIAL SERVICE WATER SUPPLY HEADER CROSSTIE TO UNIT 1 SHUTOFF VALVE  | TURBINE     | 589.00     | ESSNTL SERV WTR PIPE TUNN       |
| 8           | 2     | 2-WMO-708    | 0      | ESSENTIAL SERVICE WATER / EAST ESSENTIAL SERVICE WATER SUPPLY HEADER CROSSTIE TO UNIT 1 SHUTOFF VALVE  | TURBINE     | 589.00     | ESSNTL SERV WTR PIPE TUNN       |
| 8           | 2     | 2-WMO-712    | 0      | ESSENTIAL SERVICE WATER / EAST CONTAINMENT SPRAY HEAT EXCHANGER HE-18E ESSENTIAL SERVICE WATER INLET SHUTOFF VALVE                           | AUXILIARY   | 633.00     | 633 HALLWAY                     |
| 8           | 2     | 2-WMO-714    | 0      | ESSENTIAL SERVICE WATER / EAST CONTAINMENT SPRAY HEAT EXCHANGER HE-18E ESSENTIAL SERVICE WATER OUTLET SHUTOFF VALVE                          | AUXILIARY   | 609.00     | 609 HALLWAY                     |
| 8           | 1     | 2-WMO-716    | 0      | ESSENTIAL SERVICE WATER / WEST CONTAINMENT SPRAY HEAT EXCHANGER ESSENTIAL SERVICE WATER INLET SHUTOFF VALVE                                  | AUXILIARY   | 633.00     | 633 HALLWAY                     |
| 8           | 1     | 2-WMO-718    | 0      | ESSENTIAL SERVICE WATER / WEST CONTAINMENT SPRAY HEAT EXCHANGER ESSENTIAL SERVICE WATER OUTLET SHUTOFF VALVE                                 | AUXILIARY   | 609.00     | 609 HALLWAY                     |
| 8           | 1     | 2-WMO-722-AB | 0      | ESSENTIAL SERVICE WATER / WEST ESSENTIAL SERVICE WATER SUPPLY HEADER TO AB EMERGENCY DIESEL HEAT EXCHANGERS SHUTOFF VALVE                    | AUXILIARY   | 587.00     | 2CD DSL RM N PIPE TUNNEL        |

**DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID   | Rev No | System / Equipment Description  | Building    | Floor Elev | Room or Row Col               |
|-------------|-------|----------------|--------|---|-------------|------------|-------------------------------|
| 8           | 2     | 2-WMO-724-AB   | 0      | ESSENTIAL SERVICE WATER / EAST<br>ESSENTIAL SERVICE WATER SUPPLY<br>HEADER TO AB EMERGENCY DIESEL HEAT<br>EXCHANGERS SHUTOFF VALVE          | AUXILIARY   | 587.00     | 2CD DSL RM N PIPE<br>TUNNEL   |
| 8           | 2     | 2-WMO-726-CD   | 0      | ESSENTIAL SERVICE WATER / EAST<br>ESSENTIAL SERVICE WATER SUPPLY<br>HEADER TO CD EMERGENCY DIESEL HEAT<br>EXCHANGERS SHUTOFF VALVE          | AUXILIARY   | 587.00     | 2CD DSL RM N PIPE<br>TUNNEL   |
| 8           | 1     | 2-WMO-728-CD   | 0      | ESSENTIAL SERVICE WATER / WEST<br>ESSENTIAL SERVICE WATER SUPPLY<br>HEADER TO CD EMERGENCY DIESEL HEAT<br>EXCHANGERS SHUTOFF VALVE          | AUXILIARY   | 587.00     | 2CD DSL RM N PIPE<br>TUNNEL   |
| 8           | 2     | 2-WMO-732      | 0      | ESSENTIAL SERVICE WATER / EAST<br>COMPONENT COOLING WATER HEAT<br>EXCHANGER HE-15E ESSENTIAL SERVICE<br>WATER INLET SHUTOFF VALVE           | AUXILIARY   | 609.00     | 609 HALLWAY                   |
| 8           | 2     | 2-WMO-734      | 0      | ESSENTIAL SERVICE WATER / EAST<br>COMPONENT COOLING WATER HEAT<br>EXCHANGER HE-15E ESSENTIAL SERVICE<br>WATER OUTLET SHUTOFF VALVE          | AUXILIARY   | 609.00     | 609 HALLWAY                   |
| 8           | 1     | 2-WMO-736      | 0      | ESSENTIAL SERVICE WATER / WEST<br>COMPONENT COOLING WATER HEAT<br>EXCHANGER ESSENTIAL SERVICE WATER<br>INLET SHUTOFF VALVE                  | AUXILIARY   | 609.00     | 609 HALLWAY                   |
| 8           | 1     | 2-WMO-738      | 0      | ESSENTIAL SERVICE WATER / WEST<br>COMPONENT COOLING WATER HEAT<br>EXCHANGER ESSENTIAL SERVICE WATER<br>OUTLET SHUTOFF VALVE                 | AUXILIARY   | 609.00     | 609 HALLWAY                   |
| 8           | 1     | 2-WMO-744      | 0      | AUXILIARY FEED WATER SYSTEM / ESW TO<br>WEST MOTOR DRIV AUX FEED PUMP PP-3W<br>SHUTOFF 4 IN MOTOR OPERATED VALVE                            | TURBINE     | 591.00     | W MTR DRIVEN AUX<br>FDWTR PMP |
| 8           | 12    | 2-WMO-753      | 0      | AUXILIARY FEED WATER / ESW TO TURB<br>DRIVEN AUX FEED PUMP PP-4 SHUTOFF 6<br>IN MOTOR OPERATED VALVE  | TURBINE     | 591.00     | TB DRIVEN AUX<br>FDWTR PMP    |
| 8           | 2     | 2-WMO-754      | 0      | ESSENTIAL SERVICE WATER / ESSENTIAL<br>SERVICE WATER TO EAST MOTOR DRIVEN<br>AUXILIARY FEED PUMP PP-3E 4 IN MOTOR<br>OPERATED SHUTOFF VALVE | TURBINE     | 591.00     | E MTR DRIV AUX<br>FEEDWTR PMP |
| 8           | 12    | 2-XSO-505      | 0      | CONTROL AIR / PRESSURIZER TRAIN 'B'<br>PRESSURE RELIEF VALVE NR-152<br>CONTROL SOLENOID   | CONTAINMENT | 650.00     | PRESSURIZER ENCL,<br>INTERIOR |
| 8           | 2     | 2-XSO-507      | 0      | CONTROL AIR / PRESSURIZER TRAIN 'A'<br>PRESSURE RELIEF VALVE NR-153<br>CONTROL SOLENOID   | CONTAINMENT | 650.00     | PRESSURIZER ENCL,<br>INTERIOR |
| 9           | 2     | 12-HV-ESW-1    | 0      | SCREENHOUSE VENTILATION / UNIT 2 EAST<br>ESSENTIAL SERVICE WATER PUMP ROOM<br>SUPPLY VENTILATION FAN  | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR<br>PMP RM   |
| 9           | 2     | 12-HV-ESW-2    | 0      | SCREENHOUSE VENTILATION / UNIT 2 EAST<br>ESSENTIAL SERVICE WATER PUMP ROOM<br>SUPPLY VENTILATION FAN  | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR<br>PMP RM   |
| 9           | 1     | 12-HV-ESW-3    | 0      | SCREENHOUSE VENTILATION / UNIT 2 WEST<br>ESSENTIAL SERVICE WATER PUMP ROOM<br>SUPPLY VENTILATION FAN  | SCREENHOUSE | 591.00     | W ESSNTL SERV<br>WTR PMP RM   |
| 9           | 1     | 12-HV-ESW-4    | 0      | SCREENHOUSE VENTILATION / UNIT 2 WEST<br>ESSENTIAL SERVICE WATER PUMP ROOM<br>SUPPLY VENTILATION FAN  | SCREENHOUSE | 591.00     | W ESSNTL SERV<br>WTR PMP RM   |
| 9           | 2     | 2-HV-AES-1     | 0      | AUXILIARY BUILDING VENTILATION /<br>AUXILIARY BUILDING VENTILATION<br>ENGINEERED SAFETY FEATURE EXHAUST<br>UNIT 1                           | AUXILIARY   | 633.00     | NORM BLOWDOWN<br>FLASHTANK RM |
| 9           | 1     | 2-HV-AES-2     | 0      | AUXILIARY BUILDING VENTILATION /<br>AUXILIARY BUILDING VENTILATION<br>ENGINEERED SAFETY FEATURE EXHAUST<br>UNIT                             | AUXILIARY   | 633.00     | NORM BLOWDOWN<br>FLASHTANK RM |
| 9           | 2     | 2-HV-AFP-BRE-1 | 0      | AUXILIARY BUILDING VENTILATION / TRAIN<br>'N' BATTERY ROOM EAST EXHAUST FAN   | AUXILIARY   | 633.00     | NORM BLOWDOWN<br>FLASHTANK RM |
| 9           | 1     | 2-HV-AFP-BRE-2 | 0      | AUXILIARY BUILDING VENTILATION / TRAIN<br>'N' BATTERY ROOM WEST EXHAUST FAN   | AUXILIARY   | 633.00     | NORM BLOWDOWN<br>FLASHTANK RM |
| 9           | 2     | 2-HV-AFP-M1    | 0      | TURBINE BUILDING VENTILATION / EAST<br>MOTOR DRIVEN AUXILIARY FEEDWATER<br>PUMP ROOM EXHAUST FAN  | TURBINE     | 591.00     | E MTR DRIV AUX<br>FEEDWTR PMP |
| 9           | 2     | 2-HV-AFP-M2    | 0      | TURBINE BUILDING VENTILATION / EAST<br>MOTOR DRIVEN AUXILIARY FEEDWATER<br>PUMP ROOM SUPPLY FAN   | TURBINE     | 591.00     | E MTR DRIV AUX<br>FEEDWTR PMP |
| 9           | 2     | 2-HV-AFP-T1    | 0      | TURBINE BUILDING VENTILATION / TURBINE<br>DRIVEN AUXILIARY FEED PUMP ROOM<br>NORTH EXHAUST FAN  | TURBINE     | 591.00     | TB DRIVEN AUX<br>FDWTR PMP    |
| 9           | 1     | 2-HV-AFP-T2    | 0      | TURBINE BUILDING VENTILATION / TURBINE<br>DRIVEN AUXILIARY FEED PUMP ROOM<br>SOUTH EXHAUST FAN  | TURBINE     | 591.00     | TB DRIVEN AUX<br>FDWTR PMP    |
| 9           | 1     | 2-HV-AFP-X1    | 0      | TURBINE BUILDING VENTILATION / WEST<br>MOTOR DRIVEN AUXILIARY FEED PUMP<br>ROOM EAST EXHAUST FAN  | TURBINE     | 591.00     | W MTR DRIVEN AUX<br>FDWTR PMP |
| 9           | 1     | 2-HV-AFP-X2    | 0      | TURBINE BUILDING VENTILATION / WEST<br>MOTOR DRIVEN AUXILIARY FEED PUMP<br>ROOM WEST EXHAUST FAN  | TURBINE     | 591.00     | TB 591 ELEV BASMNT            |
| 9           | 1     | 2-HV-CEQ-1     | 0      | HYDROGEN SKIMMER / CONTAINMENT<br>HYDROGEN SKIMMER VENTILATION FAN #1   | CONTAINMENT | 625.00     | HV-CEQ-1 FAN RM               |
| 9           | 2     | 2-HV-CEQ-2     | 0      | HYDROGEN SKIMMER / CONTAINMENT<br>HYDROGEN SKIMMER VENTILATION FAN #2   | CONTAINMENT | 625.00     | HV-CEQ-2 FAN RM               |

**DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID     | Rev No | System / Equipment Description   | Building  | Floor Elev | Room or Row Col            |
|-------------|-------|------------------|--------|--|-----------|------------|----------------------------|
| 9           | 2     | 2-HV-DGS-1       | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN                                    | AUXILIARY | 587.00     | CD EMER DSL GEN RM         |
| 9           | 1     | 2-HV-DGS-2       | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN                                    | AUXILIARY | 587.00     | AB EMER DSL GEN RM         |
| 9           | 1     | 2-HV-DGS-3       | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM CABINET VENTILATION SUPPLY FAN                            | AUXILIARY | 587.00     | AB EMER DSL GEN RM         |
| 9           | 2     | 2-HV-DGS-4       | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM CABINET VENTILATION SUPPLY FAN                            | AUXILIARY | 587.00     | CD EMER DSL GEN RM         |
| 9           | 2     | 2-HV-DGX-1       | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FAN                                   | AUXILIARY | 587.00     | CD EMER DSL GEN RM         |
| 9           | 1     | 2-HV-DGX-2       | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FAN                                   | AUXILIARY | 587.00     | AB EMER DSL GEN RM         |
| 9           | 1     | 2-HV-SGRS-1A     | 0      | AUXILIARY BUILDING VENTILATION / CONTROL ROD DRIVE EQUIPMENT ROOM AND INVERTER AREA VENTILATION NORTH SUPPLY FAN       | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA    |
| 9           | 1     | 2-HV-SGRS-2      | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM AB 4KV SWITCHGEAR AREA VENTILATION SUPPLY FAN                                | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR AREA  |
| 9           | 2     | 2-HV-SGRS-3      | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM CD 4KV SWITCHGEAR AREA VENTILATION SUPPLY FAN                                | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR AREA  |
| 9           | 2     | 2-HV-SGRS-4A     | 0      | AUXILIARY BUILDING VENTILATION / CONTROL ROD DRIVE EQUIPMENT ROOM AND INVERTER AREA VENTILATION SOUTH SUPPLY FAN       | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA    |
| 9           | 2     | 2-HV-SGRS-7      | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600 VOLT SWITCHGEAR TRANSFORMERS TR21B AND TR21D AREA VENTILATION SUPPLY FAN | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA    |
| 9           | 1     | 2-HV-SGRS-8      | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600 VOLT SWITCHGEAR TRANSFORMERS TR21A AND TR21C AREA VENTILATION SUPPLY FAN | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA    |
| 9           | 1     | 2-HV-SGRS-9      | 0      | AUXILIARY BUILDING VENTILATION / 600VAC MOTOR CONTROL CENTER MEZZANINE AREA VENTILATION SUPPLY FAN                     | AUXILIARY | 613.00     | 4KV ROOM - MEZZANINE AREA  |
| 9           | 1     | 2-HV-SGRX-2      | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM AB 4KV SWITCHGEAR AREA VENTILATION EXHAUST FAN                               | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR AREA  |
| 9           | 2     | 2-HV-SGRX-3      | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM CD 4KV SWITCHGEAR AREA VENTILATION EXHAUST FAN                               | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR AREA  |
| 9           | 1     | 2-HV-SGRX-5      | 0      | AUXILIARY BUILDING VENTILATION / AB BATTERY EQUIPMENT AREA BATTERY ROOM VENTILATION EXHAUST FAN                        | AUXILIARY | 609.00     | AB BATTERY EQUIP AREA      |
| 9           | 2     | 2-HV-SGRX-6      | 0      | AUXILIARY BUILDING VENTILATION / CD BATTERY EQUIPMENT AREA BATTERY ROOM VENTILATION EXHAUST FAN                        | AUXILIARY | 628.00     | CD BATTERY EQUIP AREA      |
| 10          | 2     | 2-HV-ACRA-1      | 0      | CONTROL ROOM VENTILATION / CONTROL ROOM VENTILATION NORTH AIR CONDITIONING UNIT  | AUXILIARY | 650.00     | CTRL RM AIR CONDIT RM      |
| 10          | 1     | 2-HV-ACRA-2      | 0      | CONTROL ROOM VENTILATION / CONTROL ROOM VENTILATION SOUTH AIR CONDITIONING UNIT  | AUXILIARY | 650.00     | CTRL RM AIR CONDIT RM      |
| 10          | 2     | 2-HV-AES-1 (FLT) | 0      | AUXILIARY BUILDING VENTILATION / AUXILIARY BUILDING VENTILATION ENGINEERED SAFETY FEATURE EXHAUST AIR FILTER           | AUXILIARY | 633.00     | NORM BLOWDOWN FLASHTANK RM |
| 10          | 1     | 2-HV-AES-2 (FLT) | 0      | AUXILIARY BUILDING VENTILATION / AUXILIARY BUILDING VENTILATION ENGINEERED SAFETY FEATURE EXHAUST AIR FILTER           | AUXILIARY | 633.00     | NORM BLOWDOWN FLASHTANK RM |
| 11          | 2     | 2-HE-63N         | 0      | CONTROL ROOM AIR CONDITIONING CHILL WATER / CONTROL ROOM AIR CONDITIONING NORTH LIQUID CHILLER HV-ACR-1 EVAPORATOR     | AUXILIARY | 650.00     | CTRL RM AIR CONDIT RM      |
| 11          | 1     | 2-HE-63S         | 0      | CONTROL ROOM AIR CONDITIONING CHILL WATER / CONTROL ROOM AIR CONDITIONING SOUTH LIQUID CHILLER HV-ACR-2 EVAPORATOR     | AUXILIARY | 650.00     | CTRL RM AIR CONDIT RM      |
| 11          | 2     | 2-HE-64N         | 0      | CONTROL ROOM AIR CONDITIONING CHILL WATER / CONTROL ROOM AIR CONDITIONING NORTH LIQUID CHILLER HV-ACR-1 CONDENSER      | AUXILIARY | 650.00     | CTRL RM AIR CONDIT RM      |
| 11          | 1     | 2-HE-64S         | 0      | CONTROL ROOM AIR CONDITIONING CHILL WATER / CONTROL ROOM AIR CONDITIONING SOUTH LIQUID CHILLER HV-ACR-2 CONDENSER      | AUXILIARY | 650.00     | CTRL RM AIR CONDIT RM      |
| 11          | 2     | 2-HV-ACR-1       | 0      | CONTROL ROOM AIR CONDITIONING CHILL WATER / CONTROL ROOM AIR CONDITIONING NORTH LIQUID CHILLER                         | AUXILIARY | 650.00     | CTRL RM AIR CONDIT RM      |
| 11          | 1     | 2-HV-ACR-2       | 0      | CONTROL ROOM AIR CONDITIONING CHILL WATER / CONTROL ROOM AIR CONDITIONING SOUTH LIQUID CHILLER                         | AUXILIARY | 650.00     | CTRL RM AIR CONDIT RM      |

**DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description   | Building  | Floor Elev | Room or Row Col                |
|-------------|-------|--------------|--------|--|-----------|------------|--------------------------------|
| 12          | 1     | 2-QT-502-AB  | 0      | DIESEL COMBUSTION AIR / AB EMERGENCY DIESEL TURBOCHARGER   | AUXILIARY | 587.00     | AB EMER DSL GEN RM             |
| 12          | 2     | 2-QT-502-CD  | 0      | DIESEL COMBUSTION AIR / CD EMERGENCY DIESEL TURBOCHARGER   | AUXILIARY | 587.00     | CD EMER DSL GEN RM             |
| 14          | 1     | 2-69-ABBC    | 0      | 250 VDC DISTRIBUTION / PLANT BATTERY BATT-AB DISCONNECT SWITCH   | AUXILIARY | 609.00     | INVERTER AREA                  |
| 14          | 2     | 2-89-CD8C    | 0      | 250 VDC DISTRIBUTION / PLANT BATTERY BATT-CD DISCONNECT SWITCH   | AUXILIARY | 628.00     | CD BATTERY EQUIPMENT AREA      |
| 14          | 2     | 2-AFW        | 0      | 120/208V MISC SAFETY RELATED POWER DISTRIBUTION / POWER PANEL  | AUXILIARY | 587.00     | CD EMER DSL GEN RM             |
| 14          | 2     | 2-AFWX       | 0      | 120/208V MISC SAFETY RELATED POWER DISTRIBUTION / 120/208 VAC AUXILIARY FEEDWATER DISTRIBUTION PANEL                 | AUXILIARY | 587.00     | CD EMER DSL GEN RM             |
| 14          | 1     | 2-BATT-AB-SH | 0      | 250VDC DISTRIBUTION / PLANT BATTERY BATT-AB AMMETER SHUNT  | AUXILIARY | 609.00     | CRID INVERTER AREA             |
| 14          | 2     | 2-BATT-CD-SH | 0      | 250VDC DISTRIBUTION / PLANT BATTERY BATT-CD AMMETER SHUNT CABINET  | AUXILIARY | 628.00     | CD BATTERY EQUIP AREA          |
| 14          | 12    | 2-BATT-N-SH  | 0      | 250VDC CONTROL AND INSTRUMENTATION / METERING SHUNT  | AUXILIARY | 633.00     | NORMAL BLOWDOWN FLASHTANK ROOM |
| 14          | 1     | 2-BC-AB-SH   | 0      | 250VDC DISTRIBUTION / PLANT BATTERY CHARGER AMMETER BC-AB SHUNT CABINET  | AUXILIARY | 609.00     | CRID INVERTER AREA             |
| 14          | 2     | 2-BC-CD-SH   | 0      | 250VDC DISTRIBUTION / PLANT BATTERY CHARGER BC-CD SHUNT CABINET  | AUXILIARY | 628.00     | CD BATTERY EQUIP AREA          |
| 14          | 1     | 2-BCTC-AB    | 0      | 250VDC DISTRIBUTION / PLANT BATTERY CHARGERS BC-AB1 AND BC-AB2 TRANSFER SWITCH CABINET                               | AUXILIARY | 613.00     | 4KV ROOM - MEZZANINE AREA      |
| 14          | 2     | 2-BCTC-CD    | 0      | 250VDC DISTRIBUTION / PLANT BATTERY CHARGERS BC-CD1 AND BC-CD2 TRANSFER CABINET                                      | AUXILIARY | 628.00     | CD BATTERY EQUIP AREA          |
| 14          | 1     | 2-CCV-AB     | 0      | 250VDC DISTRIBUTION / 250VDC TRAIN 'B' CRITICAL SOLENOID VALVES DISTRIBUTION PANEL                                   | AUXILIARY | 633.00     | CONTROL ROOM                   |
| 14          | 2     | 2-CCV-CD     | 0      | 250VDC DISTRIBUTION / 250VDC TRAIN 'A' CRITICAL SOLENOID VALVES DISTRIBUTION PANEL                                   | AUXILIARY | 633.00     | CONTROL ROOM                   |
| 14          | 1     | 2-CRAB       | 0      | 250VDC DISTRIBUTION / 250VDC CONTROL ROOM DISTRIBUTION PANEL CRAB  | AUXILIARY | 633.00     | CONTROL ROOM                   |
| 14          | 2     | 2-CRCD       | 0      | 250VDC DISTRIBUTION / POWER PANEL  | AUXILIARY | 633.00     | CONTROL ROOM                   |
| 14          | 2     | 2-CRID-I     | 0      | 120V CONTROL ROOM INSTRUMENTATION DISTR / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION CHANNEL I DISTRIBUTION PANEL   | AUXILIARY | 633.00     | CONTROL ROOM                   |
| 14          | 2     | 2-CRID-II    | 0      | 120V AC DISTRIBUTION / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION CHANNEL II DISTRIBUTION PANEL                     | AUXILIARY | 633.00     | CONTROL ROOM                   |
| 14          | 1     | 2-CRID-III   | 0      | 120V CONTROL ROOM INSTRUMENTATION DISTR / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION CHANNEL III DISTRIBUTION PANEL | AUXILIARY | 633.00     | CONTROL ROOM                   |
| 14          | 1     | 2-CRID-IV    | 0      | 120V CONTROL ROOM INSTRUMENTATION DISTR / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION CHANNEL IV DISTRIBUTION PANEL  | AUXILIARY | 633.00     | CONTROL ROOM                   |
| 14          | 12    | 2-DCN        | 0      | 250VDC CONTROL AND INSTRUMENTATION / 250VDC POWER PANEL  | AUXILIARY | 633.00     | 633 HALLWAY                    |
| 14          | 1     | 2-ELSC       | 0      | 120/208V MISC SAFETY RELATED POWER DISTR / POWER PANEL   | AUXILIARY | 587.00     | AB EMER DSL GEN RM             |
| 14          | 1     | 2-ELSCX      | 0      | 120/208V MISC SAFETY RELATED POWER DISTRIBUTION / 120/208VAC EMERGENCY LOCAL SHUTDOWN AUXILIARY DISTRIBUTION PANEL   | AUXILIARY | 587.00     | AB EMER DSL GEN RM             |
| 14          | 1     | 2-MCAB       | 0      | 250VDC DISTRIBUTION / 250VDC DISTRIBUTION PANEL MCAB   | AUXILIARY | 609.00     | AB BATTERY EQUIP AREA          |
| 14          | 2     | 2-MCCD       | 0      | 250VDC DISTRIBUTION / 250VDC DISTRIBUTION POWER PANEL  | AUXILIARY | 628.00     | CD BATTERY EQUIP AREA          |
| 14          | 1     | 2-MDAB       | 0      | 250VDC DISTRIBUTION / 250 VDC POWER PANEL  | AUXILIARY | 609.00     | AB BATTERY EQUIP AREA          |
| 14          | 2     | 2-MDCD       | 0      | 250VDC DISTRIBUTION / 250VDC DISTRIBUTION PANEL MDCD   | AUXILIARY | 628.00     | CD BATTERY EQUIP AREA          |
| 14          | 2     | 2-SSV-A1     | 0      | 250VDC DISTRIBUTION / 250VDC TRAIN 'A' NUCLEAR SAMPLING FEEDER PANEL #1  | AUXILIARY | 587.00     | NUCLEAR SAMPLING RM            |
| 14          | 2     | 2-SSV-A2     | 0      | 250VDC DISTRIBUTION / 250VDC NUCLEAR SAMPLING FEEDER PANEL #2  | AUXILIARY | 587.00     | NUCLEAR SAMPLING RM            |
| 14          | 1     | 2-SSV-B      | 0      | 250VDC DISTRIBUTION / POWER PANEL  | AUXILIARY | 587.00     | NUCLEAR SAMPLING RM            |
| 14          | 1     | 2-TDAB       | 0      | 250VDC DISTRIBUTION / 250 VDC POWER PANEL  | AUXILIARY | 609.00     | AB BATTERY EQUIP AREA          |
| 14          | 2     | 2-TDCD       | 0      | 250VDC DISTRIBUTION / POWER PANEL, TRAIN A TRANSFER CABINET  | AUXILIARY | 628.00     | CD BATTERY EQUIP AREA          |
| 14          | 3     | 2-VDAB-1     | 0      | 250VDC DISTRIBUTION / 250VDC VALVE DISTRIBUTION PANEL VDAB-1   | AUXILIARY | 633.00     | CONTROL ROOM                   |
| 14          | 1     | 2-VDAB-2     | 0      | 250VDC DISTRIBUTION / 250VDC VALVE DISTRIBUTION PANEL VDAB-2   | AUXILIARY | 633.00     | CONTROL ROOM                   |
| 14          | 2     | 2-VDCD-1     | 0      | 250VDC DISTRIBUTION / 250VDC VALVE DISTRIBUTION PANEL VDCD-1   | AUXILIARY | 633.00     | CONTROL ROOM                   |
| 14          | 2     | 2-VDCD-2     | 0      | 250VDC DISTRIBUTION / 250VDC VALVE DISTRIBUTION PANEL VDCD-2   | AUXILIARY | 633.00     | CONTROL ROOM                   |

**DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID   | Rev No | System / Equipment Description  | Building    | Floor Elev | Room or Row Col                            |
|-------------|-------|----------------|--------|---|-------------|------------|--|
| 15          | 1     | 2-BATT-AB      | 0      | 250VDC DISTRIBUTION / PLANT BATTERY AB  | AUXILIARY   | 609.00     | AB BATTERY EQUIP AREA                      |
| 15          | 2     | 2-BATT-CD      | 0      | 250VDC DISTRIBUTION / PLANT BATTERY CD  | AUXILIARY   | 626.00     | CD BATTERY EQUIP AREA                      |
| 15          | 12    | 2-BATT-N       | 0      | 250VDC CONTROL AND INSTRUMENTATION / TRAIN 12 PLANT BATTERY   | AUXILIARY   | 633.00     | NORMAL BLOWDOWN FLASHTANK ROOM 633 HALLWAY |
| 16          | 12    | 2-BC-A         | 0      | 250VDC CONTROL AND INSTRUMENTATION / BATTERY CHARGER A FOR N-TRAIN BATTERY  | AUXILIARY   | 633.00     |  |
| 16          | 1     | 2-BC-AB1       | 0      | 250VDC DISTRIBUTION / PLANT BATTERY BATT-AB BATTERY CHARGER #1  | AUXILIARY   | 613.00     | 4KV ROOM - MEZZANINE AREA                  |
| 16          | 1     | 2-BC-AB2       | 0      | 250VDC DISTRIBUTION / PLANT BATTERY BATT-AB CHARGER #2  | AUXILIARY   | 613.00     | 4KV ROOM - MEZZANINE AREA                  |
| 16          | 12    | 2-BC-B         | 0      | 250VDC CONTROL AND INSTRUMENTATION / BATTERY CHARGER B FOR N-TRAIN BATTERY  | AUXILIARY   | 633.00     | 633 HALLWAY                                |
| 16          | 2     | 2-BC-CD1       | 0      | 250VDC DISTRIBUTION / PLANT BATTERY BATT-CD CHARGER #1  | AUXILIARY   | 626.00     | CD BATTERY EQUIP AREA                      |
| 16          | 2     | 2-BC-CD2       | 0      | 250VDC DISTRIBUTION / PLANT BATTERY BATT-CD CHARGER #2  | AUXILIARY   | 626.00     | CD BATTERY EQUIP AREA                      |
| 16          | 2     | 2-CRID-I-INV   | 0      | 120VAC CONTROL ROOM INSTRUMENTATION DISTRIBUTION SYSTEM / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CHANNEL I INVERTER | AUXILIARY   | 609.00     | INVERTER AREA                              |
| 16          | 2     | 2-CRID-II-INV  | 0      | 120V CONTROL ROOM INSTRUMENTATION DISTR / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CHANNEL II INVERTER                | AUXILIARY   | 609.00     | INVERTER AREA                              |
| 16          | 1     | 2-CRID-III-INV | 0      | 120V CONTROL ROOM INSTRUMENTATION DISTR / 120VAC CONTROL ROOM INSTRUMENTATION DISTRIBUTION SYSTEM CHANNEL III INVERTER          | AUXILIARY   | 609.00     | INVERTER AREA                              |
| 16          | 1     | 2-CRID-IV-INV  | 0      | 120V CONTROL ROOM INSTRUMENTATION DISTR / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CHANNEL IV INVERTER                | AUXILIARY   | 609.00     | CONTROL ROOM                               |
| 16          | 1     | 2-DGAB-INV     | 0      | DIESEL GENERATOR, CONTROL & INSTRUMENTATION / AB EMERGENCY DIESEL GENERATOR OME-150-AB INVERTER                                 | AUXILIARY   | 587.00     | AB EMER DSL GEN RM                         |
| 16          | 2     | 2-DGCD-INV     | 0      | DIESEL GENERATION, CONTROL & INSTRUMENTATION / CD EMERGENCY DIESEL GENERATOR OME-150-CD INVERTER                                | AUXILIARY   | 587.00     | CD EMER DSL GEN RM                         |
| 17          | 1     | 2-OME-150-AB   | 0      | DIESEL GENERATION, CONTROL & INSTRUMENTATION / AB EMERGENCY DIESEL GENERATOR  | AUXILIARY   | 587.00     | AB EMER DSL GEN RM                         |
| 17          | 2     | 2-OME-150-CD   | 0      | DIESEL GENERATION, CONTROL & INSTRUMENTATION / CD EMERGENCY DIESEL GENERATOR  | AUXILIARY   | 587.00     | CD EMER DSL GEN RM                         |
| 18          | 2     | 2-BLI-110      | 0      | STEAM GENERATING / STEAM GENERATOR OME-3-1 WIDE RANGE LEVEL INDICATOR TRANSMITTER   | CONTAINMENT | 612.00     | ACCUMULATOR TANK #1 AREA                   |
| 18          | 1     | 2-BLI-120      | 0      | STEAM GENERATING / STEAM GENERATOR OME-3-2 WIDE RANGE LEVEL INDICATOR TRANSMITTER   | CONTAINMENT | 612.00     | W CONT LOWER VENT RM                       |
| 18          | 1     | 2-BLI-130      | 0      | STEAM GENERATING / STEAM GENERATOR OME-3-3 WIDE RANGE LEVEL INDICATOR TRANSMITTER   | CONTAINMENT | 612.00     | ACCUMULATOR TANK #3 AREA                   |
| 18          | 2     | 2-BLI-140      | 0      | STEAM GENERATING / STEAM GENERATOR OME-3-4 WIDE RANGE LEVEL INDICATOR TRANSMITTER   | CONTAINMENT | 612.00     | ACCUMULATOR TANK #4 AREA                   |
| 18          | 2     | 2-CU-113       | 0      | CONDENSATE STORAGE TANK SUPPLY / CONDENSATE STORAGE TANK TK-32 LEVEL INDICATOR TRANSMITTER                                      | AUXILIARY   | 586.00     | STORAGE TANK PIPE TUNNEL                   |
| 18          | 1     | 2-CU-114       | 0      | CONDENSATE STORAGE TANK SUPPLY / CONDENSATE STORAGE TANK TK-32 LEVEL INDICATOR TRANSMITTER                                      | AUXILIARY   | 586.00     | STORAGE TANK PIPE TUNNEL                   |
| 18          | 2     | 2-CPS-312      | 0      | DIESEL JACKET WATER / AB EMERGENCY DIESEL JACKET WATER PUMP QT-130-AB1 DISCHARGE PRESSURE SWITCH                                | AUXILIARY   | 587.00     | AB EMER DSL GEN RM                         |
| 18          | 1     | 2-CPS-314      | 0      | DIESEL JACKET WATER / AB EMERGENCY DIESEL JACKET WATER PUMP QT-130-AB2 DISCHARGE PRESSURE SWITCH                                | AUXILIARY   | 587.00     | AB EMER DSL GEN RM                         |
| 18          | 2     | 2-CPS-317      | 0      | DIESEL JACKET WATER / CD EMERGENCY DIESEL JACKET WATER PUMP QT-130-CD1 DISCHARGE PRESSURE SWITCH                                | AUXILIARY   | 587.00     | CD EMER DSL GEN RM                         |
| 18          | 2     | 2-CPS-319      | 0      | DIESEL JACKET WATER / CD EMERGENCY DIESEL JACKET WATER PUMP QT-130-CD2 DISCHARGE PRESSURE SWITCH                                | AUXILIARY   | 587.00     | CD EMER DSL GEN RM                         |
| 18          | 2     | 2-CPS-410      | 0      | COMPONENT COOLING WATER / EAST COMPONENT COOLING WATER PUMP PP-10E DISCHARGE PRESSURE SWITCH                                    | AUXILIARY   | 609.00     | 609 HALLWAY                                |
| 18          | 1     | 2-CPS-420      | 0      | COMPONENT COOLING WATER / WEST COMPONENT COOLING WATER PUMP PP-10W DISCHARGE PRESSURE SWITCH                                    | AUXILIARY   | 609.00     | 609 HALLWAY                                |
| 18          | 1     | 2-FFI-210      | 0      | AUXILIARY FEEDWATER / AUXILIARY FEEDWATER TO STEAM GENERATOR OME-3-1 FLOW INDICATOR TRANSMITTER                                 | AUXILIARY   | 621.00     | E MAIN STM STOP ENCL                       |



**DONALD C. COOK NUCLEAR PLANT UNIT # 2**  
**SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**  
**FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description  | Building    | Floor Elev | Room or Row Col          |
|-------------|-------|--------------|--------|---|-------------|------------|--------------------------|
| 18          | 2     | 2-FI-220     | 0      | AUXILIARY FEEDWATER / AUXILIARY FEEDWATER TO STEAM GENERATOR OME-3-2 FLOW INDICATOR TRANSMITTER                       | AUXILIARY   | 621.00     | W MN STM STOP ENCL       |
| 18          | 2     | 2-FI-230     | 0      | AUXILIARY FEEDWATER / AUXILIARY FEEDWATER TO STEAM GENERATOR OME-3-3 FLOW INDICATOR TRANSMITTER                       | AUXILIARY   | 621.00     | W MN STM STOP ENCL       |
| 18          | 1     | 2-FI-240     | 0      | FEEDWATER / AUXILIARY FEEDWATER TO STEAM GENERATOR OME-3-4 FLOW INDICATOR TRANSMITTER                                 | AUXILIARY   | 621.00     | E MAIN STM STOP ENCL     |
| 18          | 2     | 2-FI-310     | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17E OUTLET LOW RANGE FLOW INDICATOR TRANSMITTER  | AUXILIARY   | 609.00     | 609 HALLWAY              |
| 18          | 2     | 2-FI-311     | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17E OUTLET HIGH RANGE FLOW INDICATOR TRANSMITTER | AUXILIARY   | 609.00     | 609 HALLWAY              |
| 18          | 1     | 2-FI-320     | 0      | RESIDUAL HEAT REMOVAL / WEST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17W OUTLET LOW RANGE FLOW INDICATOR TRANSMITTER  | AUXILIARY   | 609.00     | 609 HALLWAY              |
| 18          | 1     | 2-FI-321     | 0      | RESIDUAL HEAT REMOVAL / WEST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17W OUTLET HIGH RANGE FLOW INDICATOR TRANSMITTER | AUXILIARY   | 609.00     | 609 HALLWAY              |
| 18          | 12    | 2-FI-335     | 0      | RESIDUAL HEAT REMOVAL / RESIDUAL HEAT REMOVAL TO REACTOR COOLANT LOOPS #2 AND #3 COLD LEGS FLOW INDICATOR TRANSMITTER | AUXILIARY   | 591.00     | VESTIBULE                |
| 18          | 2     | 2-FI-51      | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP #1 FLOW INDICATOR TRANSMITTER                               | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 1      |
| 18          | 1     | 2-FI-52      | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP #2 FLOW INDICATOR TRANSMITTER                               | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 2      |
| 18          | 1     | 2-FI-53      | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP #3 FLOW INDICATOR TRANSMITTER                               | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 3      |
| 18          | 2     | 2-FI-54      | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP #4 FLOW INDICATOR TRANSMITTER                               | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 4      |
| 18          | 12    | 2-LS-950     | 0      | REFUELING WATER STORAGE TANK SUPPLY / REFUELING WATER STORAGE TANK TK-33 EXTREME LOW LEVEL TRANSMITTER                | AUXILIARY   | 588.00     | STORAGE TANK PIPE TUNNEL |
| 18          | 12    | 2-LS-951     | 0      | REFUELING WATER STORAGE TANK SUPPLY / REFUELING WATER STORAGE TANK TK-33 LEVEL TRANSMITTER                            | AUXILIARY   | 588.00     | STORAGE TANK PIPE TUNNEL |
| 18          | 1     | 2-LLS-120    | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL DAY TANK QT-107-AB HIGH LEVEL SWITCH #1                                | AUXILIARY   | 587.00     | AB EMER DSL GEN RM       |
| 18          | 1     | 2-LLS-121    | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL DAY TANK QT-107-AB LOW LEVEL SWITCH #1                                 | AUXILIARY   | 587.00     | AB EMER DSL GEN RM       |
| 18          | 1     | 2-LLS-122    | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL DAY TANK QT-107-AB HIGH LEVEL SWITCH #2                                | AUXILIARY   | 587.00     | AB EMER DSL GEN RM       |
| 18          | 1     | 2-LLS-123    | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL DAY TANK QT-107-AB LOW LEVEL SWITCH #2                                 | AUXILIARY   | 587.00     | AB EMER DSL GEN RM       |
| 18          | 2     | 2-LLS-125    | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL FUEL OIL DAY TANK QT-107-CD HIGH LEVEL SWITCH #1                                | AUXILIARY   | 587.00     | CD EMER DSL GEN RM       |
| 18          | 2     | 2-LLS-126    | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL FUEL OIL DAY TANK QT-107-CD LOW LEVEL SWITCH #1                                 | AUXILIARY   | 587.00     | CD EMER DSL GEN RM       |
| 18          | 2     | 2-LLS-127    | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL FUEL OIL DAY TANK QT-107-CD HIGH LEVEL SWITCH #2                                | AUXILIARY   | 587.00     | CD EMER DSL GEN RM       |
| 18          | 2     | 2-LLS-128    | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL FUEL OIL DAY TANK QT-107-CD LOW LEVEL SWITCH #2                                 | AUXILIARY   | 587.00     | CD EMER DSL GEN RM       |
| 18          | 2     | 2-MPP-210    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 CHANNEL I STEAM PRESSURE TRANSMITTER   | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL     |
| 18          | 2     | 2-MPP-212    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 CHANNEL IV REACTOR PROTECTION INPUT STEAM PRESSURE TRANSMITTER                   | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL     |
| 18          | 1     | 2-MPP-220    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2 CHANNEL I STEAM PRESSURE TRANSMITTER   | AUXILIARY   | 633.00     | W MN STM STOP ENCL       |
| 18          | 1     | 2-MPP-222    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2 CHANNEL III REACTOR PROTECTION INPUT STEAM PRESSURE TRANSMITTER                  | AUXILIARY   | 633.00     | W MN STM STOP ENCL       |
| 18          | 1     | 2-MPP-230    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3 CHANNEL I STEAM PRESSURE TRANSMITTER   | AUXILIARY   | 633.00     | W MN STM STOP ENCL       |
| 18          | 1     | 2-MPP-232    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3 CHANNEL III REACTOR PROTECTION INPUT STEAM PRESSURE TRANSMITTER                  | AUXILIARY   | 633.00     | W MN STM STOP ENCL       |



**DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description  | Building    | Floor Elev | Room or Row Col           |
|-------------|-------|--------------|--------|---|-------------|------------|---------------------------|
| 18          | 2     | 2-MPP-240    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 CHANNEL I STEAMPRESSURE TRANSMITTER  | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL      |
| 18          | 1     | 2-MPP-242    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 CHANNEL IV REACTOR PROTECTION INPUT STEAM PRESSURE TRANSMITTER                               | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL      |
| 18          | 1     | 2-NLI-151    | 0      | PRESSURIZER / PRESSURIZER OME-4 LEVEL INDICATOR TRANSMITTER   | CONTAINMENT | 612.00     | INSTRUMENTATION RM        |
| 18          | 2     | 2-NLP-151    | 0      | PRESSURIZER / PRESSURIZER OME-4 PROTECTION CHANNEL I LEVEL TRANSMITTER  | CONTAINMENT | 612.00     | INSTRUMENTATION RM        |
| 18          | 2     | 2-NLP-152    | 0      | PRESSURIZER / PRESSURIZER OME-4 PROTECTION CHANNEL II LEVEL TRANSMITTER   | CONTAINMENT | 612.00     | INSTRUMENTATION RM        |
| 18          | 1     | 2-NLP-153    | 0      | PRESSURIZER / PRESSURIZER OME-4 PROTECTION CHANNEL III LEVEL TRANSMITTER  | CONTAINMENT | 612.00     | INSTRUMENTATION RM        |
| 18          | 2     | 2-NPP-151    | 0      | PRESSURIZER / PRESSURIZER OME-4 PROTECTION CHANNEL I PRESSURE TRANSMITTER   | CONTAINMENT | 612.00     | INSTRUMENTATION RM        |
| 18          | 2     | 2-NPP-152    | 0      | PRESSURIZER / PRESSURIZER OME-4 PROTECTION CHANNEL II PRESSURE TRANSMITTER  | CONTAINMENT | 612.00     | INSTRUMENTATION RM        |
| 18          | 1     | 2-NPP-153    | 0      | PRESSURIZER / PRESSURIZER OME-4 PROTECTION CHANNEL III PRESSURE TRANSMITTER   | CONTAINMENT | 612.00     | INSTRUMENTATION RM        |
| 18          | 2     | 2-NPS-121    | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP #2 HOT LEG WIDE RANGE PRESSURE TRANSMITTER   | CONTAINMENT | 612.00     | W CONT LOWER VENT RM      |
| 18          | 1     | 2-NPS-122    | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP #1 HOT LEG WIDE RANGE PRESSURE TRANSMITTER   | CONTAINMENT | 612.00     | E CONT LOWER VENT RM      |
| 18          | 2     | 2-NRI-21     | 0      | NUCLEAR INSTRUMENTATION / NUCLEAR INSTRUMENTATION SOURCE RADIATION DETECTOR   | CONTAINMENT | 626.00     | REACTOR CAVITY            |
| 18          | 1     | 2-NRI-23     | 0      | NUCLEAR INSTRUMENTATION / NUCLEAR INSTRUMENTATION SOURCE RANGE RADIATION DETECTOR   | CONTAINMENT | 626.00     | REACTOR CAVITY            |
| 18          | 1     | 2-PPP-301    | 0      | CONTAINMENT VENTILATION / LOWER CONTAINMENT CHANNEL III PRESSURE TRANSMITTER  | AUXILIARY   | 612.00     | 612 AIRLOCK AREA          |
| 18          | 2     | 2-PPP-302    | 0      | CONTAINMENT VENTILATION / LOWER CONTAINMENT CHANNEL II PRESSURE PROTECTION TRANSMITTER  | AUXILIARY   | 612.00     | 612 AIRLOCK AREA          |
| 18          | 2     | 2-PPP-303    | 0      | CONTAINMENT VENTILATION / LOWER CONT CHANNEL I PRESSURE PROTECTION TRANSMITTER  | AUXILIARY   | 612.00     | 612 AIRLOCK AREA          |
| 18          | 2     | 2-QFA-210    | 0      | REACTOR COOLANT PUMP SEAL WATER INJ/LEAKOFF / RCP SEAL WATER INJECTION TO REACTOR COOLANT PUMP PP-45-1 LOW FLOW ALARM TRANSMITTER | AUXILIARY   | 587.00     | 587 HALLWAY               |
| 18          | 2     | 2-QFA-220    | 0      | REACTOR COOLANT PUMP SEAL WATER INJ/LEAKOFF / RCP SEAL WATER INJECTION TO REACTOR COOLANT PUMP PP-45-2 LOW FLOW ALARM TRANSMITTER | AUXILIARY   | 587.00     | 587 HALLWAY               |
| 18          | 1     | 2-QFA-230    | 0      | REACTOR COOLANT PUMP SEAL WATER INJ/LEAKOFF / RCP SEAL WATER INJECTION TO REACTOR COOLANT PUMP PP-45-3 LOW FLOW ALARM TRANSMITTER | AUXILIARY   | 587.00     | 587 HALLWAY               |
| 18          | 1     | 2-QFA-240    | 0      | REACTOR COOLANT PUMP SEAL WATER INJ/LEAKOFF / RCP SEAL WATER INJECTION TO REACTOR COOLANT PUMP PP-45-4 LOW FLOW ALARM TRANSMITTER | AUXILIARY   | 587.00     | 587 HALLWAY               |
| 18          | 12    | 2-QFI-200    | 0      | CHARGING (CVCS) / CVCS CHARGING PUMPS DISCHARGE FLOW INDICATOR TRANSMITTER  | AUXILIARY   | 587.00     | 587 HALLWAY               |
| 18          | 12    | 2-QLC-451    | 0      | LETDOWN (CVCS) / REACTOR COOLANT LETDOWN VOLUME CONTROL TANK TK-10 EXTREME HIGH LEVEL CONTROL TRANSMITTER                         | AUXILIARY   | 609.00     | 609 HALLWAY               |
| 18          | 12    | 2-QLC-452    | 0      | LETDOWN (CVCS) / REACTOR COOLANT LETDOWN VOLUME CONTROL TANK TK-10 HIGH LEVEL CONTROL TRANSMITTER                                 | AUXILIARY   | 609.00     | 609 HALLWAY               |
| 18          | 2     | 2-WDS-703    | 0      | ESSENTIAL SERVICE WATER / EAST ESSENTIAL SERVICE WATER PUMP PP-7E DISCHARGE STRAINER OME-34E HIGH DIFFERENTIAL PRESSURE SWITCH    | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR PMP RM  |
| 18          | 1     | 2-WDS-704    | 0      | ESSENTIAL SERVICE WATER / WEST ESSENTIAL SERVICE WATER PUMP PP-7W DISCHARGE STRAINER OME-34W HIGH DIFFERENTIAL PRESSURE SWITCH    | SCREENHOUSE | 591.00     | W ESSNTL SERV WTR PMP RM  |
| 18          | 2     | 2-WPS-702    | 0      | ESSENTIAL SERVICE WATER / EAST ESSENTIAL SERVICE WATER SUPPLY HEADER PRESSURE SWITCH  | TURBINE     | 569.00     | ESSNTL SERV WTR PIPE TUNN |
| 18          | 1     | 2-WPS-706    | 0      | ESSENTIAL SERVICE WATER / WEST ESSENTIAL SERVICE WATER SUPPLY HEADER PRESSURE SWITCH  | TURBINE     | 569.00     | ESSNTL SERV WTR PIPE TUNN |
| 18          | 1     | 2-XPS-300    | 0      | DIESEL COMBUSTION AIR / AB EMERGENCY DIESEL FRONT BANK AIR CHEST EXTREME HIGH PRESSURE SWITCH                                     | AUXILIARY   | 587.00     | AB EMER DSL GEN RM        |

**DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID   | Rev No | System / Equipment Description  | Building    | Floor Elev | Room or Row Col            |
|-------------|-------|----------------|--------|---|-------------|------------|----------------------------|
| 18          | 2     | 2-XPS-305      | 0      | DIESEL COMBUSTION AIR / CD EMERGENCY DIESEL FRONT BANK AIR CHEST EXTREME HIGH PRESSURE SWITCH                                 | AUXILIARY   | 587.00     | CD EMER DSL GEN RM         |
| 18          | 12    | 2-XRV-RACK-152 | 0      | CONTROL AIR / PRESSURIZER TRAIN 'B' PRESSURE RELIEF VALVE NRV-152 VALVE RACK (EMERGENCY AIR PRESSURE REGULATOR)               | CONTAINMENT | 650.00     | UPPER CONT, QUAD 4         |
| 18          | 12    | 2-XRV-RACK-153 | 0      | CONTROL AIR / PRESSURIZER TRAIN 'A' PRESSURE RELIEF VALVE NRV-153 VALVE RACK EMERGENCY AIR PRESSURE REGULATOR                 | CONTAINMENT | 650.00     | UPPER CONT, QUAD 4         |
| 19          | 2     | 2-CTR-415      | 0      | COMPONENT COOLING WATER / EAST COMPONENT COOLING WATER HEAT EXCHANGER HE-15E CCW OUTLET TEMPERATURE RECORDER THERMAL SENSOR   | AUXILIARY   | 609.00     | 609 HALLWAY                |
| 19          | 2     | 2-CTR-425      | 0      | COMPONENT COOLING WATER / WEST COMPONENT COOLING WATER HEAT EXCHANGER CCW OUTLET TEMPERATURE RECORDER THERMAL SENSOR          | AUXILIARY   | 609.00     | 609 HALLWAY                |
| 19          | 12    | 2-CTR-335      | 0      | RESIDUAL HEAT REMOVAL / RESIDUAL HEAT REMOVAL TO REACTOR COOLANT LOOPS #2 & #3 COLD LEGS TEMPERATURE RECORDER THERMAL SENSOR  | AUXILIARY   | 609.00     | E RHR HEAT XCHGR RM        |
| 19          | 2     | 2-NTR-110      | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP #1 HOT LEG WIDE RANGE TEMPERATURE RECORDER THERMAL SENSOR                              | CONTAINMENT | 598.00     | LOWER CONT, QUAD NO. 1     |
| 19          | 1     | 2-NTR-120      | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP #2 HOT LEG WIDE RANGE TEMPERATURE RECORDER THERMAL SENSOR                              | CONTAINMENT | 617.00     | LOWER CONT, QUAD NO. 2     |
| 19          | 1     | 2-NTR-130      | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP #3 HOT LEG WIDE RANGE TEMPERATURE RECORDER THERMAL SENSOR                              | CONTAINMENT | 625.00     | LOWER CONT, QUAD NO. 3     |
| 19          | 2     | 2-NTR-140      | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP #4 HOT LEG WIDE RANGE TEMPERATURE RECORDER THERMAL SENSOR                              | CONTAINMENT | 617.00     | LOWER CONT, QUAD NO. 4     |
| 19          | 2     | 2-NTR-210      | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP #1 COLD LEG WIDE RANGE TEMPERATURE RECORDER THERMAL SENSOR                             | CONTAINMENT | 617.00     | LOWER CONT, QUAD NO. 1     |
| 19          | 1     | 2-NTR-220      | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP #2 COLD LEG WIDE RANGE TEMPERATURE RECORDER THERMAL SENSOR                             | CONTAINMENT | 617.00     | LOWER CONT, QUAD NO. 2     |
| 19          | 1     | 2-NTR-230      | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP #3 COLD LEG WIDE RANGE TEMPERATURE RECORDER THERMAL SENSOR                             | CONTAINMENT | 617.00     | LOWER CONT, QUAD NO. 3     |
| 19          | 2     | 2-NTR-240      | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP #4 COLD LEG WIDE RANGE TEMPERATURE RECORDER THERMAL SENSOR                             | CONTAINMENT | 617.00     | LOWER CONT, QUAD NO. 4     |
| 19          | 2     | 2-VTS-201      | 0      | TURBINE BUILDING VENTILATION / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP ROOM EXHAUST FAN HV-AFP-M1                          | TURBINE     | 591.00     | E MTR DRIV AUX FEEDWTR PMP |
| 19          | 2     | 2-VTS-203      | 0      | TURBINE BUILDING VENTILATION / TURBINE DRIVEN AUXILIARY FEED PUMP ROOM NORTH EXHAUST FAN HV-AFP-T1                            | TURBINE     | 591.00     | TB DRIVEN AUX FDWTR PMP    |
| 19          | 1     | 2-VTS-204      | 0      | TURBINE BUILDING VENTILATION / TURBINE DRIVEN AUXILIARY FEED PUMP ROOM SOUTH EXHAUST FAN HV-AFP-T2                            | TURBINE     | 591.00     | TB DRIVEN AUX FDWTR PMP    |
| 19          | 1     | 2-VTS-208      | 0      | TURBINE BUILDING VENTILATION / WEST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP ROOM WEST EXHAUST FAN HV-AFP-X2                     | TURBINE     | 591.00     | W MTR DRIVEN AUX FDWTR PMP |
| 19          | 1     | 2-VTS-340      | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN HV-DGS-2 OUTSIDE AIR THERMOSTAT           | GROUND      | 609.00     | REFUEL WTR STOR TANK AREA  |
| 19          | 1     | 2-VTS-341      | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION FANS HV-DGX-2 THERMOSTAT                             | AUXILIARY   | 587.00     | AB EMER DSL GEN RM         |
| 19          | 2     | 2-VTS-345      | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN HV-DGS-1 OUTSIDE AIR THERMOSTAT           | AUXILIARY   | 596.00     | RCTR CABLE TUNN, QUAD 3    |
| 19          | 2     | 2-VTS-346      | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FAN HV-DGX-1 THERMOSTAT                      | AUXILIARY   | 587.00     | CD EMER DSL GEN RM         |
| 19          | 12    | 2-VTS-350      | 0      | AUXILIARY BUILDING VENTILATION / CONTROL ROD DRIVE EQUIP ROOM AND MV AREA VENT NORTH SUPPLY FAN HV-SGRS-1A TEMPERATURE SWITCH | AUXILIARY   | 609.00     | INVERTER AREA              |

**DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description   | Building        | Floor Elev | Room or Row Col                |
|-------------|-------|--------------|--------|--|-----------------|------------|--------------------------------|
| 19          | 12    | 2-VTS-351    | 0      | AUXILIARY BUILDING VENTILATION / CONTROL ROD DRIVE EQUIP ROOM AND INV AREA VENT NORTH SUPPLY FAN HV-SGRS-1A TEMPERATURE SWITCH         | AUXILIARY       | 609.00     | CRD EQUIP RM                   |
| 19          | 12    | 2-VTS-352    | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600 VOLT SWITCHGEAR XFMRMS TR21B AND TR21D AREA VENT SUPPLY FAN HV-SGRS-7 TEMPERATURE SWITCH | AUXILIARY       | 609.00     | 4KV RM - 600V SWGR AREA        |
| 19          | 1     | 2-VTS-353    | 0      | AUXILIARY BUILDING VENTILATION / 600VAC MOTOR CONTROL CENTER MEZZANINE AREA VENT SUPPLY FAN HV-SGRS-9 TEMPERATURE SWITCH               | AUXILIARY       | 613.00     | 4KV ROOM - MEZZANINE AREA      |
| 19          | 12    | 2-VTS-354    | 0      | AUXILIARY BUILDING VENTILATION / CTRL ROD DRV EQUIP ROOM AND INV AREA VENT OUTSIDE AIR INLET DAMPER HV-SGR-MD-2 TEMPERATURE SWITCH     | AUXILIARY       | 609.00     | INVERTER AREA                  |
| 19          | 12    | 2-VTS-355    | 0      | AUXILIARY BUILDING VENTILATION / CTRL ROD DRIVE EQUIP ROOM AND INV AREA VENT RECIRC AIR INLET DAMPER HV-SGR-MD-1 TEMPERATURE SWITCH    | AUXILIARY       | 609.00     | INVERTER AREA                  |
| 19          | 12    | 2-VTS-356    | 0      | AUXILIARY BUILDING VENTILATION / CRD EQUIPMENT ROOM AND INVERTER AREA VENTILATION NORTH SUPPLY FAN HV-SGRS-4A TEMP SWITCH              | AUXILIARY       | 609.00     | INVERTER AREA                  |
| 19          | 12    | 2-VTS-357    | 0      | AUXILIARY BUILDING VENTILATION / CTRL ROD DRIVE EQUIP ROOM AND INV AREA VENTILATION SOUTH SUPPLY FAN HV-SGRS-4A TEMPERATURE SWITCH     | AUXILIARY       | 609.00     | CRD EQUIP RM                   |
| 19          | 2     | 2-VTS-702    | 0      | SCREENHOUSE VENTILATION / UNIT 2 EAST ESW PUMP ROOM TEMPERATURE SWITCH   | SCREENHOUSE     | 591.00     | E ESSNTL SERV WTR PMP RM       |
| 19          | 1     | 2-VTS-704    | 0      | SCREENHOUSE VENTILATION / UNIT 2 WEST ESW PUMP ROOM TEMPERATURE SWITCH   | UW2 SCREENHOUSE | 591.00     | W ESSNTL SERV WTR PMP RM       |
| 19          | 1     | 2-VTS-802    | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM AB 4KV SWITCHGEAR AREA VENTILATION SUPPLY FAN HV-SGRS-2 THERMAL SENSOR                       | AUXILIARY       | 609.00     | 4KV RM - AB 4KV SWGR AREA      |
| 19          | 2     | 2-VTS-803    | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM CD 4KV SWITCHGEAR AREA VENTILATION SUPPLY FAN HV-SGRS-3 THERMAL SENSOR                       | AUXILIARY       | 609.00     | 4KV RM - CD 4KV SWGR AREA      |
| 19          | 2     | 2-VTS-805    | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600V SWGR XFMRMS TR21B AND TR21D AREA VENT SUPPLY FAN HV-SGRS-7 TEMP SWITCH THERMAL SENSOR   | AUXILIARY       | 613.00     | 4KV ROOM - MEZZANINE AREA      |
| 19          | 1     | 2-VTS-808    | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600V SWGR XFMRMS TR21A AND TR21C AREA VENT SUPPLY FAN HV-SGRS-8 TEMP SWITCH THERMAL SENSOR   | AUXILIARY       | 609.00     | 4KV RM - 600V SWGR AREA        |
| 20          | NA    | 2-A11        | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / AUXILIARY RELAY PANEL A11  | AUXILIARY       | 633.00     | CONTROL ROOM                   |
| 20          | NA    | 2-A13        | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / AUXILIARY RELAY PANEL A13  | AUXILIARY       | 633.00     | CONTROL ROOM                   |
| 20          | 2     | 2-ACRA-1     | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / CONTROL ROOM AIR HANDLING SUBPANEL #1  | AUXILIARY       | 650.00     | CTRL RM AIR CONDIT RM          |
| 20          | 1     | 2-ACRA-2     | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / CONTROL ROOM AIR HANDLING SUBPANEL #2  | AUXILIARY       | 650.00     | CTRL RM AIR CONDIT RM          |
| 20          | 2     | 2-ARA-2      | 0      | 120V/220 CONTROL AND INSTRUMENTATION / REACTOR PROTECTION TRAIN 'A' AUXILIARY RELAY CABINET #2   | AUXILIARY       | 633.00     | CONTROL ROOM                   |
| 20          | 1     | 2-ARB-2      | 0      | 120V/220 CONTROL AND INSTRUMENTATION / REACTOR PROTECTION TRAIN 'B' AUXILIARY RELAY CABINET #2   | AUXILIARY       | 633.00     | CONTROL ROOM                   |
| 20          | 12    | 2-BA         | 0      | BORON MAKEUP (CVCS) / BORIC ACID CHARGING AND LETDOWN CONTROL PANEL  | AUXILIARY       | 633.00     | CONTROL ROOM                   |
| 20          | 2     | 2-BC-A-PNL   | 0      | 120/220V CONTROL AND INSTRUMENTATION / TRAIN 'Y' BATTERY DISTRIBUTION TRAIN 'A' BATTERY CHARGER BC-A CONTROL BOX                       | AUXILIARY       | 633.00     | NORMAL BLOWDOWN FLASHTANK ROOM |
| 20          | 12    | 2-CAS        | 0      | CONTAINMENT VENTILATION / CONTAINMENT AUXILIARIES SUBPANEL (VENTILATION)   | AUXILIARY       | 633.00     | 633 HALLWAY                    |
| 20          | NA    | 2-CCW        | 0      | COMPONENT COOLING WATER / COMPONENT COOLING WATER CONTROL PANEL  | AUXILIARY       | 633.00     | CONTROL ROOM                   |
| 20          | NA    | 2-CG1        | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / REACTOR PROTECTION CONTROL GROUP #1 CABINET #14, 15, 16(RACK #14, 15, & 16)                | AUXILIARY       | 633.00     | CONTROL ROOM                   |
| 20          | 2     | 2-CG2        | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / REACTOR PROTECTION CONTROL GROUP #2 CABINET #17, #18 & #19(RACK #17, 18, & 19)             | AUXILIARY       | 633.00     | CONTROL ROOM                   |
| 20          | NA    | 2-CG3        | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / REACTOR PROTECTION CONTROL GROUP #3 CABINET #20, #21 (RACK #21 & 22)                       | AUXILIARY       | 633.00     | CONTROL ROOM                   |



**DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description  | Building  | Floor Elev | Room or Row Col               |
|-------------|-------|--------------|--------|---|-----------|------------|-------------------------------|
| 20          | NA    | 2-CG4        | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / REACTOR PROTECTION CONTROL GROUP #4 CABINET #22, #23, #24, & #25 (RACK #22, 23, 24, & 25)     | AUXILIARY | 633.00     | CONTROL ROOM                  |
| 20          | NA    | 2-CI-26      | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / REACTOR PROTECTION CONTROL INPUT CABINET #26  | AUXILIARY | 633.00     | CONTROL ROOM                  |
| 20          | NA    | 2-CI-27      | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / REACTOR PROTECTION CONTROL INPUT CABINET #27  | AUXILIARY | 633.00     | CONTROL ROOM                  |
| 20          | NA    | 2-CP         | 0      | CONDENSATE / CONDENSATE PUMP CONTROL PANEL  | AUXILIARY | 633.00     | CONTROL ROOM                  |
| 20          | NA    | 2-CR         | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / CONDENSATE PANEL REAR INSTRUMENT/RELAY RACK  | AUXILIARY | 633.00     | CONTROL ROOM                  |
| 20          | 1     | 2-DGAB       | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / AB EMERGENCY DIESEL GENERATOR OME-150-AB CONTROL SUBPANEL                                     | AUXILIARY | 587.00     | AB EMER DSL GEN RM            |
| 20          | 1     | 2-DGAB-X     | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / AB EMERGENCY DIESEL GENERATOR OME-150-AB AUXILIARY SUBPANEL                                   | AUXILIARY | 587.00     | AB EMER DSL GEN RM            |
| 20          | 2     | 2-DGCD       | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / CD EMERGENCY DIESEL GENERATOR OME-150-CD CONTROL SUBPANEL                                     | AUXILIARY | 587.00     | CD EMER DSL GEN RM            |
| 20          | 2     | 2-DGCD-X     | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / CD EMERGENCY DIESEL GENERATOR OME-150-CD AUXILIARY SUBPANEL                                   | AUXILIARY | 587.00     | CD EMER DSL GEN RM            |
| 20          | NA    | 2-DTU        | 0      | TURBINE INSTRUMENTATION & CONTROL / DELTA 'T' AND UNIT CONTROL PANEL  | AUXILIARY | 633.00     | CONTROL ROOM                  |
| 20          | NA    | 2-EFR        | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / EMERGENCY FIRE PANEL INSTRUMENT/RELAY RACK   | AUXILIARY | 633.00     | CONTROL ROOM                  |
| 20          | NA    | 2-ESW        | 0      | ESSENTIAL SERVICE WATER / ESSENTIAL SERVICE WATER CONTROL PANEL   | AUXILIARY | 633.00     | CONTROL ROOM                  |
| 20          | NA    | 2-FLX        | 0      | NUCLEAR INSTRUMENTATION / FLUX CONTROL PANEL  | AUXILIARY | 633.00     | CONTROL ROOM                  |
| 20          | 12    | 2-GR-1       | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / GENERATOR PANEL REAR INSTRUMENT/RELAY RACK #1  | AUXILIARY | 633.00     | CONTROL ROOM                  |
| 20          | NA    | 2-GR-2       | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / GENERATOR PANEL REAR INSTRUMENT/RELAY RACK #2  | AUXILIARY | 633.00     | CONTROL ROOM                  |
| 20          | NA    | 2-GRB        | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / GENERATOR PANEL REAR INSTRUMENT/RELAY RACK 'B'   | AUXILIARY | 633.00     | CONTROL ROOM                  |
| 20          | NA    | 2-GRC        | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / GENERATOR PANEL REAR INSTRUMENT/RELAY RACK 'C'   | AUXILIARY | 633.00     | CONTROL ROOM                  |
| 20          | NA    | 2-HSD2       | 0      | SAFETY INJECTION / UNIT 2 HOT SHUTDOWN PANEL  | AUXILIARY | 633.00     | CONTROL ROOM                  |
| 20          | NA    | 2-IV         | 0      | CONTAINMENT SPRAY / CONTAINMENT ISOLATION VALVE CONTROL PANEL   | AUXILIARY | 633.00     | CONTROL ROOM                  |
| 20          | 2     | 2-LSI-1      | 0      | STEAM GENERATING / STEAM GENERATORS #1 AND #4 LOCAL SHUTDOWN STATION  | AUXILIARY | 612.00     | E MAIN STM STOP ENCL          |
| 20          | 1     | 2-LSI-2      | 0      | STEAM GENERATING / STEAM GENERATORS #2 AND #3 LOCAL SHUTDOWN STATION  | AUXILIARY | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 20          | 12    | 2-LSI-3      | 0      | PRESSURIZER / REACTOR COOLANT SYSTEM CHARGING AND LETDOWN LOCAL SHUTDOWN STATION  | AUXILIARY | 587.00     | 587 HALLWAY                   |
| 20          | 12    | 2-LSI-4      | 0      | EQUIPMENT CONTROL AND INDICATION STATION / REACTOR COOLANT SYSTEM TEMPERATURES AND STEAM GENERATORS LOCAL SHUTDOWN STATION                | AUXILIARY | 587.00     | 587 HALLWAY                   |
| 20          | NA    | 2-LSI-5      | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / REACTOR COOLANT LOOPS #1 AND #4 TEMPERATURES, SG'S #1 AND #4 PRESSURES LOCAL SHUTDOWN STATION | AUXILIARY | 612.00     | E MAIN STM STOP ENCL          |
| 20          | NA    | 2-LSI-5XX    | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / LOCAL SHUTDOWN STATION 5XX  | AUXILIARY | 598.00     | RCTR CABLE TUNN, QUAD 1       |
| 20          | NA    | 2-LSI-6      | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / REACTOR COOLANT LOOPS #2 AND #3 TEMPERATURES, SG'S #2 AND #3 PRESSURES LOCAL SHUTDOWN STATION | AUXILIARY | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 20          | 2     | 2-LSI-6XX    | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / LOCAL SHUTDOWN STATION 6XX  | AUXILIARY | 598.00     | RCTR CABLE TUNN, QUAD 3       |
| 20          | NA    | 2-NIS-I      | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / NUCLEAR INSTRUMENTATION SYSTEM PROTECTION CHANNEL I CONTROL PANEL                             | AUXILIARY | 633.00     | CONTROL ROOM                  |
| 20          | NA    | 2-NIS-III    | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / NUCLEAR INSTRUMENTATION SYSTEM PROTECTION CHANNEL III CONTROL PANEL                           | AUXILIARY | 633.00     | CONTROL ROOM                  |





**DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID   | Rev No | System / Equipment Description   | Building  | Floor Elev | Room or Row Col         |
|-------------|-------|----------------|--------|--|-----------|------------|-------------------------|
| 20          | NA    | 2-NRI-21-AMP   | 0      | NUCLEAR INSTRUMENTATION / NUCLEAR INSTRUMENTATION WIDE RANGE RADIATION AMPLIFIER CABINET                   | AUXILIARY | 596.00     | RCTR CABLE TUNN, QUAD 1 |
| 20          | NA    | 2-NRI-21-PRCSR | 0      | NUCLEAR INSTRUMENTATION / NUCLEAR INSTRUMENTATION WIDE RANGE SIGNAL PROCESSOR CABINET                      | AUXILIARY | 633.00     | CONTROL ROOM            |
| 20          | NA    | 2-NRI-23-AMP   | 0      | NUCLEAR INSTRUMENTATION / NUCLEAR INSTRUMENTATION SOURCE RANGE RADIATION DETECTOR NRI-23 AMPLIFIER CABINET | AUXILIARY | 596.00     | RCTR CABLE TUNN, QUAD 1 |
| 20          | NA    | 2-NRI-23-ISOL  | 0      | NUCLEAR INSTRUMENTATION / NUCLEAR INSTRUMENTATION SOURCE RANGE SIGNAL ISOLATOR CABINET                     | AUXILIARY | 596.00     | RCTR CABLE TUNN, QUAD 1 |
| 20          | NA    | 2-NRI-23-PRCSR | 0      | NUCLEAR INSTRUMENTATION / NUCLEAR INSTRUMENTATION SOURCE RANGE SIGNAL PROCESSOR CABINET                    | AUXILIARY | 596.00     | RCTR CABLE TUNN, QUAD 1 |
| 20          | NA    | 2-NSR          | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / NUCLEAR INSTRUMENTATION SYSTEM REAR INSTRUMENT/RELAY RACK               | AUXILIARY | 633.00     | CONTROL ROOM            |
| 20          | NA    | 2-PRZ          | 0      | PRESSURIZER / PRESSURIZER CONTROL PANEL  | AUXILIARY | 633.00     | CONTROL ROOM            |
| 20          | NA    | 2-RC           | 0      | ROD CONTROL AND INSTRUMENTATION / REACTOR CONTROL RODS CONTROL PANEL                                       | AUXILIARY | 633.00     | CONTROL ROOM            |
| 20          | NA    | 2-RCP          | 0      | REACTOR COOLANT / REACTOR COOLANT PUMP CONTROL PANEL   | AUXILIARY | 633.00     | CONTROL ROOM            |
| 20          | 12    | 2-RHR          | 0      | RESIDUAL HEAT REMOVAL / RESIDUAL HEAT REMOVAL CONTROL PANEL  | AUXILIARY | 633.00     | CONTROL ROOM            |
| 20          | NA    | 2-RPC-I        | 0      | REACTOR PROTECTION / REACTOR PROTECTION CHANNEL I CAB #1, 2, 3 & 4 (RACK #1, 2, 3, & 4)                    | AUXILIARY | 633.00     | CONTROL ROOM            |
| 20          | NA    | 2-RPC-II       | 0      | REACTOR PROTECTION / REACTOR PROTECTION CHANNEL II CABINET #5, 6 & 7 (RACK #5, 6, 7, & 8)                  | AUXILIARY | 633.00     | CONTROL ROOM            |
| 20          | NA    | 2-RPC-III      | 0      | REACTOR PROTECTION / REACTOR PROTECTION CHANNEL III CABINET #9, 10 & 11 (RACK #9, 10, 11)                  | AUXILIARY | 633.00     | CONTROL ROOM            |
| 20          | NA    | 2-RPC-IV       | 0      | REACTOR PROTECTION / REACTOR PROTECTION CHANNEL IV CABINET #12 & #13 (RACK #12 & 13)                       | AUXILIARY | 633.00     | CONTROL ROOM            |
| 20          | 2     | 2-RPS-A        | 0      | REACTOR PROTECTION / REACTOR PROTECTION AND SAFEGUARD ACTUATION TRAIN 'A' CABINET                          | AUXILIARY | 633.00     | CONTROL ROOM            |
| 20          | 1     | 2-RPS-B        | 0      | REACTOR PROTECTION / REACTOR PROTECTION AND SAFEGUARD ACTUATION TRAIN 'B' CABINET                          | AUXILIARY | 633.00     | CONTROL ROOM            |
| 20          | 2     | 2-RPSX-A       | 0      | REACTOR PROTECTION / REACTOR PROTECTION AND SAFEGUARD ACTUATION TRAIN 'A' AUXILIARY CABINET                | AUXILIARY | 633.00     | CONTROL ROOM            |
| 20          | 1     | 2-RPSX-B       | 0      | REACTOR PROTECTION / REACTOR PROTECTION AND SAFEGUARD ACTUATION TRAIN 'B' AUXILIARY CABINET                | AUXILIARY | 633.00     | CONTROL ROOM            |
| 20          | NA    | 2-SA           | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / STATION AUXILIARIES CONTROL PANEL                                       | AUXILIARY | 633.00     | CONTROL ROOM            |
| 20          | NA    | 2-SCP          | 0      | NUCLEAR SAMPLING / NUCLEAR SAMPLING SYSTEM CONTROL PANEL   | AUXILIARY | 587.00     | NUCLEAR SAMPLING RM     |
| 20          | NA    | 2-SG           | 0      | STEAM GENERATION / STEAM GENERATOR AND AUXILIARY FEED PUMP CONTROL PANEL                                   | AUXILIARY | 633.00     | CONTROL ROOM            |
| 20          | 12    | 2-SIS          | 0      | SAFETY INJECTION / SAFETY INJECTION CONTROL PANEL  | AUXILIARY | 633.00     | CONTROL ROOM            |
| 20          | 12    | 2-SPY          | 0      | CONTAINMENT SPRAY / CONTAINMENT SPRAY CONTROL PANEL  | AUXILIARY | 633.00     | CONTROL ROOM            |
| 20          | 12    | 2-SR1          | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / STATION AUXILIARIES REAR INSTRUMENT/RELAY RACK #1                       | AUXILIARY | 633.00     | CONTROL ROOM            |
| 20          | NA    | 2-SR2          | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / STATION AUXILIARIES REAR INSTRUMENT/RELAY RACK #2                       | AUXILIARY | 633.00     | CONTROL ROOM            |
| 20          | NA    | 2-SR3          | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / STATION AUXILIARIES REAR INSTRUMENT/RELAY RACK #3                       | AUXILIARY | 633.00     | CONTROL ROOM            |
| 20          | NA    | 2-SR4          | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / STATION AUXILIARIES REAR INSTRUMENT/RELAY RACK #4                       | AUXILIARY | 633.00     | CONTROL ROOM            |
| 20          | 12    | 2-SSR          | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / ENGINEER SAFETY SYSTEM REAR INSTRUMENT/RELAY RACK                       | AUXILIARY | 633.00     | CONTROL ROOM            |
| 20          | NA    | 2-SWR          | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / NUCLEAR INSTRUMENTAL SOURCE RANGE N21 INSTRUMENT/RELAY RACK             | AUXILIARY | 633.00     | CONTROL ROOM            |
| 20          | NA    | 2-SWRR         | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / CONTROL ROOM SOUTHWEST INSTRUMENT/RELAY RACK                            | AUXILIARY | 633.00     | CONTROL ROOM            |
| 20          | NA    | 2-TFP          | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / TURBINE DRIVEN AUX FEED PUMP SUBPANEL                          | TURBINE   | 591.00     | TB DRIVEN AUX FEED PMP  |
| 20          | NA    | 2-TRB          | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / TURBINE PANEL REAR INSTRUMENT/RELAY RACK 'B'                            | AUXILIARY | 633.00     | CONTROL ROOM            |

**DONALD C. COOK NUCLEAR PLANT UNIT # 2**  
**SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**  
**FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description  | Building      | Floor Elev | Room or Row Col              |
|-------------|-------|--------------|--------|---|---------------|------------|------------------------------|
| 20          | NA    | 2-TRD        | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / TURBINE PANEL REAR INSTRUMENT/RELAY RACK 'D'                         | AUX           | 633.00     | CONTROL ROOM                 |
| 20          | NA    | 2-TRE        | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / TURBINE PANEL REAR INSTRUMENT/RELAY RACK                             | AUXILIARY     | 633.00     | CONTROL ROOM                 |
| 20          | NA    | 2-TSC-VO-07  | 0      | COMPUTER SUPPORT SYSTEMS / TSC COMPUTER INPUT/OUTPUT CABINET #07  | AUXILIARY     | 633.00     | 633 HALLWAY                  |
| 20          | NA    | 2-TSC-VO-09  | 0      | COMPUTER SUPPORT SYSTEMS / TSC COMPUTER INPUT/OUTPUT CABINET #9   | AUXILIARY     | 633.00     | 633 HALLWAY                  |
| 20          | NA    | 2-TSC-VO-13  | 0      | NONE / TSC COMPUTER INPUT/OUTPUT CABINET #13  | AUXILIARY     | 633.00     | 633 HALLWAY                  |
| 20          | NA    | 2-TSC-VO-15  | 0      | COMPUTER SUPPORT SYSTEMS / TSC COMPUTER INPUT/OUTPUT CABINET #15  | AUXILIARY     | 633.00     | 633 HALLWAY                  |
| 20          | NA    | 2-VS         | 0      | CONTAINMENT VENTILATION / VENTILATION CONTROL PANEL   | AUXILIARY     | 633.00     | CONTROL ROOM                 |
| 21          | 12    | 12-HE-16S    | 0      | SPENT FUEL PIT COOLING/CLEANUP & CCW / SOUTH SPENT FUEL PIT HEAT EXCHANGER                              | U-2 AUXILIARY | 609.00     | SPENT FUEL PIT HEAT XCHGR RM |
| 21          | 12    | 2-HE-11      | 0      | REACTOR COOLANT PUMP SEAL WATER IN/LEAKOFF / REACTOR COOLANT PUMP SEAL WATER HEAT EXCHANGER             | AUXILIARY     | 609.00     | SEAL WTR HEAT XCHGR RM       |
| 21          | 12    | 2-HE-13      | 0      | LETDOWN (CVCS) / EXCESS LETDOWN HEAT EXCHANGER  | CONTAINMENT   | 612.00     | REGEN HEAT XCHGR RM          |
| 21          | 12    | 2-HE-14      | 0      | LETDOWN (CVCS) / LETDOWN HEAT EXCHANGER   | AUXILIARY     | 633.00     | LETDOWN HEAT XCHGR RM        |
| 21          | 2     | 2-HE-15E     | 0      | COMPONENT COOLING WATER / EAST COMPONENT COOLING WATER HEAT EXCHANGER                                   | AUXILIARY     | 609.00     | 609 HALLWAY                  |
| 21          | 1     | 2-HE-15W     | 0      | COMPONENT COOLING WATER / WEST COMPONENT COOLING WATER HEAT EXCHANGER                                   | AUXILIARY     | 609.00     | 609 HALLWAY                  |
| 21          | 2     | 2-HE-17E     | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER                                       | AUXILIARY     | 609.00     | E RHR HEAT XCHGR RM          |
| 21          | 1     | 2-HE-17W     | 0      | RESIDUAL HEAT REMOVAL / WEST RESIDUAL HEAT REMOVAL HEAT EXCHANGER                                       | AUXILIARY     | 609.00     | W RHR HEAT XCHGR RM          |
| 21          | 2     | 2-HE-18E     | 0      | CONTAINMENT SPRAY / EAST CONTAINMENT SPRAY HEAT EXCHANGER   | AUXILIARY     | 609.00     | E CONT SPRAY HEAT XCHGR RM   |
| 21          | 1     | 2-HE-18W     | 0      | CONTAINMENT SPRAY / WEST CONTAINMENT SPRAY HEAT EXCHANGER   | AUXILIARY     | 609.00     | W CONT SPRAY HEAT XCHGR RM   |
| 21          | 2     | 2-HE-32E     | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL PUMP PP-35E MECHANICAL SEAL HEAT EXCHANGER           | AUXILIARY     | 573.00     | EAST RHR PUMP RM             |
| 21          | 1     | 2-HE-32W     | 0      | RESIDUAL HEAT REMOVAL / WEST RESIDUAL HEAT REMOVAL PUMP PP-35W MECHANICAL SEAL HEAT EXCHANGER           | AUXILIARY     | 573.00     | W RHR PMP RM                 |
| 21          | 2     | 2-HE-33E     | 0      | CCW / EAST CONTAINMENT SPRAY PUMP PP-9E MECHANICAL SEAL HEAT EXCHANGER                                  | AUXILIARY     | 573.00     | E CONT SPRAY PMP RM          |
| 21          | 1     | 2-HE-33W     | 0      | CCW / WEST CONTAINMENT SPRAY PUMP PP-9W MECHANICAL SEAL HEAT EXCHANGER                                  | AUXILIARY     | 573.00     | W CONT SPRAY PMP RM          |
| 21          | 2     | 2-HE-34-NE   | 0      | COMPONENT COOLING WATER / NORTH SAFETY INJECTION PUMP PP-26N OUTBOARD MECHANICAL SEAL HEAT EXCHANGER    | AUXILIARY     | 587.00     | N SAFETY INJ PMP RM          |
| 21          | 2     | 2-HE-34-NW   | 0      | COMPONENT COOLING WATER / NORTH SAFETY INJECTION PUMP PP-26N INBOARD MECHANICAL SEAL HEAT EXCHANGER     | AUXILIARY     | 587.00     | N SAFETY INJ PMP RM          |
| 21          | 1     | 2-HE-34-SE   | 0      | COMPONENT COOLING WATER / SOUTH SAFETY INJECTION PUMP PP-26S OUTBOARD MECHANICAL SEAL HEAT EXCHANGER    | AUXILIARY     | 587.00     | S SAFETY INJ PMP RM          |
| 21          | 1     | 2-HE-34-SW   | 0      | COMPONENT COOLING WATER / SOUTH SAFETY INJECTION PUMP PP-26S INBOARD MECHANICAL SEAL HEAT EXCHANGER     | AUXILIARY     | 587.00     | S SAFETY INJ PMP RM          |
| 21          | 2     | 2-HE-35N     | 0      | COMPONENT COOLING WATER / NORTH SAFETY INJECTION PUMP PP-26N LUBE OIL COOLER                            | AUXILIARY     | 587.00     | N SAFETY INJ PMP RM          |
| 21          | 1     | 2-HE-35S     | 0      | COMPONENT COOLING WATER / SOUTH SAFETY INJECTION PUMP PP-26S LUBE OIL COOLER                            | AUXILIARY     | 587.00     | S SAFETY INJ PMP RM          |
| 21          | 2     | 2-HE-36-EN   | 0      | COMPONENT COOLING WATER / EAST CENTRIFUGAL CHARGING PUMP PP-50E INBOARD MECHANICAL SEAL HEAT EXCHANGER  | AUXILIARY     | 587.00     | E CENTRIFUGAL CHARG PMP ROOM |
| 21          | 2     | 2-HE-36-ES   | 0      | COMPONENT COOLING WATER / EAST CENTRIFUGAL CHARGING PUMP PP-50E OUTBOARD MECHANICAL SEAL HEAT EXCHANGER | AUXILIARY     | 587.00     | E CENTRIFUGAL CHARG PMP ROOM |
| 21          | 1     | 2-HE-36-WN   | 0      | COMPONENT COOLING WATER / WEST CENTRIFUGAL CHARGING PUMP PP-50W INBOARD MECHANICAL SEAL HEAT EXCHANGER  | AUXILIARY     | 587.00     | W CENTRIFUGAL CHARG PMP RM   |
| 21          | 1     | 2-HE-36-WS   | 0      | COMPONENT COOLING WATER / WEST CENTRIFUGAL CHARGING PUMP PP-50W OUTBOARD MECHANICAL SEAL HEAT EXCHANGER | AUXILIARY     | 587.00     | W CENTRIFUGAL CHARG PMP RM   |

**DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description   | Building  | Floor Elev | Room or Row Col              |
|-------------|-------|--------------|--------|--|-----------|------------|------------------------------|
| 21          | 2     | 2-HE-37E     | 0      | MISCELLANEOUS SEALING AND COOLING / EAST CENTRIFUGAL CHARGING PUMP PP-50E GEAR OIL COOLER                  | AUXILIARY | 587.00     | E CENTRIFUGAL CHARG PMP ROOM |
| 21          | 1     | 2-HE-37W     | 0      | MISCELLANEOUS SEALING AND COOLING / WEST CENTRIFUGAL CHARGING PUMP PP-50W GEAR OIL COOLER                  | AUXILIARY | 587.00     | W CENTRIFUGAL CHARG PMP RM   |
| 21          | 2     | 2-HE-38E     | 0      | MISCELLANEOUS SEALING AND COOLING / EAST CENTRIFUGAL CHARGING PUMP PP-50E LUBE OIL COOLER                  | AUXILIARY | 587.00     | E CENTRIFUGAL CHARG PMP ROOM |
| 21          | 1     | 2-HE-38W     | 0      | MISCELLANEOUS SEALING AND COOLING / WEST CENTRIFUGAL CHARGING PUMP PP-50W LUBE OIL COOLER                  | AUXILIARY | 587.00     | W CENTRIFUGAL CHARG PMP RM   |
| 21          | 1     | 2-HE-47-ABN  | 0      | DIESEL COMBUSTION AIR / AB EMERGENCY DIESEL NORTH COMBUSTION AIR AFTERCOOLER                               | AUXILIARY | 587.00     | AB EMER DSL GEN RM           |
| 21          | 1     | 2-HE-47-ABS  | 0      | DIESEL COMBUSTION AIR / AB EMERGENCY DIESEL SOUTH COMBUSTION AIR AFTERCOOLER                               | AUXILIARY | 587.00     | AB EMER DSL GEN RM           |
| 21          | 2     | 2-HE-47-CDN  | 0      | DIESEL COMBUSTION AIR / CD EMERGENCY DIESEL NORTH COMBUSTION AIR AFTERCOOLER                               | AUXILIARY | 587.00     | CD EMER DSL GEN RM           |
| 21          | 2     | 2-HE-47-CDS  | 0      | DIESEL COMBUSTION AIR / CD EMERGENCY DIESEL SOUTH COMBUSTION AIR AFTERCOOLER                               | AUXILIARY | 587.00     | CD EMER DSL GEN RM           |
| 21          | 12    | 2-QP-21      | 0      | BORON MAKEUP (CVCS) / SOUTH BORIC ACID BLENDER   | AUXILIARY | 587.00     | BORIC ACID STOR TANK AREA    |
| 21          | 1     | 2-QT-107-AB  | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL DAY TANK  | AUXILIARY | 587.00     | AB EMER DSL GEN RM           |
| 21          | 2     | 2-QT-107-CD  | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL FUEL OIL DAY TANK  | AUXILIARY | 587.00     | CD EMER DSL GEN RM           |
| 21          | 1     | 2-QT-110-AB  | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL LUBE OIL COOLER  | AUXILIARY | 587.00     | AB EMER DSL GEN RM           |
| 21          | 2     | 2-QT-110-CD  | 0      | DIESEL LUBE OIL / CD EMERGENCY DIESEL LUBE OIL COOLER  | AUXILIARY | 587.00     | CD EMER DSL GEN RM           |
| 21          | 1     | 2-QT-115-AB  | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL LUBE OIL SUMP TANK   | AUXILIARY | 579.00     | AB EMER DSL LUBE OIL PIT     |
| 21          | 2     | 2-QT-115-CD  | 0      | DIESEL LUBE OIL / CD EMERGENCY DIESEL LUBE OIL SUMP TANK   | AUXILIARY | 579.00     | CD EMER DSL LUBE OIL PIT     |
| 21          | 1     | 2-QT-131-AB  | 0      | DIESEL JACKET WATER / AB EMERGENCY DIESEL JACKET WATER COOLER  | AUXILIARY | 587.00     | AB EMER DSL GEN RM           |
| 21          | 2     | 2-QT-131-CD  | 0      | DIESEL JACKET WATER / CD EMERGENCY DIESEL JACKET WATER COOLER  | AUXILIARY | 587.00     | CD EMER DSL GEN RM           |
| 21          | 1     | 2-QT-133-AB  | 0      | DIESEL JACKET WATER / AB EMERGENCY DIESEL JACKET WATER SURGE TANK  | AUXILIARY | 587.00     | AB EMER DSL GEN RM           |
| 21          | 2     | 2-QT-133-CD  | 0      | DIESEL JACKET WATER / CD EMERGENCY DIESEL JACKET WATER SURGE TANK  | AUXILIARY | 587.00     | CD EMER DSL GEN RM           |
| 21          | 1     | 2-QT-134-AB  | 0      | DIESEL JACKET WATER / AB EMERGENCY DIESEL AUXILIARY JACKET WATER HEATER                                    | AUXILIARY | 587.00     | AB EMER DSL GEN RM           |
| 21          | 2     | 2-QT-134-CD  | 0      | DIESEL JACKET WATER / CD EMERGENCY DIESEL AUXILIARY JACKET WATER HEATER (TANK)                             | AUXILIARY | 587.00     | CD EMER DSL GEN RM           |
| 21          | 1     | 2-QT-141-AB1 | 0      | DIESEL STARTING AIR / AB EMERGENCY DIESEL STARTING AIR RECEIVER #1   | AUXILIARY | 587.00     | AB EMER DSL GEN RM           |
| 21          | 1     | 2-QT-141-AB2 | 0      | DIESEL STARTING AIR / AB EMERGENCY DIESEL STARTING AIR RECEIVER #2   | AUXILIARY | 587.00     | AB EMER DSL GEN RM           |
| 21          | 2     | 2-QT-141-CD1 | 0      | DIESEL STARTING AIR / CD EMERGENCY DIESEL STARTING AIR RECEIVER #1   | AUXILIARY | 587.00     | CD EMER DSL GEN RM           |
| 21          | 2     | 2-QT-141-CD2 | 0      | DIESEL STARTING AIR / CD EMERGENCY DIESEL STARTING AIR RECEIVER #2   | AUXILIARY | 587.00     | CD EMER DSL GEN RM           |
| 21          | 12    | 2-TK-10      | 0      | LETDOWN (CVCS) / REACTOR COOLANT LETDOWN VOLUME CONTROL TANK   | AUXILIARY | 609.00     | VOL CTRL TANK RM             |
| 21          | 12    | 2-TK-11      | 0      | BORON INJECTION / BORON INJECTION TANK   | AUXILIARY | 612.00     | BORON INJ TANK RM            |
| 21          | 12    | 2-TK-12S     | 0      | BORON MAKEUP (CVCS) / SOUTH BORIC ACID STORAGE TANK  | AUXILIARY | 587.00     | BORIC ACID STOR TANK AREA    |
| 21          | 12    | 2-TK-150     | 0      | DRAINS, MISCELLANEOUS / MAIN STEAM LEADS CONDENSATION DRAIN TANK   | AUXILIARY | 600.00     | MN STM LINES VERT PIPE CHASE |
| 21          | 12    | 2-TK-32      | 0      | CONDENSATE STORAGE TANK SUPPLY / CONDENSATE STORAGE TANK   | GROUND    | 609.00     | INNER PLANT GROUND           |
| 21          | 12    | 2-TK-33      | 0      | REFUELING WATER STORAGE TANK SUPPLY / REFUELING WATER STORAGE TANK   | GROUND    | 609.00     | REFUEL WTR STOR TANK AREA    |
| 21          | 12    | 2-TK-37      | 0      | COMPONENT COOLING WATER / COMPONENT COOLING WATER SURGE TANK   | AUXILIARY | 650.00     | 650 HALLWAY                  |
| 21          | 2     | 2-TK-76N     | 0      | CONTROL ROOM AIR CONDITIONING CHILL WATER / CONTROL ROOM AIR CONDITIONING NORTH CHILL WATER EXPANSION TANK | AUXILIARY | 650.00     | CTRL RM AIR CONDIT RM        |
| 21          | 1     | 2-TK-76S     | 0      | CONTROL ROOM AIR CONDITIONING CHILL WATER / CONTROL ROOM AIR CONDITIONING SOUTH CHILL WATER EXPANSION TANK | AUXILIARY | 650.00     | CTRL RM AIR CONDIT RM        |

**APPENDIX C**

**DONALD C. COOK NUCLEAR PLANT - UNIT 1**

**SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR RELAY REVIEW**



## Donald C. Cook Nuclear Plant - Unit 1

### SSEL Certification:

The information identifying the equipment required to bring the plant to a safe shutdown condition on this safe shutdown equipment list is, to be the best of our knowledge and belief, correct and accurate.

| <u>Name</u>                            | <u>Signature</u>           | <u>Date</u>        |
|--|----------------------------|--------------------|
| B. A. Svensson<br>Operations           | <u>B. A. Svensson</u>      | <u>1/21/96</u>     |
| G. P. Arent<br>Operations              | <u>G. P. Arent</u>         | <u>12-15-95</u>    |
| J. V. Ruparel<br>Systems               | <u>J. V. Ruparel</u>       | <u>Dec 15, 95.</u> |
| H. W. Young<br>Systems                 | <u>H. W. Young III</u>     | <u>12/15/95</u>    |
| R. C. Steele<br>Electrical             | <u>R. C. Steele</u>        | <u>12-15-95</u>    |
| T. R. Satyan Sharma<br>Project Manager | <u>T. R. Satyan Sharma</u> | <u>12/15/95</u>    |

**DONALD C. COOK NUCLEAR PLANT UNIT # 1**  
**SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**  
**FOR RELAY REVIEW**

| Equip Class | Train | Equipment ID  | Rev No | System / Equipment Description  | Building      | Floor Elev | Room or Row Col                    |
|-------------|-------|---------------|--------|---|---------------|------------|------------------------------------|
| 0           | 12    | 1-HV-ACFD-1   | 0      | CONTROL ROOM VENTILATION / PLANT PROCESS COMPUTER ROOM VENTILATION EXHAUST NORTH FIRE DAMPER                          | U-1 AUXILIARY | 650.00     | PLANT PROCESS CMPTR RM             |
| 0           | 12    | 1-HV-ACFD-2   | 0      | CONTROL ROOM VENTILATION / PLANT PROCESS COMPUTER ROOM VENTILATION EXHAUST SOUTH FIRE DAMPER                          | U-1 AUXILIARY | 650.00     | PLANT PROCESS CMPTR RM             |
| 0           | 12    | 1-HV-ACFD-3   | 0      | CONTROL ROOM VENTILATION / CONTROL ROOM VENT UNITS HV-ACRA-1 AND HV-ACRA-2 TO PLANT PROCESS COMPUTER ROOM FIRE DAMPER | U-1 AUXILIARY | 650.00     | PLANT PROCESS CMPTR RM             |
| 0           | 1     | 1-HV-DGS-FD-1 | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FIRE DAMPER                           | U-1 AUXILIARY | 587.00     | AB EMER DSL GEN RM                 |
| 0           | 2     | 1-HV-DGS-FD-2 | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FIRE DAMPER                           | U-1 AUXILIARY | 587.00     | CD EMER DSL GEN RM                 |
| 0           | 1     | 1-HV-DGX-FD-1 | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FIRE DAMPER                          | U-1 AUXILIARY | 587.00     | AB EMERGENCY DIESEL GENERATOR ROOM |
| 0           | 2     | 1-HV-DGX-FD-2 | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FIRE DAMPER                          | U-1 AUXILIARY | 587.00     | CD EMER DSL GEN RM                 |
| 0           | 2     | 1-OME-34E     | 0      | ESW / EAST ESW PUMP PP-7E DISCHARGE STRAINER  | SCREENHOUSE   | 591.00     | E ESSNTL SERV WTR PMP RM           |
| 0           | 1     | 1-OME-34W     | 0      | ESW / WEST ESW PUMP PP-7W DISCHARGE STRAINER  | SCREENHOUSE   | 591.00     | W ESSNTL SERV WTR PMP RM           |
| 0           | 1     | 1-QT-100-AB   | 0      | DIESEL COMBUSTION AIR / AB EMERG DIESEL AIR INTAKE FILTER   | GROUND        | 609.00     | INNER PLANT GROUND                 |
| 0           | 2     | 1-QT-100-CD   | 0      | DIESEL COMBUSTION AIR / CD EMERG DIESEL AIR INTAKE FILTER   | GROUND        | 609.00     | INNER PLANT GROUND                 |
| 0           | 1     | 1-QT-118-AB   | 0      | DIESEL LUBE OIL / AB EMERG DIESEL BYPASS LUBE OIL FILTER  | AUXILIARY     | 579.00     | AB EMER DSL LUBE OIL PIT           |
| 0           | 2     | 1-QT-118-CD   | 0      | DIESEL LUBE OIL / CD EMERG DIESEL BYPASS LUBE OIL FILTER  | AUXILIARY     | 579.00     | CD EMER DSL LUBE OIL PIT           |
| 1           | 1     | 1-AB-A        | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC AB-A  | AUXILIARY     | 587.00     | 587 HALLWAY                        |
| 1           | 2     | 1-AB-D        | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC 1-AB-D  | AUXILIARY     | 587.00     | 587 HALLWAY                        |
| 1           | 1     | 1-ABD-A       | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC ABD-A   | AUXILIARY     | 587.00     | AB EMER DSL GEN RM                 |
| 1           | 1     | 1-ABD-B       | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC ABD-B   | AUXILIARY     | 587.00     | AB EMER DSL GEN RM                 |
| 1           | 2     | 1-ABD-C       | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC ABD-C   | AUXILIARY     | 587.00     | CD EMER DSL GEN RM                 |
| 1           | 2     | 1-ABD-D       | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC ABD-D   | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR                 |
| 1           | 1     | 1-ABV-A       | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC VCC ABV-A   | AUXILIARY     | 587.00     | 587 HALLWAY                        |
| 1           | 2     | 1-ABV-D       | 0      | 600V AC DISTR / MCC 1-ABV-D   | AUXILIARY     | 587.00     | 587 HALLWAY                        |
| 1           | 1     | 1-AM-A        | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC AM-A  | AUXILIARY     | 633.00     | 633 HALLWAY                        |
| 1           | 2     | 1-AM-D        | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC AM-D  | AUXILIARY     | 633.00     | 633 HALLWAY                        |
| 1           | 1     | 1-AZ-BC       | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC AZ-BC   | AUXILIARY     | 609.00     | 609 HALLWAY                        |
| 1           | 1     | 1-AZV-A       | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC VCC AZV-A   | AUXILIARY     | 587.00     | 609 HALLWAY                        |
| 1           | 1     | 1-EZC-A       | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC EZC-A   | AUXILIARY     | 613.00     | 4KV RM - MEZZANINE                 |
| 1           | 1     | 1-EZC-B       | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC EZC-B   | AUXILIARY     | 613.00     | 4KV RM - MEZZANINE                 |
| 1           | 2     | 1-EZC-C       | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC EZC-C   | AUXILIARY     | 613.00     | 4KV RM - MEZZANINE                 |
| 1           | 2     | 1-EZC-D       | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC EZC-D   | AUXILIARY     | 613.00     | 4KV RM - MEZZANINE                 |
| 1           | 1     | 1-PS-A        | 0      | ELECTRICAL DISTRIBUTION, 600 VAC / 600 VAC MCC 1-PS-A   | SCREEN HOUSE  | 594.00     | TRAVELING SCRNM MCC UPPER RM       |
| 1           | 2     | 1-PS-D        | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600 VAC MCC 1-PS-D  | SCREENHOUSE   | 594.00     | TRAVELING SCRNM MCC UPPER RM       |
| 2           | 1     | 1-11A1        | 0      | ELECTRICAL DISTRIBUTION, 600VAC / REACTOR ROD CONTROL SOUTH MOTOR-GENERATOR SET CRDMG-1S SUPPLY BREAKER               | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR                 |
| 2           | 1     | 1-11A10       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / WEST TURBINE AUXILIARY COOLING WATER PUMP PP-14W SUPPLY BREAKER                     | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR                 |
| 2           |       | 1-11A11       | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC BUS 11A SUPPLY BREAKER  | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR                 |
| 2           | 1     | 1-11A13       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER AM-A1 SUPPLY BREAKER                                    | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR                 |
| 2           | 1     | 1-11A4        | 0      | ELECTRICAL DISTRIBUTION, 600VAC / SOUTH PLANT LIGHTING TRANSFORMER TR-LTG-8S SUPPLY BREAKER                           | U-1 AUXILIARY | 609.00     | 4KV RM - 600V SWGR                 |
| 2           | 1     | 1-11A7        | 0      | ELECTRICAL DISTRIBUTION, 600VAC / SERVICE BUILDING LIGHTING TRANSFORMER 12-TR-LTG-14 SUPPLY BREAKER                   | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR                 |

**DONALD C. COOK NUCLEAR PLANT UNIT # 1**  
**SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**  
**FOR RELAY REVIEW**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description  | Building  | Floor Elev | Room or Row Col    |
|-------------|-------|--------------|--------|---|-----------|------------|--------------------|
| 2           | 1     | 1-11A9       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / TSC UNINTERRUPTABLE PWR SOURCE EMER FEED CONSTANT VOLTAGE TRANSFORMER 12-TSC-UPS-CVT SUPPLY BREAKER | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 1     | 1-11B10      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / PLANT AIR COMPRESSOR OME-41 SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 1     | 1-11B11      | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC BUS 11B SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 1     | 1-11B12      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / SOUTH NON-ESSENTIAL SERVICE WATER PUMP PP-8S SUPPLY BREAKER   | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 1     | 1-11B13      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / TURBINE ROOM INDUCTION HEATING, STRESS RELIEF AND BOLT HEATERS SUPPLY BREAKER                       | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 1     | 1-11B3       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / EAST AND WEST AUXILIARY BUILDING CRANES 12-OM-3E AND 12-OM-3W SUPPLY BREAKER                        | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 1     | 1-11B4       | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC AZ-BC SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 1     | 1-11B5       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTERS TBG-BE AND TBP-BW SUPPLY BREAKER                                       | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 1     | 1-11B6       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / EAST TURBINE AUXILIARY COOLING WATER PUMP PP-14E SUPPLY BREAKER                                     | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 1     | 1-11B7       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / PLANT HEATING BOILER FORCED DRAFT FAN 12-OME-10-FAN SUPPLY BREAKER                                  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 1     | 1-11B8       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / MAKEUP PLANT VACUUM DEGASIFIER 2ND STAGE VACUUM PUMP 12-PP-44M SUPPLY BREAKER                       | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11C1       | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC BUS 11C SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11C12      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / NORTH SPENT FUEL PIT PUMP 12-PP-31N SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11C13      | 0      | ELECTRICAL DISTRIBUTION 600 VAC / CIRCUIT BREAKER-600V FOR RECIPROCATING CHARGING PUMP 1-PP-49  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11C14      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC BUS 11C SPARE CIRCUIT BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11C15      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / TECHNICAL SUPPORT CENTER UNINTERRUPTABLE POWER SUPPLY NORMAL SUPPLY BREAKER                         | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11C16      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTERS TBC-CS AND TBG-CW SUPPLY BREAKER                                       | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11C17      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / NORTH NON-ESSENTIAL SERVICE WATER PUMP PP-8N SUPPLY BREAKER   | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11C18      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / TURBINE BUILDING 240/50 TON OVERHEAD CRANE 12-OM-1 SUPPLY BREAKER                                   | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11C2       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / CONTAINMENT POLAR CRANE OM-4 SUPPLY BREAKER   | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11C3       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER AM-C1 SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11C4       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / CIRCULATING WATER TRAVELING SCREENS NORTH WASH PUMP 12-PP-15N SUPPLY BREAKER                        | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11C5       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / MAKEUP PLANT VACUUM DEGASIFIER STANDBY VACUUM PUMP 12-PP-44W SUPPLY BREAKER                         | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11C7       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC BUS 11C SPARE CIRCUIT BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11C8       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / SERVICE BUILDING AND CONTAINMENT STANDBY LIGHTING TRANSFORMER TR-LTG-8 SUPPLY BREAKER               | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11C9       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / MAIN AND SPARE TRANSFORMER AUXILIARIES NORMAL DISTRIBUTION CABINET TCSN SUPPLY BREAKER              | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11D1       | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC BUS 11D SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11D10      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / NORTH PLANT LIGHTING TRANSFORMER TR-LTG-9N SUPPLY BREAKER   | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11D13      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / REACTOR ROD CONTROL NORTH MOTOR-GENERATOR SET CRDMG-1N SUPPLY BREAKER                               | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |



**DONALD C. COOK NUCLEAR PLANT UNIT # 1**  
**SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**  
**FOR RELAY REVIEW**

| Equip Class | Train | Equipment ID   | Rev No | System / Equipment Description  | Building  | Floor Elev | Room or Row Col      |
|-------------|-------|----------------|--------|---|-----------|------------|----------------------|
| 2           | 2     | 1-11D3         | 0      | ELECTRICAL DISTRIBUTION, 600VAC / CONTAINMENT LIGHTING TRANSFORMER TR-LTG-10 SUPPLY BREAKER                                 | AUXILIARY | 609.00     | 4KV RM - 600V SWGR   |
| 2           | 2     | 1-11D9         | 0      | ELECTRICAL DISTRIBUTION, 600VAC / MAIN AND SPARE TRANSFORMER AUXILIARIES EMERGENCY DISTRIBUTION CABINET TCSE SUPPLY BREAKER | AUXILIARY | 609.00     | 4KV RM - 600V SWGR   |
| 2           | 2     | 1-52-BYA       | 0      | REACTOR TRIP BREAKER / REACTOR ROD CONTROL TRIN 'A' REACTOR TRIP BYPASS CIRCUIT BREAKER                                     | AUXILIARY | 609.00     | CRD EQUIP RM         |
| 2           | 1     | 1-52-BYB       | 0      | ROD CONTROL AND INSTRUMENTATION / REACTOR ROD CONTROL TRIN 'B' REACTOR TRIP BYPASS CIRCUIT BREAKER                          | AUXILIARY | 609.00     | CRD EQUIP RM         |
| 2           | 2     | 1-52-RTA       | 0      | ROD CONTROL AND INSTRUMENTATION / REACTOR ROD CONTROL TRIN 'A' REACTOR TRIP CIRCUIT BREAKER                                 | AUXILIARY | 609.00     | CRD EQUIP RM         |
| 2           | 1     | 1-52-RTB       | 0      | ROD CONTROL AND INSTRUMENTATION / REACTOR ROD CONTROL TRIN 'B' REACTOR TRIP CIRCUIT BREAKER                                 | AUXILIARY | 609.00     | CRD EQUIP RM         |
| 3           | 1     | 1-T11A1        | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC / SOUTH SAFETY INJECTION PUMP PP-26S SUPPLY BREAKER                                       | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR |
| 3           | 1     | 1-T11A10       | 0      | ELECTRICAL DISTRIBUTION 4160VAC / 600V BUS 11A SUPPLY TRANSFORMER TR11A SUPPLY BREAKER                                      | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR |
| 3           | 1     | 1-T11A11       | 0      | ELECTRICAL DISTRIBUTION 4160VAC / AB EMERG DIESEL GENERATOR TO 4KV BUS T11A SUPPLY BREAKER                                  | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR |
| 3           | 1     | 1-T11A12       | 0      | ELECTRICAL DISTRIBUTION 4160 VAC / CIRCUIT BREAKER FROM 69KV TO BUS T11A  | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR |
| 3           | 1     | 1-T11A3        | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC / WEST CONTAINMENT SPRAY PUMP PP-9W SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR |
| 3           | 1     | 1-T11A6        | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC / 4KV BUS T11A TO 480V PRESSURIZER HEATER BUS SUPPLY XFMR TR11A PHA SUPPLY BRKR           | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR |
| 3           | 1     | 1-T11A9        | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 4KV BUS 1A TO 4KV BUS T11A TIE BREAKER   | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR |
| 3           | 1     | 1-T11B1        | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 4KV BUS 1B TO 4KV BUS T11B TIE BREAKER   | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR |
| 3           | 1     | 1-T11B2        | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / CIRCUIT BREAKER FROM 69KV BUS TO BUS T11B  | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR |
| 3           | 1     | 1-T11B4        | 0      | ELECTRICAL DISTRIBUTION 4160VAC / AB EMERG DIESEL GENERATOR TO 4KV BUS T11 SUPPLY BREAKER                                   | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR |
| 3           | 2     | 1-T11C1        | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 4KV BUS 1C TO 4KV BUS T11C TIE BREAKER   | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR |
| 3           | 2     | 1-T11C2        | 0      | ELECTRICAL DISTRIBUTION 4160 VOLTS / CIRCUIT BREAKER-4KV FROM 69KV TO BUS T11C  | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR |
| 3           | 2     | 1-T11C3        | 0      | ELECTRICAL DISTRIBUTION 4160VAC / CD EMERG DIESEL GENERATOR TO 4KV BUS T11C SUPPLY BREAKER                                  | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR |
| 3           | 2     | 1-T11D1        | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC. / CIRCUIT BREAKER 4KV FROM 69KV FEED TO BUS T11D   | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR |
| 3           | 2     | 1-T11D12       | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 4KV BUS 1D TO 4KV BUS T11D TIE BREAKER   | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR |
| 3           | 2     | 1-T11D2        | 0      | ELECTRICAL DISTRIBUTION 4160VAC / 600V BUS 11D SUPPLY TRANSFORMER TR11D SUPPLY BREAKER                                      | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR |
| 3           | 2     | 1-T11D4        | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC / EAST CONTAINMENT SPRAY PUMP PP-9E SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR |
| 3           | 2     | 1-T11D5        | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC / NORTH SAFETY INJECTION PUMP PP-26N SUPPLY BREAKER                                       | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR |
| 3           | 2     | 1-T11D8        | 0      | ELECTRICAL DISTRIBUTION 4160VAC / CD EMERG DIESEL GENERATOR TO 4KV BUS T11D SUPPLY BREAKER                                  | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR |
| 3           | 2     | 1-T11D9        | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC / 4KV BUS T11D TO 480V PRESSURIZER HEATER BUS SUPPLY XFMR TR11PHC SUPPLY BRKR             | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR |
| 4           | 2     | 1-CRID-I-CVT   | 0      | 120V CTRL RM INSTRUMENTATION DISTR / 10KVA TRANSFORMER-CONSTANT VOLTAGE   | AUXILIARY | 609.00     | 4KV RM - 600V SWGR   |
| 4           | 2     | 1-CRID-II-CVT  | 0      | 120VAC DISTRIBUTION / 120V AC CR INST DISTR CH-II ISOL. CONT. VOLT TRANSF   | AUXILIARY | 609.00     | 4KV RM - 600V SWGR   |
| 4           | 1     | 1-CRID-III-CVT | 0      | 120V CTRL RM INSTRUMENTATION DISTR / 10KVA ISOLIMETER -CONSTANT VOLTAGE - TRANSFORMER                                       | AUXILIARY | 609.00     | 4KV RM - 600V SWGR   |
| 4           | 1     | 1-CRID-IV-CVT  | 0      | 120V CTRL RM INSTRUMENTATION DISTR / 10KVA ISOLIMETER -CONSTANT VOLTAGE - TRANSFORMER                                       | AUXILIARY | 609.00     | 4KV RM - 600V SWGR   |
| 4           | 1     | 1-DGAB-FFCKT   | 0      | DIESEL GENERATION, CONTROL AND INSTRUMENT / AB EMERGENCY DIESEL GENERATOR OME-150-AB FIELD FLASH CIRCUIT TRANSFORMER        | AUXILIARY | 587.00     | AB EMER DSL GEN RM   |

**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR RELAY REVIEW**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description   | Building    | Floor Elev | Room or Row Col               |
|-------------|-------|--------------|--------|--|-------------|------------|-------------------------------|
| 4           | 2     | 1-DGCD-FFCKT | 0      | DIESEL GENERATION, CONTROL AND INSTRUMENT / CD EMERGENCY DIESEL GENERATOR ONE-150-CD FIELD FLASH CKT TRANSFORMER | AUXILIARY   | 587.00     | CD EMER DSL GEN RM            |
| 4           | 1     | 1-TR11A      | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC BUS 11A SUPPLY TRANSFORMER   | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR            |
| 4           | 1     | 1-TR11B      | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC BUS 11B SUPPLY TRANSFORMER   | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR            |
| 4           | 2     | 1-TR11C      | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC BUS 11C SUPPLY TRANSFORMER   | AUXILIARY   | 609.00     | 4KV RM - CD 4KV SWGR          |
| 4           | 2     | 1-TR11D      | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC BUS 11D SUPPLY TRANSFORMER   | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR            |
| 5           | 2     | 1-PP-10E     | 0      | CCW / EAST CCW PUMP  | AUXILIARY   | 609.00     | 609 HALLWAY                   |
| 5           | 2     | 1-PP-10W     | 0      | CCW / WEST CCW PUMP  | AUXILIARY   | 609.00     | 609 HALLWAY                   |
| 5           | 2     | 1-PP-26N     | 0      | SAFETY INJECTION / NORTH SAFETY INJECTION PUMP   | AUXILIARY   | 587.00     | N SAFETY INJ PMP RM           |
| 5           | 1     | 1-PP-26S     | 0      | SAFETY INJECTION / SOUTH SAFETY INJECTION PUMP   | AUXILIARY   | 587.00     | S SAFETY INJ PMP RM           |
| 5           | 2     | 1-PP-3E      | 0      | AUX FEEDWATER / EAST MOTOR DRIVEN AUX FEEDWATER PUMP   | TURBINE     | 591.00     | E MOTOR DRIVEN AUX FDWTR PU   |
| 5           | 1     | 1-PP-3W      | 0      | AUX FEEDWATER / WEST MOTOR DRIVEN AUX FEEDWATER PUMP   | TURBINE     | 591.00     | W MOTOR DRIVEN AUX FDWTR PU   |
| 5           | 12    | 1-PP-4       | 0      | AUX FEEDWATER / TURBINE DRIVEN AUX FEEDWATER PUMP  | TURBINE     | 591.00     | TB DRIVEN AUX FDWTR PMP       |
| 5           | 2     | 1-PP-48-1    | 0      | CVCS / BORIC ACID STORAGE TANKS TRANSFER PUMP 1  | AUXILIARY   | 587.00     | BORIC ACID STOR TANK          |
| 5           | 1     | 1-PP-48-2    | 0      | CVCS / BORIC ACID STORAGE TANKS TRANSFER PUMP 2  | AUXILIARY   | 587.00     | BORIC ACID STOR TANK          |
| 5           | 12    | 1-PP-49      | 0      | CVCS / RECIPROCATING CHARGING PUMP   | AUXILIARY   | 587.00     | RECIPROCATING CHRG PMP RM     |
| 5           | 2     | 1-PP-50E     | 0      | CVCS / EAST CENTRIFUGAL CHARGING PUMP  | AUXILIARY   | 587.00     | E CNTRFGL CHARG PMP RM        |
| 5           | 1     | 1-PP-50W     | 0      | CVCS / WEST CENTRIFUGAL CHARGING PUMP  | AUXILIARY   | 587.00     | W CENTRIFUGAL CHRG PMP RM     |
| 5           | 2     | 1-PP-82N     | 0      | CONTROL ROOM AC CHILL WATER / CONTROL ROOM NORTH CHILL WATER CIRCULATION PUMP                                    | AUXILIARY   | 650.00     | CTRL RM AIR COND RM           |
| 5           | 1     | 1-PP-82S     | 0      | CONTROL ROOM AC CHILL WATER / CONTROL AC SOUTH CHILL WATER CIRCULATION PUMP                                      | AUXILIARY   | 650.00     | CTRL RM AIR COND RM           |
| 5           | 1     | 1-QT-108-AB1 | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL TRANSFER PUMP #1  | AUXILIARY   | 587.00     | AB EMER DSL FUEL OIL XFR PMP  |
| 5           | 1     | 1-QT-108-AB2 | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL TRANSFER PUMP #2  | AUXILIARY   | 587.00     | AB EMER DSL FUEL OIL XFR PMP  |
| 5           | 2     | 1-QT-108-CD1 | 0      | DIESEL FUEL OIL / CD EMERG DIESEL FUEL OIL TRANSFER PUMP 1   | AUXILIARY   | 587.00     | CD EMER DSL FUEL OIL XFER PMP |
| 5           | 2     | 1-QT-108-CD2 | 0      | DIESEL FUEL OIL / CD EMERG DIESEL FUEL OIL TRANSFER PUMP 2   | AUXILIARY   | 587.00     | CD EMER DSL FUEL OIL XFER PMP |
| 5           | 1     | 1-QT-111-AB  | 0      | DIESEL LUBE OIL / AB EMERG DIESEL LUBE OIL BEFORE AND AFTER PUMP   | AUXILIARY   | 579.00     | AB EMER DSL LUBE OIL PIT      |
| 5           | 2     | 1-QT-111-CD  | 0      | DIESEL LUBE OIL / CD EMERG DIESEL LUBE OIL BEFORE AND AFTER PUMP   | AUXILIARY   | 579.00     | CD EMER DSL LUBE OIL PIT      |
| 5           | 1     | 1-QT-117-AB  | 0      | DIESEL LUBE OIL / AB EMERG DIESEL LUBE OIL HEATER QT-118-AB PUMP   | AUXILIARY   | 579.00     | AB EMER DSL LUBE OIL PIT      |
| 5           | 2     | 1-QT-117-CD  | 0      | DIESEL LUBE OIL / CD EMERG DIESEL LUBE OIL HEATER QT-118-CD PUMP   | AUXILIARY   | 579.00     | CD EMER DSL LUBE OIL PIT      |
| 5           | 1     | 1-QT-119-AB  | 0      | DIESEL LUBE OIL / AB EMERG DIESEL LUBE OIL FILTER (QT-118-AB) PUMP   | AUXILIARY   | 579.00     | AB EMER DSL LUBE OIL PIT      |
| 5           | 2     | 1-QT-119-CD  | 0      | DIESEL LUBE OIL / CD EMERG DIESEL BYPASS LUBE OIL FILTER (QT-118-CD) PUMP  | AUXILIARY   | 579.00     | CD EMER DSL LUBE OIL PIT      |
| 5           | 1     | 1-QT-130-AB1 | 0      | DIESEL JACKET WATER / AB EMERG DIESEL JACKET WATER PUMP 1  | AUXILIARY   | 587.00     | AB EMER DSL GEN RM            |
| 5           | 1     | 1-QT-130-AB2 | 0      | DIESEL JACKET WATER / AB EMERG DIESEL JACKET WATER PUMP 2  | AUXILIARY   | 587.00     | AB EMER DSL GEN RM            |
| 5           | 2     | 1-QT-130-CD1 | 0      | DIESEL JACKET WATER / CD EMERG DIESEL JACKET WATER PUMP 1  | AUXILIARY   | 587.00     | CD EMER DSL GEN RM            |
| 5           | 2     | 1-QT-130-CD2 | 0      | DIESEL JACKET WATER / CD EMERG DIESEL JACKET WATER PUMP 2  | AUXILIARY   | 587.00     | CD EMER DSL GEN RM            |
| 5           | 1     | 1-QT-135-AB  | 0      | DIESEL JACKET WATER / AB EMERG DIESEL AUX JACKET WATER PUMP  | AUXILIARY   | 587.00     | AB EMER DSL GEN RM            |
| 5           | 2     | 1-QT-135-CD  | 0      | DIESEL JACKET WATER / CD EMERG DIESEL AUX JACKET WATER PUMP  | AUXILIARY   | 587.00     | CD EMER DSL GEN RM            |
| 5           | 12    | 12-PP-10     | 0      | CCW / SPARE CCW PUMP   | AUXILIARY   | 609.00     | 609 HALLWAY                   |
| 5           | 12    | 12-PP-31N    | 0      | SPENT FUEL PIT COOLING/CLEANUP / NORTH SPENT FUEL PIT PUMP   | UNIT #1 AUX | 609.00     | SPENT FUEL PIT HEAT XCHGR RM  |
| 6           | 2     | 1-PP-35E     | 0      | RHR / EAST RHR PUMP  | AUXILIARY   | 573.00     | EAST RHR PUMP RM              |
| 6           | 1     | 1-PP-35W     | 0      | RHR / WEST RHR PUMP  | AUXILIARY   | 573.00     | W RHR PUMP RM                 |
| 6           | 2     | 1-PP-7E      | 0      | ESW / EAST ESW PUMP  | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR PMP RM      |
| 6           | 1     | 1-PP-7W      | 0      | ESW / WEST ESW PUMP  | SCREENHOUSE | 591.00     | W ESSNTL SERV WTR PMP RM      |
| 6           | 2     | 1-PP-9E      | 0      | CONTAINMENT SPRAY / EAST CONTAINMENT SPRAY PUMP  | AUXILIARY   | 573.00     | E CONT SPRAY PMP RM           |
| 6           | 1     | 1-PP-9W      | 0      | CONTAINMENT SPRAY / WEST CONTAINMENT SPRAY PUMP  | AUXILIARY   | 573.00     | W CONT SPRAY PMP RM           |
| 7           | 2     | 1-CRV-410    | 0      | CCW / DEMINERALIZED MAKEUP WATER TO CCW SURGE TANK 'A' 1.5 in AIR OPERATED SHUTOFF VALVE                         | AUXILIARY   | 650.00     | 650 HALLWAY                   |

**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR RELAY REVIEW**

| Equip Class | Train | Equipment ID  | Rev No | System / Equipment Description  | Building    | Floor Elev | Room or Row Col               |
|-------------|-------|---------------|--------|---|-------------|------------|-------------------------------|
| 7           | 1     | 1-CRV-411     | 0      | CCW / DEMINERALIZED MAKEUP WATER TO CCW SURGE TANK 'B' 1.5 in AIR OPERATED SHUTOFF VALVE                                      | AUXILIARY   | 650.00     | 650 HALLWAY                   |
| 7           | 2     | 1-DCR-301     | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 1 BLOWDOWN SAMPLE DSR-301 CONTAINMENT ISOLATION VALVE                                      | AUXILIARY   | 591.00     | VESTIBULE                     |
| 7           | 1     | 1-DCR-302     | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 2 BLOWDOWN SAMPLE DSR-302 CONTAINMENT ISOLATION VALVE                                      | AUXILIARY   | 591.00     | VESTIBULE                     |
| 7           | 1     | 1-DCR-303     | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 3 BLOWDOWN SAMPLE DSR-303 CONTAINMENT ISOLATION VALVE                                      | AUXILIARY   | 591.00     | VESTIBULE                     |
| 7           | 2     | 1-DCR-304     | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 4 BLOWDOWN SAMPLE DSR-304 CONTAINMENT ISOLATION VALVE                                      | AUXILIARY   | 591.00     | VESTIBULE                     |
| 7           | 2     | 1-DCR-310     | 0      | BLOWDOWN / STEAM GENERATOR OME-3-1 BLOWDOWN CONTAINMENT ISOLATION VALVE   | AUXILIARY   | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 7           | 1     | 1-DCR-320     | 0      | BLOWDOWN / STEAM GENERATOR OME-3-2 BLOWDOWN CONTAINMENT ISOLATION VALVE   | AUXILIARY   | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 7           | 1     | 1-DCR-330     | 0      | BLOWDOWN / STEAM GENERATOR OME-3-3 BLOWDOWN CONTAINMENT ISOLATION VALVE   | AUXILIARY   | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 7           | 2     | 1-DCR-340     | 0      | BLOWDOWN / STEAM GENERATOR OME-3-4 BLOWDOWN CONTAINMENT ISOLATION VALVE   | AUXILIARY   | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 7           | 12    | 1-DRV-407     | 0      | STEAM LINE DRAINS / MAIN STEAM LEADS CONDENSATION DRAIN TANK TK-200, OUTLET SHUTOFF VALVE                                     | AUXILIARY   | 621.00     | W MAIN STM STOP ENCL          |
| 7           | 1     | 1-FRV-247     | 0      | AUX FEEDWATER / WEST MOTOR DRIV AUX FEEDWATER PUMP PP-3W EMERG 1 in AIR OPERATED LEAKOFF GLOBE VALVE                          | TURBINE     | 591.00     | W MOTOR DRIVEN AUX FDWTR PU   |
| 7           | 2     | 1-FRV-257     | 0      | AUX FEEDWATER / EAST MOTOR DRIV AUX FEEDWATER PUMP PP-3E EMERG 1 in AIR OPERATED LEAKOFF GLOBE VALVE                          | TURBINE     | 591.00     | E MOTOR DRIVEN AUX FDWTR PU   |
| 7           | 12    | 1-FRV-258     | 0      | AUX FEEDWATER / TURBINE DRIV AUX FEED PUMP EMERG 1 in AIR OPERATED LEAKOFF GLOBE VALVE  | TURBINE     | 591.00     | TB DRIVEN AUX FDWTR PMP       |
| 7           | 12    | 1-GCR-314     | 0      | NITROGEN (REACTOR PLANT SERVICE) / NITROGEN SUPPLY TO ACCUMULATOR TANKS CONTAINMENT ISOLATION VALVE                           | AUXILIARY   | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 7           | 12    | 1-GRV-341     | 0      | NITROGEN (REACTOR PLANT SERVICE) / NITROGEN SUPPLY TO ACCUMULATOR TANKS VENT TO ATMOS. VALVE                                  | CONTAINMENT | 598.00     | ANNULUS, QUAD2                |
| 7           | 12    | 1-HV-SGR-MD-1 | 0      | AUX BUILDING VENTILATION / CONTROL ROD DRIVE EQUIP ROOM AND INVERTER AREA VENTILATION RECIRCULATING AIR INLET DAMPER          | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR            |
| 7           | 12    | 1-HV-SGR-MD-2 | 0      | AUX BUILDING VENTILATION / CONTROL ROD DRIVE EQUIP ROOM AND INVERTER AREA VENTILATION RECIRCULATING AIR INLET DAMPER          | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR            |
| 7           | 2     | 1-DRV-112     | 0      | NITROGEN (REACTOR PLANT SERVICES) / ACCUMULATOR TANK OME-6-1 NITROGEN SUPPLY VENT VALVE                                       | CONTAINMENT | 612.00     | ACCUM TANK1 AREA              |
| 7           | 2     | 1-DRV-116     | 0      | RHR / ACCUMULATOR TANK OME-6-1 0.75 in AIR OPERATED OUTLET TO REACTOR COOLANT LOOP #1 COLD LEG TEST VALVE                     | CONTAINMENT | 598.00     | ANNULUS, QUAD1                |
| 7           | 1     | 1-DRV-122     | 0      | NITROGEN (REACTOR PLANT SERVICES) / ACCUMULATOR TANK OME-6-2 NITROGEN SUPPLY VENT VALVE                                       | CONTAINMENT | 612.00     | ACCUM TANK2 AREA              |
| 7           | 1     | 1-DRV-126     | 0      | RHR / ACCUMULATOR TANK OME-6-2 0.75 in AIR OPERATED OUTLET AND SAFETY INJECTION TO REACTOR COOLANT LOOP 2 COLD LEG TEST VALVE | CONTAINMENT | 598.00     | ANNULUS, QUAD2                |
| 7           | 2     | 1-DRV-132     | 0      | NITROGEN (REACTOR PLANT SERVICES) / ACCUMULATOR TANK OME-6-3 NITROGEN SUPPLY VENT VALVE                                       | CONTAINMENT | 612.00     | ACCUM TANK3 AREA              |
| 7           | 2     | 1-DRV-136     | 0      | RHR / ACCUMULATOR TANK OME-6-3 OUTLET AND SAFETY INJECTION TO REACTOR COOLANT LOOP 3 COLD LEG 0.75 in AIR OPERATED TEST VALVE | CONTAINMENT | 598.00     | ANNULUS, QUAD3                |
| 7           | 1     | 1-DRV-142     | 0      | NITROGEN (REACTOR PLANT SERVICES) / ACCUMULATOR TANK OME-6-4 NITROGEN SUPPLY VENT VALVE                                       | CONTAINMENT | 612.00     | ACCUM TANK4 AREA              |
| 7           | 1     | 1-DRV-146     | 0      | RHR / ACCUMULATOR TANK OME-6-4 1 in AIR OPERATED OUTLET AND SAFETY INJECTION TO REACTOR COOLANT LOOP 4 COLD LEG TEST VALVE    | CONTAINMENT | 598.00     | ANNULUS, QUAD4                |
| 7           | 1     | 1-DRV-147     | 0      | RHR / WEST RHR AND SOUTH SAFETY INJECTION TO REACTOR COOLANT LOOPS 2 AND 3 0.75 in AIR OPERATED TEST VALVE                    | CONTAINMENT | 612.00     | HV-CEQ-1 FAN RM               |
| 7           | 2     | 1-DRV-148     | 0      | RHR / EAST RHR AND NORTH SAFETY INJECTION TO REACTOR COOLANT LOOPS 1 AND 4 0.75 in AIR OPERATED TEST VALVE                    | CONTAINMENT | 612.00     | HV-CEQ-1 FAN RM               |
| 7           | 1     | 1-DRV-149     | 0      | RHR / WEST RHR TO REACTOR COOLANT LOOPS 2 AND 3 0.75 in AIR OPERATED TEST VALVE   | CONTAINMENT | 612.00     | HV-CEQ-1 FAN RM               |

**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR RELAY REVIEW**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description  | Building    | Floor Elev | Room or Row Col         |
|-------------|-------|--------------|--------|---|-------------|------------|-------------------------|
| 7           | 2     | 1-RV-150     | 0      | RHR / EAST RHR TO REACTOR COOLANT LOOPS 1 AND 4 0.75 in AIR OPERATED TEST VALVE                           | CONTAINMENT | 612.00     | HV-CEQ-1 FAN RM         |
| 7           | 12    | 1-RV-200     | 0      | SAFETY INJECTION / SAFETY INJECTION TEST LINE SHUTOFF 0.75 in AIR OPERATED VALVE                          | AUXILIARY   | 587.00     | N SAFETY INJ PMP RM     |
| 7           | 2     | 1-RV-310     | 0      | RHR / EAST RHR HEAT EXCHANGER HE-17E 8 in AIR OPERATED OUTLET FLOW CONTROL VALVE                          | AUXILIARY   | 609.00     | EAST RHR HEAT EXCHGR RM |
| 7           | 12    | 1-RV-311     | 0      | RHR / RHR HEAT EXCHANGERS BYPASS FLOW 8 in AIR OPERATED CONTROL VALVE                                     | AUXILIARY   | 609.00     | EAST RHR HEAT EXCHGR RM |
| 7           | 1     | 1-RV-320     | 0      | RHR / WEST RHR HEAT EXCHANGER HE-17W 8 in AIR OPERATED OUTLET FLOW CONTROL VALVE                          | AUXILIARY   | 609.00     | W RHR HEAT XCHGR RM     |
| 7           | 12    | 1-RV-50      | 0      | BORON INJECTION / BORON INJECTION TO ACCUMULATOR FILL LINE 1 in AIR OPERATED CONTROL VALVE                | CONTAINMENT | 598.00     | ANNULUS, QUAD2          |
| 7           | 12    | 1-RV-60      | 0      | SAFETY INJECTION / SAFETY INJECTION TO ACCUMULATOR FILL LINE 1 in AIR OPERATED CONTROL VALVE              | CONTAINMENT | 598.00     | ANNULUS, QUAD2          |
| 7           | 2     | 1-MCR-251    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 1 STEAM SAMPLE MSX-101 0.5 in AIR OPERATED CONTAINMENT ISOLATION VALVE | AUXILIARY   | 591.00     | VESTIBULE               |
| 7           | 1     | 1-MCR-252    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 2 STEAM SAMPLE MSX-102 0.5 in AIR OPERATED CONTAINMENT ISOLATION VALVE | AUXILIARY   | 591.00     | VESTIBULE               |
| 7           | 1     | 1-MCR-253    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 3 STEAM SAMPLE MSX-103 0.5 in AIR OPERATED CONTAINMENT ISOLATION VALVE | AUXILIARY   | 591.00     | VESTIBULE               |
| 7           | 2     | 1-MCR-254    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 4 STEAM SAMPLE MSX-104 0.5 in AIR OPERATED CONTAINMENT ISOLATION VALVE | AUXILIARY   | 591.00     | VESTIBULE               |
| 7           | 2     | 1-MRV-151    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 1 STEAM SAMPLE MSX-101 0.5 in AIR OPERATED CONTAINMENT ISOLATION VALVE | CONTAINMENT | 612.00     | E CONT LWR VENT RM      |
| 7           | 1     | 1-MRV-152    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 2 STEAM SAMPLE MSX-102 0.5 in AIR OPERATED CONTAINMENT ISOLATION VALVE | CONTAINMENT | 612.00     | W CONT LOWER VENT RM    |
| 7           | 1     | 1-MRV-153    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 3 STEAM SAMPLE MSX-103 0.5 in AIR OPERATED CONTAINMENT ISOLATION VALVE | CONTAINMENT | 612.00     | W CONT LOWER VENT RM    |
| 7           | 2     | 1-MRV-154    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 4 STEAM SAMPLE MSX-104 0.5 in AIR OPERATED CONTAINMENT ISOLATION VALVE | CONTAINMENT | 591.00     | E CONT LWR VENT RM      |
| 7           | 2     | 1-MRV-211    | 0      | MAIN STEAM / STEAM GENERATOR 1 STOP VALVE MRV-210 STEAM CYLINDER 'A' DUMP VALVE                           | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL    |
| 7           | 2     | 1-MRV-212    | 0      | MAIN STEAM / STEAM GENERATOR 1 STOP VALVE MRV-210 STEAM CYLINDER 'B' DUMP VALVE                           | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL    |
| 7           | 1     | 1-MRV-221    | 0      | MAIN STEAM / STEAM GENERATOR 2 STOP VALVE MRV-220 STEAM CYLINDER 'A' DUMP VALVE                           | AUXILIARY   | 633.00     | W MAIN STM STOP ENCL    |
| 7           | 1     | 1-MRV-222    | 0      | MAIN STEAM / STEAM GENERATOR 2 STOP VALVE MRV-220 STEAM CYLINDER 'B' DUMP VALVE                           | AUXILIARY   | 633.00     | W MAIN STM STOP ENCL    |
| 7           | 1     | 1-MRV-231    | 0      | MAIN STEAM / STEAM GENERATOR 3 STOP VALVE MRV-230 STEAM CYLINDER 'A' DUMP VALVE                           | AUXILIARY   | 633.00     | W MAIN STM STOP ENCL    |
| 7           | 1     | 1-MRV-232    | 0      | MAIN STEAM / STEAM GENERATOR 3 STOP VALVE MRV-230 STEAM CYLINDER 'B' DUMP VALVE                           | AUXILIARY   | 633.00     | W MAIN STM STOP ENCL    |
| 7           | 2     | 1-MRV-241    | 0      | MAIN STEAM / STEAM GENERATOR 4 STOP VALVE MRV-240 STEAM CYLINDER 'A' DUMP VALVE                           | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL    |
| 7           | 2     | 1-MRV-242    | 0      | MAIN STEAM / STEAM GENERATOR 4 STOP VALVE MRV-240 STEAM CYLINDER 'B' DUMP VALVE                           | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL    |
| 7           | 2     | 1-NRV-101    | 0      | NUCLEAR SAMPLING / REACTOR COOLANT LOOP 1 HOT LEG SAMPLE NSX-101 SHUTOFF VALVE                            | CONTAINMENT | 598.00     | ANNULUS, QUAD1          |
| 7           | 12    | 1-NRV-102    | 0      | NUCLEAR SAMPLING / PRESSURIZER LIQUID SPACE SAMPLE NSX-102 0.5 in AIR OPERATED SHUTOFF VALVE              | CONTAINMENT | 612.00     | INSTRUMENTATION RM      |
| 7           | 1     | 1-NRV-103    | 0      | NUCLEAR SAMPLING / REACTOR COOLANT LOOP 3 HOT LEG SAMPLE NSV-103 SHUTOFF VALVE                            | CONTAINMENT | 598.00     | ANNULUS, QUAD3          |
| 7           | 12    | 1-NRV-104    | 0      | NUCLEAR SAMPLING / PRESSURIZER STEAM SPACE SAMPLE NSX-104 0.5 in AIR OPERATED SHUTOFF VALVE               | CONTAINMENT | 612.00     | INSTRUMENTATION RM      |
| 7           | 1     | 1-NRV-151    | 0      | PRESSURIZER / PRESSURIZER 'B' PRESSURE RELIEF VALVE   | CONTAINMENT | 650.00     | PRESSRZR ENCL INTERIOR  |

**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR RELAY REVIEW**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description   | Building    | Floor Elev | Room or Row Col            |
|-------------|-------|--------------|--------|--|-------------|------------|----------------------------|
| 7           | 1     | 1-NRV-152    | 0      | PRESSURIZER / PRESSURIZER 'B' PRESSURE RELIEF VALVE  | CONTAINMENT | 650.00     | PRESSRZR ENCL, INTERIOR    |
| 7           | 2     | 1-NRV-153    | 0      | PRESSURIZER / PRESSURIZER 'A' PRESSURE RELIEF VALVE  | CONTAINMENT | 650.00     | PRESSRZR ENCL, INTERIOR    |
| 7           | 12    | 1-QRV-10     | 0      | RCTR COOLANT PMP SEAL WTR INJ/LEAKOFF / RCP 1 SEAL 1 LEAKOFF TO RCP SEAL WATER RETURN FILTER QC-109 2 In AIR OPERATED SHUTOFF VALVE                            | CONTAINMENT | 617.00     | LOWER CONT, QUAD1          |
| 7           | 2     | 1-QRV-111    | 0      | CVCS / REACTOR COOLANT NORMAL LETDOWN TRAIN 'A' SHUTOFF VALVE  | CONTAINMENT | 612.00     | LOWER CONT, QUAD4          |
| 7           | 1     | 1-QRV-112    | 0      | CVCS / REACTOR COOLANT NORMAL LETDOWN TRAIN 'B' SHUTOFF VALVE  | CONTAINMENT | 612.00     | LOWER CONT, QUAD4          |
| 7           | 1     | 1-QRV-113    | 0      | CVCS / REACTOR COOLANT EXCESS LETDOWN TO EXCESS LETDOWN HEAT EXCHANGER HE-13 1 In AIR OPERATED 'B' SHUTOFF VALVE   | CONTAINMENT | 612.00     | LOWER CONT, QUAD4          |
| 7           | 2     | 1-QRV-114    | 0      | CVCS / REACTOR COOLANT EXCESS LETDOWN TO EXCESS LETDOWN HEAT EXCHANGER HE-13 1 In AIR OPERATED 'A' SHUTOFF VALVE   | CONTAINMENT | 612.00     | LOWER CONT, QUAD4          |
| 7           | 12    | 1-QRV-150    | 0      | RCTR COOLANT PMP SEAL WTR INJ/LEAKOFF / REACTOR COOLANT PUMPS STARTUP SEAL SYSTEM BYPASS TO SEAL WATER RETURN FILTER QC-109 0.75 In AIR OPERATED SHUTOFF VALVE | CONTAINMENT | 598.00     | ANNULUS, QUAD2             |
| 7           | 12    | 1-QRV-170    | 0      | CVCS / EXCESS LETDOWN HEAT EXCHANGER HE-13 1 In AIR OPERATED OUTLET PRESSURE CONTROL VALVE   | CONTAINMENT | 612.00     | REGEN HEAT XCHGR RM        |
| 7           | 12    | 1-QRV-171    | 0      | CVCS / EXCESS LETDOWN HEAT EXCHANGER HE-13 1 In AIR OPERATED OUTLET DIVERSION VALVE  | CONTAINMENT | 612.00     | REGEN HEAT XCHGR RM        |
| 7           | 12    | 1-QRV-20     | 0      | RCTR COOLANT PMP SEAL WTR INJ/LEAKOFF / RCP 2 SEAL 1 LEAKOFF TO RCP SEAL WATER RETURN FILTER QC-109 2 In AIR OPERATED SHUTOFF VALVE                            | CONTAINMENT | 617.00     | LOWER CONT, QUAD2          |
| 7           | 12    | 1-QRV-251    | 0      | CVCS / SEAL INJECTION WATER FLOW 3 In AIR OPERATED CONTROL VALVE   | AUXILIARY   | 587.00     | RECIPROCATING CHRG PMP RM  |
| 7           | 12    | 1-QRV-30     | 0      | RCTR COOLANT PMP SEAL WTR INJ/LEAKOFF / RCP 3 SEAL 1 LEAKOFF TO RCP SEAL WATER RETURN FILTER QC-109 2 In AIR OPERATED SHUTOFF VALVE                            | CONTAINMENT | 612.00     | LOWER CONT, QUAD3          |
| 7           | 12    | 1-QRV-40     | 0      | RCTR COOLANT PMP SEAL WTR INJ/LEAKOFF / RCP 4 SEAL 1 LEAKOFF TO RCP RETURN FILTER QC-109 2 In AIR OPERATED SHUTOFF VALVE                                       | CONTAINMENT | 612.00     | LOWER CONT, QUAD4          |
| 7           | 12    | 1-QRV-400    | 0      | CVCS / NORTH BORIC ACID BLENDER QP-21 2 In AIR OPERATED TO CVCS CHARGING PUMP SUCTION SHUTOFF VALVE  | AUXILIARY   | 609.00     | VOL CONTROL TANK E HALLWAY |
| 7           | 12    | 1-QRV-411    | 0      | CVCS (BORON MAKEUP) / NORTH BORIC ACID FILTER TO CVCS CHARGING PUMPS AND NORTH BORIC ACID BLENDER 1 In AIR OPERATED FLOW CONTROL VALVE                         | AUXILIARY   | 587.00     | BORIC ACID STOR TANK       |
| 7           | 12    | 1-QRV-451    | 0      | BORON MAKEUP (CVCS) / NORTH BORIC ACID BLENDER QP-21 TO REACTOR COOLANT LETDOWN VOLUME CONTROL TANK SHUTOFF VALVE  | AUXILIARY   | 609.00     | VOL CONTROL TANK E HALLWAY |
| 7           | 2     | 1-VRV-315    | 0      | CONTROL ROOM A/C CHILL WATER / CONTROL ROOM VENT UNIT HV-ACRA-1 CHILL WATER INLET/BYPASS, 3-WAY AIR OPERATED CONTROL VALVE                                     | AUXILIARY   | 650.00     | CONTROL ROOM A/C ROOM      |
| 7           | 1     | 1-VRV-325    | 0      | CONTROL ROOM A/C CHILL WATER / CONTROL ROOM VENT UNIT HV-ACRA-2 CHILL WATER INLET/BYPASS 3-WAY AIR OPERATED CONTROL VALVE                                      | AUXILIARY   | 650.00     | CONTROL ROOM A/C ROOM      |
| 7           | 2     | 1-WRV-761    | 0      | ESW / EAST ESW PUMP PP-7E DISCHARGE STRAINER EAST BASKET BACKWASH OUTLET SHUTOFF VALVE   | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR PMP RM   |
| 7           | 1     | 1-WRV-762    | 0      | ESW / WEST ESW PUMP PP-7W DISCHARGE STRAINER EAST BASKET BACKWASH OUTLET SHUTOFF VALVE   | SCREENHOUSE | 591.00     | W ESSNTL SERV WTR PMP RM   |
| 7           | 2     | 1-WRV-766    | 0      | ESW / EAST ESW PUMP PP-7E DISCHARGE STRAINER EAST BASKET BACKWASH 4 In AIR OPERATED INLET SHUTOFF VALVE  | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR PMP RM   |
| 7           | 1     | 1-WRV-767    | 0      | ESW / WEST ESW PUMP PP-7W DISCHARGE STRAINER EAST BASKET BACKWASH INLET 4 In AIR OPERATED SHUTOFF VALVE  | SCREENHOUSE | 591.00     | W ESSNTL SERV WTR PMP RM   |
| 7           | 2     | 1-WRV-771    | 0      | ESW / EAST ESW PUMP PP-7E DISCHARGE STRAINER WEST BASKET BACKWASH OUTLET SHUTOFF VALVE   | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR PMP RM   |
| 7           | 1     | 1-WRV-772    | 0      | ESW / WEST ESW PUMP PP-7W DISCHARGE STRAINER WEST BASKET BACKWASH SHUTOFF VALVE  | SCREENHOUSE | 591.00     | W ESSNTL SERV WTR PMP RM   |
| 7           | 2     | 1-WRV-776    | 0      | ESW / EAST ESW PUMP PP-7E DISCHARGE STRAINER WEST BASKET BACKWASH INLET 4 In AIR OPERATED SHUTOFF VALVE  | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR PMP RM   |
| 7           | 1     | 1-WRV-777    | 0      | ESW / WEST ESW PUMP PP-7W DISCHARGE STRAINER WEST BASKET BACKWASH INLET 4 In AIR OPERATED SHUTOFF VALVE  | SCREENHOUSE | 591.00     | W ESSNTL SERV WTR PMP RM   |

**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR RELAY REVIEW**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description   | Building  | Floor Elev | Room or Row Col               |
|-------------|-------|--------------|--------|--|-----------|------------|-------------------------------|
| 7           | 1     | 1-XRV-220    | 0      | DIESEL STARTING AIR / AB EMERG DIESEL STARTING AIR JET ASSIST CONTROL VALVE  | AUXILIARY | 587.00     | AB EMER DSL GEN RM            |
| 7           | 1     | 1-XRV-222    | 0      | DIESEL STARTING AIR / AB EMERG DIESEL REAR BANK STARTING AIR SHUTOFF VALVE   | AUXILIARY | 587.00     | AB EMER DSL GEN RM            |
| 7           | 2     | 1-XRV-225    | 0      | DIESEL STARTING AIR / CD EMERG DIESEL STARTING AIR JET ASSIST CONTROL VALVE  | AUXILIARY | 587.00     | CD EMER DSL GEN RM            |
| 7           | 2     | 1-XRV-226    | 0      | DIESEL STARTING AIR / CD EMERG DIESEL FRONT BANK STARTING AIR SHUTOFF VALVE  | AUXILIARY | 587.00     | CD EMER DSL GEN RM            |
| 7           | 2     | 1-XRV-227    | 0      | DIESEL STARTING AIR / CD EMERG DIESEL REAR BANK STARTING AIR SHUTOFF VALVE   | AUXILIARY | 587.00     | CD EMER DSL GEN RM            |
| 7           | 12    | 12-CRV-51    | 0      | CONDENSATE STORAGE SUPPLY / UNIT 1 AND 2 CONDENSATE STORAGE TANK CROSSTIE 8 in AIR OPERATED SHUTOFF VALVE                    | TURBINE   | 591.00     | AUX FEED PMP E HALLWAY        |
| 7           | 12    | 12-QRV-410   | 0      | CVCS / NORTH EAST TK-12N 2 in AIR OPERATED INLET FLOW CONTROL VALVE  | AUXILIARY | 587.00     | BORIC ACID STOR TANK          |
| 7           | 12    | 12-QRV-420   | 0      | CVCS (BORON MAKEUP) / MIDDLES EAST TK-12M 2 in AIR OPERATED INLET FLOW CONTROL VALVE   | AUXILIARY | 587.00     | BORIC ACID STOR TANK          |
| 8           | 2     | 1-CCM-451    | 0      | CCW / REACTOR COOLANT PUMPS BEARING OIL COOLERS CCW RETURN HEADER 'A' CONTAINMENT 8 in MOTOR OPERATED ISOLATION VALVE        | AUXILIARY | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 8           | 1     | 1-CCM-452    | 0      | CCW / RC PUMPS BEARING OIL COOLERS CCW RETURN HEADER 'B' CONTAINMENT 8 in MOTOR OPERATED ISOLATION VALVE                     | AUXILIARY | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 8           | 2     | 1-CCM-453    | 0      | CCW / RCP THERMAL BARRIER CCW OUTLET 'A' CONTAINMENT 4 in MOTOR OPERATED ISOLATION VALVE                                     | AUXILIARY | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 8           | 1     | 1-CCM-454    | 0      | CCW / RC PUMPS THERMAL BARRIER CCW RETURN HEADER 'B' CONTAINMENT 4 in MOTOR OPERATED ISOLATION VALVE                         | AUXILIARY | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 8           | 2     | 1-CCM-456    | 0      | CCW / CCW TO REACTOR COOLANT PUMPS TRAIN 'A' CONTAINMENT ISOLATION VALVE   | AUXILIARY | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 8           | 1     | 1-CCM-459    | 0      | CCW / CCW TO REACTOR COOLANT PUMPS TRAIN 'B' CONTAINMENT ISOLATION VALVE   | AUXILIARY | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 8           | 2     | 1-CMO-410    | 0      | CCW / EAST CCW TO HEAT EXCHANGER HE-15E CCW OUTLET SHUTOFF VALVE   | AUXILIARY | 609.00     | 609 HALLWAY                   |
| 8           | 2     | 1-CMO-411    | 0      | CCW / CCW PUMPS SUCTION CROSSTIE HEADER 'A' 18 in MOTOR OPERATED SHUTOFF VALVE   | AUXILIARY | 609.00     | 609 HALLWAY                   |
| 8           | 2     | 1-CMO-412    | 0      | CCW / CCW PUMPS DISCHARGE CROSSTIE HEADER 'A' 18 in MOTOR OPERATED SHUTOFF VALVE   | AUXILIARY | 609.00     | 609 HALLWAY                   |
| 8           | 1     | 1-CMO-413    | 0      | CCW / CCW PUMPS SUCTION CROSSTIE HEADER 'B' 18 in MOTOR OPERATED SHUTOFF VALVE   | AUXILIARY | 609.00     | 609 HALLWAY                   |
| 8           | 1     | 1-CMO-414    | 0      | CCW / CCW PUMPS DISCHARGE CROSSTIE HEADER 'A' 18 in MOTOR OPERATED SHUTOFF VALVE   | AUXILIARY | 609.00     | 609 HALLWAY                   |
| 8           | 2     | 1-CMO-415    | 0      | CCW / CCW TO MISCELLANEOUS SERVICE HEADER 'A' 18 in MOTOR OPERATED SHUTOFF VALVE   | AUXILIARY | 609.00     | 609 HALLWAY                   |
| 8           | 1     | 1-CMO-416    | 0      | CCW / CCW TO MISCELLANEOUS SERVICE HEADER 'B' 18 in MOTOR OPERATED SHUTOFF VALVE   | AUXILIARY | 609.00     | 609 HALLWAY                   |
| 8           | 2     | 1-CMO-419    | 0      | CCW / EAST RHR HEAT EXCHANGER HE-17E CCW OUTLET SHUTOFF VALVE  | AUXILIARY | 609.00     | 609 HALLWAY                   |
| 8           | 1     | 1-CMO-420    | 0      | CCW / WEST CCW TO HEAT EXCHANGER HE-15W CCW OUTLET SHUTOFF VALVE   | AUXILIARY | 609.00     | 609 HALLWAY                   |
| 8           | 2     | 1-CMO-429    | 0      | CCW / WEST RHR HEAT EXCHANGER HE-17W CCW OUTLET SHUTOFF VALVE  | AUXILIARY | 633.00     | 633 HALLWAY                   |
| 8           | 1     | 1-FMO-211    | 0      | AUX FEEDWATER / TURBINE DRIV AUX FEED PUMP PP-4 DISCHARGE TO STEAM GENERATOR OME-3-1 4 in MOTOR OPERATED CONTROL VALVE       | AUXILIARY | 612.00     | E MAIN STM STOP ENCL          |
| 8           | 1     | 1-FMO-212    | 0      | AUX FEEDWATER / WEST MOTOR DRIV AUX FEEDWATER PUMP PP-3W SUPPLY TO STEAM GENERATOR OME-3-1 4 in MOTOR OPERATED CONTROL VALVE | AUXILIARY | 612.00     | E MAIN STM STOP ENCL          |
| 8           | 2     | 1-FMO-221    | 0      | AUX FEEDWATER / TURBINE DRIV AUX FEED PUMP PP-4 DISCHARGE TO STEAM GENERATOR OME-3-2 4 in MOTOR OPERATED CONTROL VALVE       | AUXILIARY | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 8           | 2     | 1-FMO-222    | 0      | AUX FEEDWATER / EAST MOTOR DRIV AUX FEED PUMP PP-3E SUPPLY TO STEAM GENERATOR OME-3-2 4 in MOTOR OPERATED CONTROL VALVE      | AUXILIARY | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 8           | 2     | 1-FMO-231    | 0      | AUX FEEDWATER / TURBINE DRIV AUX FEED PP-4 PUMP SUPPLY TO STEAM GENERATOR OME-3-3 4 in MOTOR OPERATED CONTROL VALVE          | AUXILIARY | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 8           | 2     | 1-FMO-232    | 0      | AUX FEEDWATER / EAST MOTOR DRIV AUX FEED PUMP PP-3E SUPPLY TO STEAM GENERATOR OME-3-3 4 in MOTOR OPERATED CONTROL VALVE      | AUXILIARY | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |

**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR RELAY REVIEW**

| Equip Class | Train | Equipment ID  | Rev No | System / Equipment Description  | Building    | Floor Elev | Room or Row Col              |
|-------------|-------|---------------|--------|---|-------------|------------|------------------------------|
| 8           | 1     | 1-FMO-241     | 0      | AUX FEEDWATER / TURBINE DRIV AUX FEED PUMP PP-4 DISCHARGE TO STEAM GENERATOR OME-3-4 4 in MOTOR OPERATED CONTROL VALVE                  | AUXILIARY   | 612.00     | E MAIN STM STOP ENCL         |
| 8           | 1     | 1-FMO-242     | 0      | AUX FEEDWATER / WEST MOTOR DRIV AUX FEED PUMP PP-3W SUPPLY TO STEAM GENERATOR 3-4 4 in MOTOR OPERATED CONTROL VALVE                     | AUXILIARY   | 612.00     | E MAIN STM STOP ENCL         |
| 8           | 1     | 1-HV-DOP-AB1  | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FAN HV-DGX-1 TEMPERING AIR DAMPER                      | AUXILIARY   | 587.00     | AB EMER DSL GEN RM           |
| 8           | 1     | 1-HV-DOP-AB2  | 0      | DIESEL ROOM VENTILATION / DIESEL GENERATOR ROOM 1AB VENTILATION SUPPLY FAN HV-DGS-1 TEMPERING AIR DAMPER 1-HV-DOP-ABZ                   | AUXILIARY   | 587.00     | AB EMER DSL GEN RM           |
| 8           | 2     | 1-HV-DOP-CD1  | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FAN HV-DGX-2 TEMPERING AIR DAMPER                      | AUXILIARY   | 587.00     | CD EMER DSL GEN RM           |
| 8           | 2     | 1-HV-DOP-CD2  | 0      | DIESEL ROOM VENTILATION / DIESEL GEN ROOM 1 CD VENTILATION SUPPLY FAN 1-HV-DGS-2 TEMPERING AIR DAMPER 1-HV-DOP-CD2                      | AUXILIARY   | 587.00     | CD EMER DSL GEN RM           |
| 8           | 1     | 1-HV-DGS-DAB  | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN HV-DGS-1 OUTSIDE AIR SHUTOFF DAMPER                 | AUXILIARY   | 588.00     | RCTR CABLE TUNNEL, QUAD3     |
| 8           | 2     | 1-HV-DGS-DCD  | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN HV-DGS-2 OUTSIDE AIR SHUTOFF DAMPER                 | AUXILIARY   | 588.00     | STORAGE TANK PIPE TUNNEL     |
| 8           | 12    | 1-HV-SGR-MD-3 | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600V SWITCHGEAR TRANSFORMERS TR11A & TR11C AREA VENT SUPPLY FAN HV-SGRS-8 SUCTION DAMPER      | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR           |
| 8           | 12    | 1-HV-SGR-MD-4 | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600V SWITCHGEAR TRANSFORMERS AREA VENTILATION SUPPLY FAN HV-SGRS-7 SUCTION DAMPER             | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR           |
| 8           | 12    | 1-HV-SGR-MD-5 | 0      | AUXILIARY BUILDING VENTILATION / 600VAC MOTOR CONTROL CENTER MEZZANINE AREA VENTILATION SUPPLY FAN HV-SGRS-9 VENT DAMPER                | AUXILIARY   | 613.00     | 4KV RM - MEZZANINE           |
| 8           | 12    | 1-ICM-111     | 0      | RHR / RHR TO REACTOR COOLANT LOOPS 2 AND 3 COLD LEGS CONTAINMENT ISOLATION VALVE  | CONTAINMENT | 598.00     | ANNULUS, QUAD2               |
| 8           | 2     | 1-ICM-129     | 0      | RHR / REACTOR COOLANT LOOP 2 HOT LEG TO RHR PUMPS SUCTION CONTAINMENT ISOLATION VALVE   | CONTAINMENT | 598.00     | ANNULUS, QUAD2               |
| 8           | 2     | 1-ICM-250     | 0      | BORON INJECTION / BORON INJECTION TANK 'A' CONTAINMENT ISOLATION VALVE  | AUXILIARY   | 612.00     | BORON INJ TANK OUTLET VLV RM |
| 8           | 1     | 1-ICM-251     | 0      | BORON INJECTION / BORON INJECTION TANK 'B' CONTAINMENT ISOLATION VALVE  | AUXILIARY   | 612.00     | BORON INJ TANK OUTLET VLV RM |
| 8           | 2     | 1-ICM-260     | 0      | SAFETY INJECTION / NORTH SAFETY INJECTION PUMP PP-28N DISCHARGE CONTAINMENT ISOLATION 4 in MOTOR OPERATED VALVE                         | AUXILIARY   | 587.00     | N SAFETY INJ PMP RM          |
| 8           | 1     | 1-ICM-265     | 0      | SAFETY INJECTION / SOUTH SAFETY INJECTION PUMP PP-28S DISCHARGE CONTAINMENT ISOLATION 4 in MOTOR OPERATED VALVE                         | AUXILIARY   | 587.00     | S SAFETY INJ PMP RM          |
| 8           | 2     | 1-ICM-305     | 0      | RHR / RECIRCULATION SUMP TO EAST RHR/CTS PUMPS SUCTION CONTAINMENT ISOLATION 18 in MOTOR OPERATED VALVE                                 | AUXILIARY   | 591.00     | VESTIBULE                    |
| 8           | 1     | 1-ICM-306     | 0      | RHR / RECIRCULATION SUMP TO WEST RHR/CTS PUMPS SUCTION CONTAINMENT ISOLATION 18 in MOTOR OPERATED VALVE                                 | AUXILIARY   | 591.00     | VESTIBULE                    |
| 8           | 2     | 1-ICM-311     | 0      | RHR / EAST RHR TO REACTOR COOLANT LOOPS 1 AND 4 HOT LEGS CONTAINMENT ISOLATION 8 in MOTOR OPERATED VALVE                                | AUXILIARY   | 609.00     | EAST RHR HEAT EXCHGR RM      |
| 8           | 1     | 1-ICM-321     | 0      | RHR / WEST RHR TO REACTOR COOLANT LOOPS 2 AND 3 HOT LEGS CONTAINMENT ISOLATION 8 in MOTOR OPERATED VALVE                                | AUXILIARY   | 609.00     | W RHR HEAT XCHGR RM          |
| 8           | 1     | 1-IMO-128     | 0      | RHR / REACTOR COOLANT LOOP 2 HOT LEG TO RHR PUMPS SUCTION SHUTOFF VALVE   | CONTAINMENT | 598.00     | LOWER CONT, QUAD2            |
| 8           | 2     | 1-IMO-210     | 0      | CONTAINMENT SPRAY / EAST CONTAINMENT SPRAY PUMP PP-9E DISCHARGE SHUTOFF 10 in MOTOR OPERATED VALVE                                      | AUXILIARY   | 573.00     | E CONT SPRAY PMP RM          |
| 8           | 2     | 1-IMO-211     | 0      | CONTAINMENT SPRAY / EAST CONTAINMENT SPRAY PUMP PP-9E DISCHARGE SHUTOFF 10 in MOTOR OPERATED VALVE                                      | AUXILIARY   | 573.00     | E CONT SPRAY PMP RM          |
| 8           | 2     | 1-IMO-212     | 0      | CONTAINMENT SPRAY / EAST CONTAINMENT SPRAY PUMP PP-9E DISCHARGE TO CONTAINMENT SPRAY ADDITIVE EDUCTOR 2 in MOTOR OPERATED SHUTOFF VALVE | AUXILIARY   | 573.00     | E CONT SPRAY PMP RM          |





**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR RELAY REVIEW**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description  | Building    | Floor Elev | Room or Row Col              |
|-------------|-------|--------------|--------|---|-------------|------------|------------------------------|
| 8           | 2     | 1-IMO-215    | 0      | CONTAINMENT SPRAY / RWST TO EAST<br>CONTAINMENT SPRAY PUMP PP-9E<br>SUCTION 12 In MOTOR OPERATED SHUTOFF<br>VALVE   | AUXILIARY   | 573.00     | E CONT SPRAY PMP<br>RM       |
| 8           | 1     | 1-IMO-220    | 0      | CONTAINMENT SPRAY / WEST<br>CONTAINMENT SPRAY PUMP PP-9W<br>DISCHARGE SHUTOFF 10 In MOTOR<br>OPERATED VALVE   | AUXILIARY   | 573.00     | W CONT SPRAY PMP<br>RM       |
| 8           | 1     | 1-IMO-221    | 0      | CONTAINMENT SPRAY / WEST<br>CONTAINMENT SPRAY PUMP PP-9W<br>DISCHARGE SHUTOFF 10 In MOTOR<br>OPERATED VALVE   | AUXILIARY   | 573.00     | W CONT SPRAY PMP<br>RM       |
| 8           | 1     | 1-IMO-222    | 0      | CONTAINMENT SPRAY / WEST<br>CONTAINMENT SPRAY PUMP PP-9W<br>DISCHARGE TO CONTAINMENT SPRAY<br>ADDITIVE EDUCTOR SHUTOFF 2 In MOTOR<br>OPERATED VALVE               | AUXILIARY   | 573.00     | W CONT SPRAY PMP<br>RM       |
| 8           | 1     | 1-IMO-225    | 0      | CONTAINMENT SPRAY / RWST TO WEST<br>CONTAINMENT SPRAY PUMP PP-9W<br>SUCTION 12 In MOTOR OPERATED SHUTOFF<br>VALVE   | AUXILIARY   | 573.00     | W CONT SPRAY PMP<br>RM       |
| 8           | 2     | 1-IMO-255    | 0      | BORON INJECTION / BORON INJECTION<br>TANK 'A' INLET SHUTOFF VALVE   | AUXILIARY   | 612.00     | BORON INJ TANK RM            |
| 8           | 1     | 1-IMO-256    | 0      | BORON INJECTION / BORON INJECTION<br>TANK 'B' INLET SHUTOFF VALVE   | AUXILIARY   | 612.00     | BORON INJ TANK RM            |
| 8           | 12    | 1-IMO-261    | 0      | REFUELING WATER STORAGE TANK<br>SUPPLY / TK-33 SUPPLY TO SAFETY<br>INJECTION PUMP SHUTOFF 8 In MOTOR<br>OPERATED VALVE  | AUXILIARY   | 587.00     | N SAFETY INJ PMP<br>RM       |
| 8           | 2     | 1-IMO-262    | 0      | REFUELING WATER STORAGE TANK<br>SUPPLY / SAFETY INJECTION PUMPS<br>RECIRC TO REFUELING WATER STORAGE<br>TANK TK-33 TRAIN 'A' SHUTOFF 2 In MOTOR<br>OPERATED VALVE | AUXILIARY   | 587.00     | S SAFETY INJ PMP<br>RM       |
| 8           | 1     | 1-IMO-263    | 0      | REFUELING WATER STORAGE TANK<br>SUPPLY / SAFETY INJECTION PUMPS<br>RECIRC TO REFUELING WATER STORAGE<br>TANK TK-33 TRAIN 'B' SHUTOFF 2 In MOTOR<br>OPERATED VALVE | AUXILIARY   | 587.00     | S SAFETY INJ PMP<br>RM       |
| 8           | 2     | 1-IMO-270    | 0      | SAFETY INJECTION / SAFETY INJECTION<br>PUMPS DISCHARGE CROSSTIE TRAIN 'A'<br>SHUTOFF 4 In MOTOR OPERATED VALVE  | AUXILIARY   | 587.00     | N SAFETY INJ PMP<br>RM       |
| 8           | 1     | 1-IMO-275    | 0      | SAFETY INJECTION / SAFETY INJECTION<br>PUMPS DISCHARGE CROSSTIE TRAIN 'B'<br>SHUTOFF 4 In MOTOR OPERATED VALVE  | AUXILIARY   | 587.00     | S SAFETY INJ PMP<br>RM       |
| 8           | 2     | 1-IMO-310    | 0      | RHR / EAST RHR PUMP PP-35E SUCTION<br>SHUTOFF 14 In MOTOR OPERATED VALVE  | AUXILIARY   | 573.00     | EAST RHR PUMP RM             |
| 8           | 2     | 1-IMO-312    | 0      | RHR / EAST RHR HEAT EXCHANGER HE-17E<br>OUTLET MIN-FLOW LINE SHUTOFF VALVE  | AUXILIARY   | 609.00     | EAST RHR HEAT<br>EXCHGR RM   |
| 8           | 2     | 1-IMO-314    | 0      | RHR / EAST RHR PUMP PP-35E DISCHARGE<br>CROSSTIE SHUTOFF 8 In MOTOR OPERATED<br>VALVE   | AUXILIARY   | 609.00     | EAST RHR HEAT<br>EXCHGR RM   |
| 8           | 2     | 1-IMO-315    | 0      | RHR / EAST RHR AND NORTH SAFETY<br>INJECTION TO REACTOR COOLANT LOOPS 1<br>AND 4 HOT LEGS SHUTOFF VALVE   | CONTAINMENT | 612.00     | E CONT LWR VENT<br>RM        |
| 8           | 2     | 1-IMO-316    | 0      | RHR / EAST RHR AND NORTH SAFETY<br>INJECTION TO REACTOR COOLANT LOOPS 1<br>AND 4 COLD LEGS SHUTOFF 8 In MOTOR<br>OPERATED VALVE                                   | CONTAINMENT | 612.00     | E CONT LWR VENT<br>RM        |
| 8           | 1     | 1-IMO-320    | 0      | RHR / WEST RHR PUMP PP-35W SUCTION<br>SHUTOFF 14 In MOTOR OPERATED VALVE  | AUXILIARY   | 573.00     | W RHR PUMP RM                |
| 8           | 1     | 1-IMO-322    | 0      | RHR / WEST RHR HEAT EXCHANGER HE-<br>17W OUTLET MIN-FLOW LINE SHUTOFF<br>VALVE  | AUXILIARY   | 609.00     | W RHR HEAT XCHGR<br>RM       |
| 8           | 1     | 1-IMO-324    | 0      | RHR / WEST RHR PUMP PP-35W<br>DISCHARGE CROSSTIE SHUTOFF 8 In<br>MOTOR OPERATED VALVE   | AUXILIARY   | 609.00     | W RHR HEAT XCHGR<br>RM       |
| 8           | 1     | 1-IMO-325    | 0      | RHR / WEST RHR AND SOUTH SAFETY<br>INJECTION TO REACTOR COOLANT LOOPS 2<br>AND 3 HOT LEGS SHUTOFF VALVE   | CONTAINMENT | 612.00     | W CONT LOWER<br>VENT RM      |
| 8           | 1     | 1-IMO-326    | 0      | RHR / WEST RHR AND SOUTH SAFETY<br>INJECTION TO REACTOR COOLANT LOOPS 2<br>AND 3 COLD LEGS SHUTOFF 8 In MOTOR<br>OPERATED VALVE                                   | CONTAINMENT | 612.00     | W CONT LOWER<br>VENT RM      |
| 8           | 2     | 1-IMO-330    | 0      | RHR / EAST RHR TO UPPER CONTAINMENT<br>SPRAY SHUTOFF 8 In MOTOR OPERATED<br>VALVE   | AUXILIARY   | 609.00     | EAST RHR HEAT<br>EXCHGR RM   |
| 8           | 1     | 1-IMO-331    | 0      | RHR / WEST RHR TO UPPER CONTAINMENT<br>SPRAY SHUTOFF 8 In MOTOR OPERATED<br>VALVE   | AUXILIARY   | 609.00     | W RHR HEAT XCHGR<br>RM       |
| 8           | 12    | 1-IMO-340    | 0      | RHR / EAST RHR HEAT EXCHANGER TO<br>CHARGING PUMPS SUCTION SHUTOFF 8 In<br>MOTOR OPERATED VALVE   | AUXILIARY   | 609.00     | EAST RHR HEAT<br>EXCHGR RM   |
| 8           | 12    | 1-IMO-350    | 0      | RHR / WEST RHR HEAT EXCHANGER<br>OUTLET TO SAFETY INJECTION PUMP<br>SUCTION SHUTOFF 8 In MOTOR OPERATED<br>VALVE  | AUXILIARY   | 609.00     | W RHR HEAT XCHGR<br>RM       |
| 8           | 12    | 1-IMO-360    | 0      | SAFETY INJECTION / SAFETY INJECTION<br>PUMPS TO CVCS CHARGING PUMPS<br>SUCTION HEADER CROSSTIE SHUTOFF<br>VALVE   | AUXILIARY   | 587.00     | W CENTRIFUGAL<br>CHRG PMP RM |

**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR RELAY REVIEW**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description   | Building    | Floor Elev | Room or Row Col                  |
|-------------|-------|--------------|--------|--|-------------|------------|----------------------------------|
| 8           | 2     | 1-IMO-381    | 0      | SAFETY INJECTION / SAFETY INJECTION PUMPS SUCTION TO AND FROM CHARGING PUMPS SUCTION 'A' SHUTOFF 4 In MOTOR OPERATED VALVE | AUXILIARY   | 587.00     | N SAFETY INJ PMP RM              |
| 8           | 1     | 1-IMO-382    | 0      | SAFETY INJECTION / SAFETY INJECTION PUMPS SUCTION TO AND FROM CHARGING PUMP 'B' SHUTOFF 4 In MOTOR OPERATED VALVE          | AUXILIARY   | 587.00     | N SAFETY INJ PMP RM              |
| 8           | 12    | 1-IMO-390    | 0      | RHR / RWST TK-33 TO RHR PUMPS SUCTION SHUTOFF 12 In MOTOR OPERATED VALVE   | AUXILIARY   | 591.00     | VESTIBULE                        |
| 8           | 2     | 1-IMO-51     | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP 1 SHUTOFF 1.5 In MOTOR OPERATED VALVE                            | CONTAINMENT | 598.00     | ANNULUS, QUAD1                   |
| 8           | 1     | 1-IMO-52     | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP 2 SHUTOFF 1.5 In MOTOR OPERATED VALVE                            | CONTAINMENT | 598.00     | ANNULUS, QUAD2                   |
| 8           | 1     | 1-IMO-53     | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP 3 SHUTOFF 1.5 In MOTOR OPERATED VALVE                            | CONTAINMENT | 598.00     | ANNULUS, QUAD3                   |
| 8           | 2     | 1-IMO-54     | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP 4 SHUTOFF 1.5 In MOTOR OPERATED VALVE                            | CONTAINMENT | 598.00     | ANNULUS, QUAD4                   |
| 8           | 2     | 1-IMO-910    | 0      | CVCS / RWST TO CHARGING PUMP SUCTION SHUTOFF VALVE   | AUXILIARY   | 587.00     | RECIPROCATING CHARGING PUMP ROOM |
| 8           | 1     | 1-IMO-911    | 0      | CVCS / RWST TO CHARGING PUMP SUCTION SHUTOFF VALVE   | AUXILIARY   | 587.00     | E CNTRFGL CHARG PMP RM           |
| 8           | 1     | 1-LSO-240    | 0      | DIESEL LUBE OIL / AB EMERG DIESEL UPPER VALVE GEAR LUBRICATION CONTROL SOLENOID 1  | AUXILIARY   | 587.00     | AB EMER DSL GEN RM               |
| 8           | 1     | 1-LSO-241    | 0      | DIESEL LUBE OIL / AB EMERG DIESEL UPPER VALVE GEAR LUBRICATION CONTROL SOLENOID 2  | AUXILIARY   | 587.00     | AB EMER DSL GEN RM               |
| 8           | 2     | 1-LSO-245    | 0      | DIESEL LUBE OIL / CD EMERG DIESEL GENERATOR UPPER VALVE GEAR LUBRICATION CONTROL SOLENOID 1                                | AUXILIARY   | 587.00     | CD EMER DSL GEN RM               |
| 8           | 2     | 1-LSO-246    | 0      | DIESEL LUBE OIL / CD EMERG DIESEL GENERATOR UPPER VALVE GEAR LUBRICATION CONTROL SOLENOID 2                                | AUXILIARY   | 587.00     | CD EMER DSL GEN RM               |
| 8           | 1     | 1-MCM-221    | 0      | MAIN STEAM / MAIN STEAM LEAD 2 TO AUX FEED PUMP TURBINE 4 In MOTOR OPERATED SHUTOFF VALVE                                  | AUXILIARY   | 633.00     | W MAIN STM STOP ENCL             |
| 8           | 1     | 1-MCM-231    | 0      | MAIN STEAM / MAIN STEAM LEAD 3 TO AUX FEED PUMP TURBINE 4 In MOTOR OPERATED SHUTOFF VALVE                                  | AUXILIARY   | 633.00     | W MAIN STM STOP ENCL             |
| 8           | 2     | 1-MMO-210    | 0      | MAIN STEAM / STEAM STOP VALVE MRV-210 STEAM CYLINDER DUMP 4 In MOTOR OPERATED VALVES SELECTOR VALVE                        | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL             |
| 8           | 1     | 1-MMO-220    | 0      | MAIN STEAM / STEAM STOP VALVE MRV-220 STEAM CYLINDER DUMP 4 In MOTOR OPERATED VALVES SELECTOR VALVE                        | AUXILIARY   | 633.00     | W MAIN STM STOP ENCL             |
| 8           | 1     | 1-MMO-230    | 0      | MAIN STEAM / STEAM STOP VALVE MRV-230 STEAM CYLINDER DUMP VALVES 4 In MOTOR OPERATED SELECTOR VALVE                        | AUXILIARY   | 633.00     | W MAIN STM STOP ENCL             |
| 8           | 2     | 1-MMO-240    | 0      | MAIN STEAM / STEAM STOP VALVE MRV-240 STEAM CYLINDER DUMP VALVE 4 In MOTOR OPERATED SELECTOR VALVE                         | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL             |
| 8           | 1     | 1-NMO-151    | 0      | PRESSURIZER / PRESSURIZER RELIEF VALVE NRV-151 UPSTREAM 3 In MOTOR OPERATED SHUTOFF VALVE                                  | CONTAINMENT | 650.00     | PRESSRZR ENCL, INTERIOR          |
| 8           | 1     | 1-NMO-152    | 0      | PRESSURIZER / PRESSURIZER RELIEF VALVE NRV-152 UPSTREAM 3 In MOTOR OPERATED SHUTOFF VALVE                                  | CONTAINMENT | 650.00     | PRESSRZR ENCL, INTERIOR          |
| 8           | 2     | 1-NMO-153    | 0      | PRESSURIZER / PRESSURIZER RELIEF VALVE NRV-153 3 In MOTOR OPERATED UPSTREAM SHUTOFF VALVE                                  | CONTAINMENT | 650.00     | PRESSRZR ENCL, INTERIOR          |
| 8           | 2     | 1-NSO-61     | 0      | REACTOR COOLANT SYSTEM VENTS / PRESSURIZER OME-4 POST-ACCIDENT VENT 'A' SOLENOID VALVE                                     | CONTAINMENT | 650.00     | PRESSRZR ENCL, INTERIOR          |
| 8           | 2     | 1-NSO-62     | 0      | REACTOR COOLANT SYSTEM VENTS / PRESSURIZER OME-4 POST-ACCIDENT VENT 'A' SOLENOID VALVE                                     | CONTAINMENT | 650.00     | PRESSRZR ENCL, INTERIOR          |
| 8           | 1     | 1-NSO-63     | 0      | REACTOR COOLANT SYSTEM VENTS / PRESSURIZER OME-4 POST-ACCIDENT VENT 'B' SOLENOID VALVE                                     | CONTAINMENT | 650.00     | PRESSRZR ENCL, INTERIOR          |
| 8           | 1     | 1-NSO-64     | 0      | REACTOR COOLANT SYSTEM VENTS / PRESSURIZER OME-4 POST-ACCIDENT VENT 'B' SOLENOID VALVE                                     | CONTAINMENT | 650.00     | PRESSRZR ENCL, INTERIOR          |
| 8           | 2     | 1-QCM-250    | 0      | RCTR COOLANT PMP SEAL WTR INJ/LEAKOFF / RCP SEAL WATER RETURN 'A' CONTAINMENT ISOLATION 4 In MOTOR OPERATED VALVE          | CONTAINMENT | 598.00     | ANNULUS, QUAD2                   |
| 8           | 1     | 1-QCM-350    | 0      | RCTR COOLANT PMP SEAL WTR INJ/LEAKOFF / RCP SEAL WATER RETURN 'B' CONTAINMENT ISOLATION 4 In MOTOR OPERATED VALVE          | AUXILIARY   | 591.00     | VESTIBULE                        |
| 8           | 2     | 1-QMO-200    | 0      | CVCS / CHARGING TO REGENERATIVE HEAT EXCHANGER 'A' SHUTOFF VALVE   | AUXILIARY   | 587.00     | RECIPROCATING CHRG PMP RM        |
| 8           | 1     | 1-QMO-201    | 0      | CVCS / CHARGING TO REGENERATIVE HEAT EXCHANGER 'B' SHUTOFF VALVE   | AUXILIARY   | 587.00     | RECIPROCATING CHRG PMP RM        |

**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR RELAY REVIEW**

| Equip Class | Train | Equipment ID   | Rev No | System / Equipment Description   | Building    | Floor Elev | Room or Row Col             |
|-------------|-------|----------------|--------|--|-------------|------------|-----------------------------|
| 8           | 2     | 1-QMO-225      | 0      | CVCS / EAST CENTRIFUGAL CHARGING PUMP MINI FLOW TO RCP SEAL WATER HEAT EXCHANGER HE-11 2 In MOTOR OPERATED SHUTOFF VALVE | AUXILIARY   | 587.00     | W CENTRIFUGAL CHRG PMP RM   |
| 8           | 1     | 1-QMO-228      | 0      | CVCS / WEST CENTRIFUGAL CHARGING PUMP MINI FLOW TO RCP SEAL WATER HEAT EXCHANGER HE-11 2 In MOTOR OPERATED SHUTOFF VALVE | AUXILIARY   | 587.00     | W CENTRIFUGAL CHRG PMP RM   |
| 8           | 12    | 1-QMO-410      | 0      | CVCS / EMERG. BORATION TO CHARGING PUMP SUCTION SHUTOFF VALVE  | AUXILIARY   | 587.00     | BORIC ACID STOR TANK        |
| 8           | 2     | 1-QMO-451      | 0      | CVCS / REACTOR COOLANT LETDOWN VOLUME CONTROL TANK TK-10 TO CHARGING PUMP 'A' SHUTOFF 4 In MOTOR OPERATED VALVE          | AUXILIARY   | 609.00     | VOL CONTROL TANK E HALLWAY  |
| 8           | 1     | 1-QMO-452      | 0      | CVCS / REACTOR COOLANT LETDOWN VOLUME CONTROL TANK TK-10 TO CHARGING PUMP 'B' SHUTOFF 4 In MOTOR OPERATED VALVE          | AUXILIARY   | 609.00     | VOL CONTROL TANK E HALLWAY  |
| 8           | 12    | 1-QT-508       | 0      | MAIN STEAM / TURBINE DRIV AUX FEED PUMP PP-4 TRIP AND THROTTLE VALVE   | TURBINE     | 591.00     | TB DRIVEN AUX FDWTR PMP     |
| 8           | 2     | 1-WMO-701      | 0      | ESW / EAST ESW PUMP PP-7E DISCHARGE SHUTOFF VALVE  | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR PMP RM    |
| 8           | 1     | 1-WMO-702      | 0      | ESW / WEST ESW PUMP PP-7W DISCHARGE SHUTOFF VALVE  | SCREENHOUSE | 591.00     | W ESSNTL SERV WTR PMP RM    |
| 8           | 1     | 1-WMO-705      | 0      | ESW / WEST ESW SUPPLY HEADER CROSSTIE TO UNIT 2 20 In MOTOR OPERATED SHUTOFF VALVE                                       | TURBINE     | 569.00     | ESSNTL SERV WTR PIPE TUNNEL |
| 8           | 2     | 1-WMO-707      | 0      | ESW / EAST ESSENTIAL SERVICE WATER SUPPLY HEADER CROSSTIE TO UNIT 2 20 In MOTOR OPERATED SHUTOFF VALVE                   | TURBINE     | 569.00     | ESSNTL SERV WTR PIPE TUNNEL |
| 8           | 2     | 1-WMO-711      | 0      | ESW / EAST CONTAINMENT SPRAY HEAT EXCHANGER HE-18E ESW INLET 12 In MOTOR OPERATED SHUTOFF VALVE                          | AUXILIARY   | 633.00     | 633 HALLWAY                 |
| 8           | 2     | 1-WMO-713      | 0      | ESW / EAST CONTAINMENT SPRAY HEAT EXCHANGER ESW OUTLET SHUTOFF VALVE   | AUXILIARY   | 609.00     | 609 HALLWAY                 |
| 8           | 1     | 1-WMO-715      | 0      | ESW / WEST CONTAINMENT SPRAY HEAT EXCHANGER HE-18W ESW INLET 12 In MOTOR OPERATED SHUTOFF VALVE                          | AUXILIARY   | 633.00     | 633 HALLWAY                 |
| 8           | 1     | 1-WMO-717      | 0      | ESW / WEST CONTAINMENT SPRAY HEAT EXCHANGER ESW OUTLET SHUTOFF VALVE   | AUXILIARY   | 609.00     | 609 HALLWAY                 |
| 8           | 1     | 1-WMO-721      | 0      | ESW / WEST ESW SUPPLY HEADER TO AB EMERG DIESEL HEAT EXCHANGER SHUTOFF VALVE   | AUXILIARY   | 587.00     | AB DSL RM SO PIPE TUNN      |
| 8           | 2     | 1-WMO-723      | 0      | ESW / EAST ESW SUPPLY HEADER TO AB EMERG DIESEL HEAT EXCHANGER SHUTOFF VALVE   | AUXILIARY   | 587.00     | AB DSL RM SO PIPE TUNN      |
| 8           | 2     | 1-WMO-725      | 0      | ESW / EAST ESW SUPPLY HEADER TO CD EMERG DIESEL HEAT EXCHANGER SHUTOFF VALVE   | AUXILIARY   | 587.00     | AB DSL RM SO PIPE TUNN      |
| 8           | 1     | 1-WMO-727      | 0      | ESW / WEST ESW SUPPLY HEADER TO CD EMERG DIESEL HEAT EXCHANGER SHUTOFF VALVE   | AUXILIARY   | 587.00     | AB DSL RM SO PIPE TUNN      |
| 8           | 2     | 1-WMO-731      | 0      | ESW / EAST CCW HEAT EXCHANGER HE-15E ESW INLET 18 In MOTOR OPERATED SHUTOFF VALVE  | AUXILIARY   | 609.00     | 609 HALLWAY                 |
| 8           | 2     | 1-WMO-733      | 0      | ESW / EAST CCW HEAT EXCHANGER HE-15E ESW OUTLET SHUTOFF VALVE  | AUXILIARY   | 609.00     | 609 HALLWAY                 |
| 8           | 1     | 1-WMO-735      | 0      | ESW / WEST CCW HEAT EXCHANGER HE-15W ESW INLET 18 In MOTOR OPERATED SHUTOFF VALVE  | AUXILIARY   | 609.00     | 609 HALLWAY                 |
| 8           | 1     | 1-WMO-737      | 0      | ESW / WEST CCW HEAT EXCHANGER HE-15W ESW OUTLET SHUTOFF VALVE  | AUXILIARY   | 609.00     | 609 HALLWAY                 |
| 8           | 1     | 1-WMO-744      | 0      | APW / (ESW TO WEST MOTOR DRIV AUX FEEDWATER PUMP) SHUTOFF 4 In MOV   | TURBINE     | 591.00     | W MOTOR DRIVEN AUX FDWTR PU |
| 8           | 12    | 1-WMO-753      | 0      | APW / (ESW TO TURB DRIV AUX FEED PUMP PP-4) SHUTOFF 8 In MOTOR OPERATED VALVE  | TURBINE     | 591.00     | TB DRIVEN AUX FDWTR PMP     |
| 8           | 2     | 1-WMO-754      | 0      | APW / (ESW TO EAST MOTOR DRIV AUX FEED PUMP) SHUTOFF 4 In MOTOR OPERATED VALVE   | TURBINE     | 591.00     | E MOTOR DRIVEN AUX FDWTR PU |
| 8           | 12    | 1-XSO-505      | 0      | CONTROL AIR / PRESSURIZER TRAIN 1 InB In PRESSURE RELIEF VALVE NRV-152 CONTROL SOLENOID                                  | CONTAINMENT | 650.00     | PRESSRZR ENCL INTERIOR      |
| 8           | 12    | 1-XSO-507      | 0      | CONTROL AIR / PRESSURIZER TRAIN 'A' PRESSURE RELIEF VALVE NRV-153 CONTROL SOLENOID                                       | CONTAINMENT | 650.00     | PRESSRZR ENCL INTERIOR      |
| 9           | 2     | 1-HV-AES-1     | 0      | AUX BUILDING VENTILATION / AUX BUILDING VENTILATION ENGINEERED SAFETY FEATURE EXHAUST UNIT 1                             | AUXILIARY   | 633.00     | NORM BLOWDOWN FLASHTANK RM  |
| 9           | 1     | 1-HV-AES-2     | 0      | AUX BUILDING VENTILATION / AUX BUILDING VENTILATION ENGINEERED SAFETY FEATURE EXHAUST UNIT 2                             | AUXILIARY   | 633.00     | NORM BLOWDOWN FLASHTANK RM  |
| 9           | 2     | 1-HV-AFP-BRE-1 | 0      | AUX BUILDING VENTILATION / 'N' BATTERY ROOM EAST EXHAUST FAN   | AUXILIARY   | 633.00     | 633 HALLWAY                 |
| 9           | 1     | 1-HV-AFP-BRE-2 | 0      | AUX BUILDING VENTILATION / TR. 'N' BATTERY ROOM WEST EXHAUST FAN   | AUXILIARY   | 633.00     | 633 HALLWAY                 |
| 9           | 2     | 1-HV-AFP-M1    | 0      | TURBINE BUILDING VENTILATION / EAST MOTOR DRIV AUX FEEDWATER PUMP ROOM EXHAUST FAN                                       | TURBINE     | 591.00     | E MOTOR DRIVEN AUX FDWTR PU |



**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR RELAY REVIEW**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description   | Building    | Floor Elev | Room or Row Col             |
|-------------|-------|--------------|--------|--|-------------|------------|-----------------------------|
| 9           | 2     | 1-HV-AFP-M2  | 0      | TURBINE BUILDING VENTILATION / EAST MOTOR DRIV AUX FEED WATER PUMP ROOM SUPPLY FAN                                 | TURBINE     | 591.00     | E MOTOR DRIVEN AUX FDWTR PU |
| 9           | 2     | 1-HV-AFP-T1  | 0      | TURBINE BUILDING VENTILATION / TURB DRIV AUX FEED PUMP ROOM SOUTH EXHAUST FAN                                      | TURBINE     | 591.00     | TB DRIVEN AUX FDWTR PMP     |
| 9           | 1     | 1-HV-AFP-T2  | 0      | TURBINE BUILDING VENTILATION / TURBINE DRIV AUX FEED PUMP ROOM NORTH EXHAUST FAN                                   | TURBINE     | 591.00     | TB DRIVEN AUX FDWTR PMP     |
| 9           | 1     | 1-HV-AFP-X1  | 0      | TURBINE BUILDING VENTILATION / WEST MOTOR DRIV AUX FEED PUMP ROOM EAST EXHAUST FAN                                 | TURBINE     | 591.00     | W MOTOR DRIVEN AUX FDWTR PU |
| 9           | 1     | 1-HV-AFP-X2  | 0      | TURBINE BUILDING VENTILATION / WEST MOTOR DRIV AUX FEEDWATER PUMP ROOM WEST EXHAUST FAN                            | TURBINE     | 591.00     | W MOTOR DRIVEN AUX FDWTR PU |
| 9           | 1     | 1-HV-CEQ-1   | 0      | HYDROGEN SKIMMER / CONTAINMENT HYDROGEN SKIMMER VENTILATION FAN 1  | CONTAINMENT | 625.00     | HV-CEQ-1 FAN RM             |
| 9           | 2     | 1-HV-CEQ-2   | 0      | HYDROGEN SKIMMER / CONTAINMENT HYDROGEN SKIMMER VENTILATION FAN 2  | CONTAINMENT | 625.00     | HV-CEQ-1 FAN RM             |
| 9           | 1     | 1-HV-DGS-1   | 0      | DIESEL ROOM VENTILATION / AB EMERG DIESEL GENERATOR VENTILATION SUPPLY FAN   | AUXILIARY   | 587.00     | AB EMER DSL GEN RM          |
| 9           | 2     | 1-HV-DGS-2   | 0      | DIESEL ROOM GENERATOR / CD EMERG DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN                                      | AUXILIARY   | 587.00     | CD EMER DSL GEN RM          |
| 9           | 1     | 1-HV-DGS-3   | 0      | DIESEL ROOM VENTILATION / AB EMERG DIESEL GENERATOR ROOM CONTROL PANEL VENTILATION SUPPLY FAN                      | AUXILIARY   | 587.00     | AB EMER DSL GEN RM          |
| 9           | 2     | 1-HV-DGS-4   | 0      | DIESEL ROOM VENTILATION / CD EMERG DIESEL GENERATOR ROOM CONTROL PANEL VENTILATION SUPPLY FAN                      | AUXILIARY   | 587.00     | CD EMER DSL GEN RM          |
| 9           | 1     | 1-HV-DGX-1   | 0      | DIESEL ROOM VENTILATION / AB EMERG DIESEL GENERATOR ROOM VENTILATION EXHAUST FAN                                   | AUXILIARY   | 587.00     | AB EMER DSL GEN RM          |
| 9           | 2     | 1-HV-DGX-2   | 0      | DIESEL ROOM VENTILATION / CD EMERG DIESEL GENERATOR VENTILATION EXHAUST FAN  | AUXILIARY   | 587.00     | CD EMER DSL GEN RM          |
| 9           | 1     | 1-HV-SGRS-1A | 0      | AUXILIARY BUILDING VENTILATION / CONTROL ROD DRIVE EQUIPMENT ROOM AND INVERTER AREA VENTILATION SOUTH SUPPLY FAN   | AUXILIARY   | 609.00     | 4KV RM - 600V SWITCHGEAR    |
| 9           | 1     | 1-HV-SGRS-2  | 0      | AUX BUILDING VENTILATION / 4KV ROOM AB 4KV SWITCHGEAR AREA VENTILATION SUPPLY FAN                                  | AUXILIARY   | 609.00     | 4KV RM - AB 4KV SWGR        |
| 9           | 2     | 1-HV-SGRS-3  | 0      | AUX BUILDING VENTILATION / 4KV ROOM CD 4KV SWITCHGEAR AREA VENTILATION SUPPLY FAN                                  | AUXILIARY   | 609.00     | 4KV RM - CD 4KV SWGR        |
| 9           | 2     | 1-HV-SGRS-4A | 0      | AUX BUILDING VENTILATION / CONTROL ROD DRIVE EQUIP ROOM AND INVERTER AREA VENTILATION NORTH SUPPLY FAN             | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR          |
| 9           | 12    | 1-HV-SGRS-7  | 0      | AUX BUILDING VENTILATION / 4KV ROOM 600V SWITCHGEAR TRANSFORMER TR-11B AND TR-11D AREA VENTILATION SUPPLY FAN      | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR          |
| 9           | 12    | 1-HV-SGRS-8  | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600V SWITCHGEAR TRANSFORMERS TR11A AND TR11C AREA VENTILATION SUPPLY FAN | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR          |
| 9           | 12    | 1-HV-SGRS-9  | 0      | AUXILIARY BUILDING VENTILATION / 600VAC MOTOR CONTROL CENTER MEZZANINE AREA VENTILATION SUPPL FAN                  | AUXILIARY   | 613.00     | 4KV RM - MEZZANINE          |
| 9           | 1     | 1-HV-SGRX-2  | 0      | AUX BUILDING VENTILATION / 4KV ROOM AB 4KV SWITCHGEAR AREA VENTILATION EXHAUST FAN                                 | AUXILIARY   | 609.00     | 4KV RM - AB 4KV SWGR        |
| 9           | 2     | 1-HV-SGRX-3  | 0      | AUX BUILDING VENTILATION / 4KV ROOM CD 4KV SWITCHGEAR AREA VENTILATION EXHAUST FAN                                 | AUXILIARY   | 609.00     | 4KV RM - CD 4KV SWGR        |
| 9           | 1     | 1-HV-SGRX-5  | 0      | AUX BUILDING VENTILATION / AB BATTERY EQUIPMENT AREA BATTERY ROOM VENTILATION EXHAUST FAN                          | AUXILIARY   | 609.00     | AB BATT EQUIP               |
| 9           | 2     | 1-HV-SGRX-6  | 0      | AUX BUILDING VENTILATION / CD BATTERY EQUIPMENT AREA BATTERY ROOM VENTILATION EXHAUST FAN                          | AUXILIARY   | 628.00     | SWGR CSR                    |
| 9           | 12    | 12-HV-ACCP-1 | 0      | AUX BUILDING VENTILATION / CCW PUMPS VENTILATION NORTH SUPPLY FAN  | AUXILIARY   | 633.00     | 633 HALLWAY                 |
| 9           | 12    | 12-HV-ACCP-2 | 0      | AUX BUILDING VENTILATION / CCW PUMPS VENTILATION MIDDLE SUPPLY FAN   | AUXILIARY   | 633.00     | 633 HALLWAY                 |
| 9           | 12    | 12-HV-ACCP-3 | 0      | AUX BUILDING VENTILATION / CCW PUMPS VENTILATION SOUTH SUPPLY FAN  | AUXILIARY   | 633.00     | 633 HALLWAY                 |
| 9           | 1     | 12-HV-ESW-5  | 0      | SCREENHOUSE VENTILATION / UNIT 1 WEST ESW PUMP ROOM SUPPLY VENTILATION FAN   | SCREENHOUSE | 591.00     | W ESSNTL SERV WTR PMP RM    |
| 9           | 1     | 12-HV-ESW-6  | 0      | SCREENHOUSE VENTILATION / UNIT 1 WEST ESW PUMP ROOM SUPPLY VENTILATION FAN   | SCREENHOUSE | 591.00     | W ESSNTL SERV WTR PMP RM    |
| 9           | 2     | 12-HV-ESW-7  | 0      | SCREENHOUSE VENTILATION / UNIT #1 EAST ESW PUMP ROOM SUPPLY VENTILATION FAN  | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR PMP RM    |
| 9           | 2     | 12-HV-ESW-8  | 0      | SCREENHOUSE VENTILATION / UNIT 1 ESW PUMP ROOM SUPPLY VENTILATION FAN  | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR PMP RM    |

**DONALD C. COOK NUCLEAR PLANT UNIT # 1**  
**SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**  
**FOR RELAY REVIEW**

| Equip Class | Train | Equipment ID   | Rev No | System / Equipment Description  | Building    | Floor Elev | Room or Row Col             |
|-------------|-------|----------------|--------|---|-------------|------------|-----------------------------|
| 10          | 2     | 1-HV-ACRA-1    | 0      | CONTROL ROOM VENTILATION / CONTROL ROOM VENTILATION NORTH AIR HANDLER PACKAGE                                       | AUXILIARY   | 650.00     | CTRL RM AIR COND RM         |
| 10          | 1     | 1-HV-ACRA-2    | 0      | CONTROL ROOM VENTILATION / CONTROL ROOM VENTILATION SOUTH AIR HANDLER PACKAGE                                       | AUXILIARY   | 650.00     | CTRL RM AIR COND RM         |
| 11          | 2     | 1-HV-ACR-1     | 0      | CONTROL ROOM A/C CHILL WATER / CONTROL ROOM NORTH LIQUID CHILLER PACKAGE  | AUXILIARY   | 650.00     | CTRL RM AIR COND RM         |
| 11          | 1     | 1-HV-ACR-2     | 0      | CONTROL ROOM A/C CHILL WATER / CONTROL ROOM SOUTHW LIQUID CHILLER PACKAGE   | AUXILIARY   | 650.00     | CTRL RM AIR COND RM         |
| 15          | 1     | 1-BATT-AB      | 0      | 250V DC DISTRIBUTION / PLANT BATT AB  | AUXILIARY   | 609.00     | AB BATT EQUIP               |
| 15          | 2     | 1-BATT-CD      | 0      | 250V DC DISTRIBUTION / PLANT BATT CD  | AUXILIARY   | 626.00     | CD BATT EQUIP               |
| 15          | 12    | 1-BATT-N       | 0      | 250VDC CONTROL AND INSTRUMENTATION / TRAIN N PLANT BATTERY  | AUXILIARY   | 633.00     | 633 HALLWAY                 |
| 16          | 12    | 1-BC-A         | 0      | 250VDC CONTROL AND INSTRUMENTATION / BATTERY CHARGER 'A' FOR 'N' TRAIN BATTERY                                      | AUXILIARY   | 633.00     | 633 HALLWAY                 |
| 16          | 1     | 1-BC-AB1       | 0      | 250V DC DISTRIBUTION / PLANT BATT BATT-AB BATTERY CHARGER #1  | AUXILIARY   | 613.00     | 4KV RM - MEZZANINE          |
| 16          | 1     | 1-BC-AB2       | 0      | 250V DC DISTRIBUTION / PLANT BATTERY BATT-AB CHARGER #2   | AUXILIARY   | 613.00     | 4KV RM - MEZZANINE          |
| 16          | 12    | 1-BC-B         | 0      | 250VDC CONTROL AND INSTRUMENTATION / BATTERY CHARGER 'B' FOR 'N' TRAIN BATTERY                                      | AUXILIARY   | 633.00     | 633 HALLWAY                 |
| 16          | 2     | 1-BC-CD1       | 0      | 250V DC DISTRIBUTION / PLANT BATTERY BATT-CD CHARGER #1   | AUXILIARY   | 626.00     | CD BATT EQUIP               |
| 16          | 2     | 1-BC-CD2       | 0      | 250V DC DISTRIBUTION / PLANT BATTERY BATT-CD CHARGER #2   | AUXILIARY   | 626.00     | CD BATT EQUIP               |
| 16          | 2     | 1-CRID-I-INV   | 0      | 120VAC CTRL RM INSTRUMENTATION DISTR / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CH-I INVERTER             | AUXILIARY   | 609.00     | INVERTER AREA               |
| 16          | 2     | 1-CRID-II-INV  | 0      | 120V DC DISTRIBUTION / 120V AC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CH-II INVERTER                           | AUXILIARY   | 609.00     | INVERTER AREA               |
| 16          | 1     | 1-CRID-III-INV | 0      | 120V CTRL RM INSTRUMENTATION DISTR / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CH-III INVERTER             | AUXILIARY   | 609.00     | INVERTER AREA               |
| 16          | 1     | 1-CRID-IV-INV  | 0      | 120V CTRL RM INSTRUMENTATION DISTR / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CH-IV INVERTER              | AUXILIARY   | 633.00     | CONTROL RM                  |
| 16          | 1     | 1-DGAB-INV     | 0      | DIESEL GENERATOR, CONTROL AND INSTRUMENT / AB EMERGENCY DIESEL GENERATOR OME-150-AB INVERTER                        | AUXILIARY   | 587.00     | AB EMER DSL GEN RM          |
| 16          | 2     | 1-DGCD-INV     | 0      | DIESEL GENERATION, CONTROL AND INSTRUMENT / DIESEL GENERATOR INVERTER   | AUXILIARY   | 587.00     | CD EMER DSL GEN RM          |
| 17          | 1     | 1-OME-150-AB   | 0      | DIESEL GENERATOR CONTROL AND INSTRUMENTA / AB EMERG DIESEL GENERATOR  | AUXILIARY   | 587.00     | AB EMER DSL GEN RM          |
| 17          | 2     | 1-OME-150-CD   | 0      | DIESEL GENERATION CONTROL AND INSTRUMENT / CD EMERG DIESEL GENERATOR  | AUXILIARY   | 587.00     | CD EMER DSL GEN RM          |
| 18          | 2     | 1-CLJ-113      | 0      | CONDENSATE STORAGE TANK SUPPLY / CONDENSATE STORAGE TANK TK-32 LEVEL INDICATOR TRANSMITTER                          | AUXILIARY   | 588.00     | STORAGE TANK PIPE TUNNEL    |
| 18          | 1     | 1-CLJ-114      | 0      | CONDENSATE STORAGE TANK SUPPLY / CONDENSATE STORAGE TANK TK-32 LEVEL INDICATOR TRANSMITTER                          | AUXILIARY   | 588.00     | STORAGE TANK PIPE TUNNEL    |
| 18          | 1     | 1-FFI-210      | 0      | AUX FEEDWATER / AUX FEEDWATER TO STEAM GENERATOR OME-3-1 FLOW INDICATOR TRANSMITTER                                 | AUXILIARY   | 621.00     | E MAIN STM STOP ENCL        |
| 18          | 2     | 1-FFI-220      | 0      | AUX FEEDWATER / AUX FEEDWATER TO STEAM GENERATOR OME-3-2 FLOW INDICATOR TRANSMITTER                                 | AUXILIARY   | 621.00     | W MAIN STM STOP ENCL        |
| 18          | 2     | 1-FFI-230      | 0      | AUX FEEDWATER / AUX FEEDWATER TO STEAM GENERATOR OME-3-3 FLOW INDICATOR TRANSMITTER                                 | AUXILIARY   | 621.00     | W MAIN STM STOP ENCL        |
| 18          | 1     | 1-FFI-240      | 0      | AUX FEEDWATER / AUX FEEDWATER TO STEAM GENERATOR OME-3-4 FLOW INDICATOR TRANSMITTER                                 | AUXILIARY   | 621.00     | E MAIN STM STOP ENCL        |
| 18          | 2     | 1-WDS-701      | 0      | ESW / EAST ESW PUMP PP-7E DISCHARGE STRAINER OME-34E HIGH DIFFERENTIAL PRESSURE SWITCH                              | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR PMP RM    |
| 18          | 1     | 1-WDS-702      | 0      | ESW / WEST ESW PUMP PP-7W DISCHARGE STRAINER OME-34W HIGH DIFFERENTIAL PRESSURE SWITCH                              | SCREENHOUSE | 591.00     | W ESSNTL SERV WTR PMP RM    |
| 18          | 2     | 1-WPS-701      | 0      | ESW / EAST ESW SUPPLY HEADER PRESSURE SWITCH  | TURBINE     | 589.00     | ESSNTL SERV WTR PIPE TUNNEL |
| 18          | 1     | 1-WPS-705      | 0      | ESW / WEST ESW SUPPLY HEADER PRESSURE SWITCH  | TURBINE     | 589.00     | ESSNTL SERV WTR PIPE TUNNEL |
| 19          | 12    | 1-VTS-201      | 0      | TURBINE BUILDING VENTILATION / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP ROOM EXHAUST FAN HV-AFP-M1 THERMAL SENSOR | TURBINE     | 591.00     | E MOTOR DRIVEN AUX FDWTR PU |
| 19          | 2     | 1-VTS-203      | 0      | TURBINE BUILDING VENTILATION / TURBINE DRIVEN AUXILIARY FEED PUMP ROOM NORTH EXHAUST FAN HV-AFP-T1 THERMAL SENSOR   | TURBINE     | 591.00     | TB DRIVEN AUX FDWTR PMP     |

**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR RELAY REVIEW**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description  | Building     | Floor Elev | Room or Row Col             |
|-------------|-------|--------------|--------|---|--------------|------------|-----------------------------|
| 19          | 1     | 1-VTS-204    | 0      | TURBINE BUILDING VENTILATION / TURBINE DRIVEN AUXILIARY FEED PUMP ROOM SOUTH EXHAUST FAN HV-AFP-T2 THERMAL SENSOR   | TURBINE      | 591.00     | TB DRIVEN AUX FDWTR PMP     |
| 19          | 12    | 1-VTS-206    | 0      | TURBINE BUILDING VENTILATION / WEST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP ROOM WEST EXHAUST FAN HV-AFP-X2 THERMAL SENSOR  | TURBINE      | 591.00     | W MOTOR DRIVEN AUX FDWTR PU |
| 19          | 1     | 1-VTS-340    | 0      | DIESEL BUILDING VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION FANS OUTSIDE AIR THERMOSTAT  | AUXILIARY    | 596.00     | RCTR CABLE TUNNEL, QUAD3    |
| 19          | 1     | 1-VTS-341    | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION FANS HV-DGX-1 AND HV-DGS-1 THERMOSTAT  | AUXILIARY    | 587.00     | AB EMER DSL GEN RM          |
| 19          | 2     | 1-VTS-345    | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION FANS OUTSIDE AIR THERMOSTAT  | GROUND       | 609.00     | INNER PLANT GROUND          |
| 19          | 2     | 1-VTS-346    | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION FANS HV-DGX-2 AND HV-DGS-2 THERMOSTAT  | AUXILIARY    | 587.00     | CD EMER DSL GEN RM          |
| 19          | 12    | 1-VTS-350    | 0      | AUXILIARY BUILDING VENTILATION / CONTROL ROD DRIVE EQUIP ROOM AND INV AREA VENT SOUTH SUPPLY FAN HV-SGRA-1A TEMPERATURE SWITCH                                  | AUXILIARY    | 609.00     | INVERTER AREA               |
| 19          | 12    | 1-VTS-351    | 0      | AUXILIARY BUILDING VENTILATION / CONTROL ROD DRIVE EQUIPMENT ROOM AND INV AREA VENT SOUTH SUPPLY FAN HV-SGRS-1A TEMPERATURE SWITCH                              | AUXILIARY    | 609.00     | CRD EQUIP RM                |
| 19          | 2     | 1-VTS-352    | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600 VOLT SWGR XFMR TR11B AND TR11D AREA VENT SUPPLY FAN HV-SGRS-7 TEMP SWITCH   | AUXILIARY    | 609.00     | 4KV RM - 600V SWGR          |
| 19          | 12    | 1-VTS-353    | 0      | AUXILIARY BUILDING VENTILATION / 600VAC MOTOR CONTROL CENTER MEZZANINE AREA VENT SUPPLY FAN SGRS-9 TEMPERATURE SWITCH   | AUXILIARY    | 613.00     | 4KV RM - MEZZANINE          |
| 19          | 12    | 1-VTS-354    | 0      | AUXILIARY BUILDING VENTILATION / CONT ROD DRIVE EQUIP ROOM AND INV AREA OUTSIDE AIR INLET DAMPER HV-SGR-MD-1 AND 2 TEMP SWITCH TO OVERRIDE PNEUMATIC CONTROLLER | AUXILIARY    | 609.00     | INVERTER AREA               |
| 19          | 12    | 1-VTS-355    | 0      | AUXILIARY BUILDING VENTILATION / CRD AND CRDM INV AREA VENT AIR INLET DAMPER HV-SGR-MD-1 AND 2 TEMP SWITCH TO OVERRIDE PNEUMATIC CONTROLLER                     | AUXILIARY    | 609.00     | INVERTER AREA               |
| 19          | 12    | 1-VTS-356    | 0      | AUXILIARY BUILDING VENTILATION / CNTRL ROD DRIVE EQUIP ROOM AND INV AREA VENT NORTH SUPPLY FAN HV-SGRS-4A TEMP SWITCH   | AUXILIARY    | 609.00     | INVERTER AREA               |
| 19          | 12    | 1-VTS-357    | 0      | AUXILIARY BUILDING VENTILATION / CONTROL ROD DRIVE EQUIPMENT ROOM AND INV AREA VENT NORTH SUPPLY FAN HV-SGRS-4A TEMPERATURE SWITCH                              | AUXILIARY    | 609.00     | CRD EQUIP RM                |
| 19          | 1     | 1-VTS-802    | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM AB 4KV SWITCHGEAR AREA VENTILATION SUPPLY FAN HV-SGRS-2 THERMAL SENSOR  | AUXILIARY    | 609.00     | 4KV RM - AB 4KV SWGR        |
| 19          | 2     | 1-VTS-803    | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM CD 4KV SWITCHGEAR AREA VENTILATION SUPPLY FAN HV-SGRS-3 THERMAL SENSOR  | AUXILIARY    | 609.00     | 4KV RM - CD 4KV SWGR        |
| 19          | 12    | 1-VTS-805    | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600V SWGR XFMR TR11B AND TR11D AREA VENT EXHAUST FAN HV-SGRS-7 TEMP SWITCH THERMAL SENSOR                             | AUXILIARY    | 613.00     | 4KV RM - MEZZANINE          |
| 19          | 1     | 1-VTS-808    | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600VAC SWGR XFMR TR11A AND TR11C AREA VENT SUPPLY FAN HV-SGRS-8 TEMP SWITCH THERMAL SENSOR                            | AUXILIARY    | 609.00     | 4KV RM - 600V SWGR          |
| 19          | 1     | 12-VTS-708   | 0      | SCREEN HOUSE VENTILATION / UNIT 1 WEST ESSENTIAL SERVICE WATER PUMP ROOM TEMPERATURE SWITCH THERMAL SENSOR  | SCREEN HOUSE | 591.00     | W ESSENTIAL SERV WTR PMP RM |
| 19          | 2     | 12-VTS-708   | 0      | SCREEN HOUSE VENTILATION / UNIT 1 EAST ESSENTIAL SERVICE WATER PUMP ROOM TEMPERATURE SWITCH THERMAL SENSOR  | SCREEN HOUSE | 591.00     | E ESSENTIAL SERV WTR PMP RM |





**APPENDIX C**

**DONALD C. COOK NUCLEAR PLANT - UNIT 2**

**SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR RELAY REVIEW**

## Donald C. Cook Nuclear Plant - Unit 2

### SSEL Certification:

The information identifying the equipment required to bring the plant to a safe shutdown condition on this safe shutdown equipment list is, to be the best of our knowledge and belief, correct and accurate.

| <u>Name</u>                            | <u>Signature</u>           | <u>Date</u>        |
|--|----------------------------|--------------------|
| B. A. Svensson<br>Operations           | <u>B. A. Svensson</u>      | <u>1/21/96</u>     |
| G. P. Arent<br>Operations              | <u>G. P. Arent</u>         | <u>12-15-95</u>    |
| J. V. Ruparel<br>Systems               | <u>J. V. Ruparel</u>       | <u>Dec 15, 95.</u> |
| H. W. Young<br>Systems                 | <u>Donald W. Young III</u> | <u>12/15/95</u>    |
| R. C. Steele<br>Electrical             | <u>R. C. Steele</u>        | <u>12-15-95</u>    |
| T. R. Satyan Sharma<br>Project Manager | <u>T. R. Satyan Sharma</u> | <u>12/15/95</u>    |

**DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR RELAY REVIEW**

| Equip Class | Train | Equipment ID  | Rev No | System / Equipment Description  | Building      | Floor Elev | Room or Row Col           |
|-------------|-------|---------------|--------|---|---------------|------------|---------------------------|
| 0           | 12    | 2-HV-ACFD-1   | 0      | CONTROL ROOM VENTILATION / PLANT PROCESS COMPUTER ROOM VENTILATION EXHAUST NORTH FIRE DAMPER                        | U-2 AUXILIARY | 650.00     | PLANT PROCESS COMPUTER RM |
| 0           | 12    | 2-HV-ACFD-2   | 0      | CONTROL ROOM VENTILATION / PLANT PROCESS COMPUTER ROOM VENTILATION EXHAUST SOUTH FIRE DAMPER                        | U-2 AUXILIARY | 650.00     | PLANT PROCESS COMPUTER RM |
| 0           | 12    | 2-HV-ACFD-3   | 0      | CONTROL ROOM VENTILATION / CONTROL ROOM VENT UNITS HV-ACRA-1 & HV-ACRA-2 TO PLANT PROCESS COMPUTER ROOM FIRE DAMPER | U-2 AUXILIARY | 650.00     | PLANT PROCESS COMPUTER RM |
| 0           | 2     | 2-HV-DGS-FD-1 | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FIRE DAMPER                         | U-2 AUXILIARY | 587.00     | CD EMER DSL GEN RM        |
| 0           | 1     | 2-HV-DGS-FD-2 | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FIRE DAMPER                         | U-2 AUXILIARY | 587.00     | AB EMER DSL GEN RM        |
| 0           | 2     | 2-HV-DGX-FD-1 | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FIRE DAMPER                        | U-2 AUXILIARY | 587.00     | CD EMER DSL GEN RM        |
| 0           | 1     | 2-HV-DGX-FD-2 | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FIRE DAMPER                        | U-2 AUXILIARY | 587.00     | AB EMER DSL GEN RM        |
| 0           | 2     | 2-OME-34E     | 0      | ESSENTIAL SERVICE WATER / EAST ESSENTIAL SERVICE WATER PUMP PP-7E DISCHARGE STRAINER                                | SCREENHOUSE   | 591.00     | E ESSNTL SERV WTR PMP RM  |
| 0           | 1     | 2-OME-34W     | 0      | ESSENTIAL SERVICE WATER / WEST ESSENTIAL SERVICE WATER PUMP PP-7W DISCHARGE STRAINER                                | SCREENHOUSE   | 591.00     | W ESSNTL SERV WTR PMP RM  |
| 0           | 1     | 2-QT-100-AB   | 0      | DIESEL COMBUSTION AIR / AB EMERGENCY DIESEL AIR INTAKE FILTER   | GROUND        | 609.00     | INNER PLANT GROUND        |
| 0           | 2     | 2-QT-100-CD   | 0      | DIESEL COMBUSTION AIR / CD EMERGENCY DIESEL AIR INTAKE FILTER   | GROUND        | 609.00     | INNER PLANT GROUND        |
| 0           | 1     | 2-QT-118-AB   | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL BYPASS LUBE OIL FILTER  | AUXILIARY     | 579.00     | AB EMER DSL LUBE OIL PIT  |
| 0           | 2     | 2-QT-118-CD   | 0      | DIESEL LUBE OIL / CD EMERGENCY DIESEL BYPASS LUBE OIL FILTER  | AUXILIARY     | 579.00     | CD EMER DSL LUBE OIL PIT  |
| 1           | 1     | 2-AB-A        | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER AB-A  | AUXILIARY     | 587.00     | 587 HALLWAY               |
| 1           | 2     | 2-AB-D        | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER AB-D  | AUXILIARY     | 587.00     | 587 HALLWAY               |
| 1           | 12    | 2-AB-N        | 0      | 250VDC CONTROL AND INSTRUMENTATION / CONTROL CENTER VALVE   | AUXILIARY     | 587.00     | 587 HALLWAY               |
| 1           | 1     | 2-ABD-A       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER ABD-A   | AUXILIARY     | 587.00     | AB EMER DSL GEN RM        |
| 1           | 1     | 2-ABD-B       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER ABD-B   | AUXILIARY     | 587.00     | AB EMER DSL GEN RM        |
| 1           | 2     | 2-ABD-C       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER ABD-C   | AUXILIARY     | 587.00     | CD EMER DSL GEN RM        |
| 1           | 2     | 2-ABD-D       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER ABD-D   | AUXILIARY     | 587.00     | CD EMER DSL GEN RM        |
| 1           | 2     | 2-ABV-A       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC VALVE CONTROL CENTER ABV-A   | AUXILIARY     | 587.00     | 587 HALLWAY               |
| 1           | 2     | 2-ABV-D       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC VALVE CONTROL CENTER ABV-D   | AUXILIARY     | 587.00     | 587 HALLWAY               |
| 1           | 1     | 2-AM-A        | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER AM-A  | AUXILIARY     | 633.00     | 633 HALLWAY               |
| 1           | 2     | 2-AM-D        | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER AM-D  | AUXILIARY     | 633.00     | 633 HALLWAY               |
| 1           | 1     | 2-AZY-A       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC VALVE CONTROL CENTER AZV-A   | AUXILIARY     | 609.00     | 609 HALLWAY               |
| 1           | 1     | 2-EZC-A       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER EZC-A   | AUXILIARY     | 613.00     | 4KV ROOM - MEZZANINE AREA |
| 1           | 1     | 2-EZC-B       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER EZC-B   | AUXILIARY     | 613.00     | 4KV ROOM - MEZZANINE AREA |
| 1           | 2     | 2-EZC-C       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER EZC-C   | AUXILIARY     | 613.00     | 4KV ROOM - MEZZANINE AREA |
| 1           | 2     | 2-EZC-D       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER EZC-D   | AUXILIARY     | 613.00     | 4KV ROOM - MEZZANINE AREA |
| 1           | 1     | 2-PS-A        | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER PS-A  | SCREENHOUSE   | 594.00     | TRAVEL SCRNM MCC UPPER RM |
| 1           | 2     | 2-PS-D        | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER PS-D  | SCREENHOUSE   | 594.00     | TRAVEL SCRNM MCC UPPER RM |
| 2           | 1     | 2-21A1        | 0      | ELECTRICAL DISTRIBUTION, 600VAC / REACTOR ROD CONTROL SOUTH MOTOR-GENERATOR SET CRDMG-2S SUPPLY BREAKER             | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR AREA   |
| 2           | 1     | 2-21A10       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / WEST TURBINE AUXILIARY COOLING WATER PUMP PP-14W SUPPLY BREAKER                   | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR AREA   |
| 2           | 1     | 2-21A11       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC BUS 21A SUPPLY BREAKER   | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR AREA   |
| 2           | 1     | 2-21A4        | 0      | ELECTRICAL DISTRIBUTION, 600VAC / SOUTH PLANT LIGHTING TRANSFORMER TR-LTG-8S SUPPLY BREAKER                         | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR AREA   |
| 2           | 1     | 2-21AC        | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21A TO 600V BUS 21C TIE BREAKER  | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR AREA   |
| 2           | 1     | 2-21B10       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / PLANT AIR COMPRESSOR OME-41 SUPPLY BREAKER  | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR AREA   |

**DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR RELAY REVIEW**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description  | Building  | Floor Elev | Room or Row Col                          |
|-------------|-------|--------------|--------|---|-----------|------------|--|
| 2           | 1     | 2-21B11      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC BUS 21B SUPPLY BREAKER   | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 1     | 2-21B12      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / SOUTH NON-ESSENTIAL SERVICE WATER PUMP PP-8S SUPPLY BREAKER                               | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 1     | 2-21B13      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / TURBINE ROOM INDUCTION HEATING, STRESS RELIEF AND BOLT HEATERS SUPPLY BREAKER             | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 1     | 2-21B5       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V MOTOR CONTROL CENTERS TBG-BW AND TBP-BN SUPPLY BREAKER                               | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 1     | 2-21B6       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / EAST TURBINE AUXILIARY COOLING WATER PUMP PP-14E SUPPLY BREAKER                           | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21B0       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21B TO 600V BUS 21D TIE BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21C1       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21C SUPPLY BREAKER   | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21C12      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / SOUTH SPENT FUEL PIT PUMP 12-PP-31S SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21C13      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / RECIPROCATING CHARGING PUMP PP-49 SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21C14      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / FIRE PROTECTION WATER HIGH DEMAND PUMP PP-11 SUPPLY BREAKER                               | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21C16      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER TBC-CN SUPPLY BREAKER   | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21C17      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / NORTH NON-ESSENTIAL SERVICE WATER PUMP PP-8N SUPPLY BREAKER                               | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21C18      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / MAIN TURBINE AUXILIARY LUBE OIL PUMP QT-201 SUPPLY BREAKER                                | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21C2       | 0      | CONTAINMENT POLAR CR / ELECTRICAL DISTRIBUT   | AUXILIARY | 609.00     | AIR COOLED CIRCUIT BREAKER (METAL FRAME) |
| 2           | 2     | 2-21C4       | 0      | ELECTRICAL DISTRIBUTION 600VAC / CIRCULATING WATER TRAVELING SCREEN SOUTH WASH PUMP PP-15S SUPPLY BREAKER                   | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21C8       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / PLANT AND CNTMT STANDBY LIGHTING TRANSFORMER TR-LTG-8 SUPPLY BREAKER                      | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21C9       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / MAIN AND SPARE TRANSFORMER AUXILIARIES 'NORMAL DISTRIBUTION CABINET TCSN SUPPLY BREAKER   | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21D1       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21D SUPPLY BREAKER   | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21D10      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / NORTH PLANT LIGHTING TRANSFORMER 'TR-LTG-9N SUPPLY BREAKER                                | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21D13      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / REACTOR ROD CONTROL NORTH MOTOR-GENERATOR SET CRDMG-2N SUPPLY BREAKER                     | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           |       | 2-21D3       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / CONTAINMENT LIGHTING TRANSFORMER TR-LTG-10 SUPPLY BREAKER                                 | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-21D9       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / MAIN AND SPARE TRANSFORMER AUXILIARIES EMERGENCY DISTRIBUTION CABINET TCSE SUPPLY BREAKER | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                  |
| 2           | 2     | 2-52-BYA     | 0      | REACTOR TRIP BREAKER (ROO CONTROL & INST.) / REACTOR ROD CONTROL TR-A REACTOR TRIP BYPASS CIRCUIT BREAKER                   | AUXILIARY | 609.00     | CRD EQUIP RM                             |
| 2           | 1     | 2-52-BYB     | 0      | REACTOR TRIP BREAKER (ROO CONTROL & INST.) / REACTOR ROD CONTROL TR-B REACTOR TRIP BYPASS CIRCUIT BREAKER                   | AUXILIARY | 609.00     | CRD EQUIP RM                             |
| 2           | 2     | 2-52-RTA     | 0      | ROO CONTROL AND INSTRUMENTATION / REACTOR ROD CONTROL TR-A REACTOR TRIP CIRCUIT BREAKER                                     | AUXILIARY | 609.00     | CRD EQUIP RM                             |
| 2           | 1     | 2-52-RTB     | 0      | ROO CONTROL AND INSTRUMENTATION / REACTOR ROD CONTROL TR-B REACTOR TRIP CIRCUIT BREAKER                                     | AUXILIARY | 609.00     | CRD EQUIP RM                             |
| 3           | 1     | 2-T21A1      | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / SOUTH SAFETY INJECTION PUMP PP-26S SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR AREA                |
| 3           | 1     | 2-T21A10     | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 600V BUS 21A SUPPLY TRANSFORMER TR21A SUPPLY BREAKER                                     | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR AREA                |
| 3           | 1     | 2-T21A11     | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / AB EMERGENCY DIESEL GENERATOR TO 4KV BUS T21A SUPPLY BREAKER                             | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR AREA                |
| 3           | 1     | 2-T21A12     | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / CIRCUIT BREAKER FROM 69KV TO BUS T21A  | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR AREA                |

**DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR RELAY REVIEW**

| Equip Class | Train | Equipment ID   | Rev No | System / Equipment Description  | Building      | Floor Elev | Room or Row Col              |
|-------------|-------|----------------|--------|---|---------------|------------|------------------------------|
| 3           | 1     | 2-T21A3        | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC / WEST CONTAINMENT SPRAY PUMP PP-9W SUPPLY BREAKER                                      | AUXILIARY     | 609.00     | 4KV RM - AB 4KV SWGR AREA    |
| 3           | 1     | 2-T21A8        | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC / 4KV BUS T21A TO 480V PRESSURIZER HEATER BUS SUPPLY TRANSFORMER TR21PHA SUPPLY BREAKER | AUXILIARY     | 609.00     | 4KV RM - AB 4KV SWGR AREA    |
| 3           | 1     | 2-T21A9        | 0      | ELECTRICAL DISTRIBUTION 4160VAC / 4KV BUS 2A TO BUS T21A TIE BREAKER  | AUXILIARY     | 609.00     | 4KV RM - AB 4KV SWGR AREA    |
| 3           | 1     | 2-T21B1        | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 4KV BUS 2B TO 4KV BUS T21B TIE BREAKER   | AUXILIARY     | 609.00     | 4KV RM - AB 4KV SWGR AREA    |
| 3           | 1     | 2-T21B2        | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / CIRCUIT BREAKER FROM 60KV BUS TO BUS T21B  | AUXILIARY     | 609.00     | 4KV RM - AB 4KV SWGR AREA    |
| 3           | 1     | 2-T21B4        | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / AB EMERGENCY DIESEL GENERATOR TO 4KV BUS T21B SUPPLY BREAKER                           | AUXILIARY     | 609.00     | 4KV RM - AB 4KV SWGR AREA    |
| 3           | 2     | 2-T21C1        | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 4KV BUS 2C TO 4KV BUS T21C TIE BREAKER   | AUXILIARY     | 609.00     | 4KV RM - CD 4KV SWGR AREA    |
| 3           | 2     | 2-T21C2        | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / CIRCUIT BREAKER - 4KV FROM 60KV TO BUS T21C  | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR AREA      |
| 3           | 2     | 2-T21C3        | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / CD EMERGENCY DIESEL GENERATOR TO 4KV BUS T21C SUPPLY BREAKER                           | AUXILIARY     | 609.00     | 4KV RM - CD 4KV SWGR AREA    |
| 3           | 2     | 2-T21D1        | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 4KV EMERGENCY POWER BUS EP TO 4KV BUS T21D SUPPLY BREAKER                              | AUXILIARY     | 609.00     | 4KV RM - CD 4KV SWGR AREA    |
| 3           | 2     | 2-T21D12       | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 4KV BUS 2D TO 4KV BUS T21D TIE BREAKER   | AUXILIARY     | 609.00     | 4KV RM - CD 4KV SWGR AREA    |
| 3           | 2     | 2-T21D2        | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 600V BUS 21D SUPPLY TRANSFORMER TR21D SUPPLY BREAKER                                   | AUXILIARY     | 609.00     | 4KV RM - CD 4KV SWGR AREA    |
| 3           | 2     | 2-T21D4        | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC / EAST CONTAINMENT SPRAY PUMP PP-9E SUPPLY BREAKER                                      | AUXILIARY     | 609.00     | 4KV RM - CD 4KV SWGR AREA    |
| 3           | 2     | 2-T21D5        | 0      | ELECTRICAL DISTRIBUTION PANEL, 4160 VAC / NORTH SAFETY INJECTION PUMP PP-26N SUPPLY BREAKER                               | AUXILIARY     | 609.00     | 4KV RM - CD 4KV SWGR AREA    |
| 3           | 2     | 2-T21D8        | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / CD EMERGENCY DIESEL GENERATOR TO 4KV BUS T21D SUPPLY BREAKER                           | AUXILIARY     | 609.00     | 4KV RM - CD 4KV SWGR AREA    |
| 3           | 2     | 2-T21D9        | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC / 4KV BUS T21D TO 480V PRESSURIZER HEATER BUS SUPPLY TRANSFORMER TR21PHC SUPPLY BREAKER | AUXILIARY     | 609.00     | 4KV RM - CD 4KV SWGR AREA    |
| 4           | 2     | 2-CRID-I-CVT   | 0      | 120V CONTROL ROOM INSTRUMENTATION DISTRIBUTION / 10KVA TRANSFORMER - CONSTANT VOLTAGE                                     | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR AREA      |
| 4           | 2     | 2-CRID-II-CVT  | 0      | 120VAC DISTRIBUTION / 120V AC CR INST DISTR CH-II ISOL CONT VOLT TRANSFORMER  | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR AREA      |
| 4           | 1     | 2-CRID-III-CVT | 0      | 120V CONTROL ROOM INSTRUMENTATION DISTR / 10KVA ISOLIMETER - CONSTANT VOLTAGE - TRANSFORMER                               | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR AREA      |
| 4           | 1     | 2-CRID-IV-CVT  | 0      | 120V CONTROL ROOM INSTRUMENTATION DISTR / 10KVA ISOLIMETER - CONSTANT VOLTAGE - TRANSFORMER                               | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR AREA      |
| 4           | 1     | 2-DGAB-FFCKT   | 0      | DIESEL GENERATION, CONTROL AND INSTRUMENTATION / AB EMERGENCY DIESEL GENERATOR OME-150-AB FIELD FLASH CIRCUIT TRANSFORMER | AUXILIARY     | 587.00     | AB EMER DSL GEN RM           |
| 4           | 2     | 2-DGCD-FFCKT   | 0      | DIESEL GENERATION, CONTROL AND INSTRUMENTATION / CD EMERGENCY DIESEL GENERATOR OME-150-CD FIELD FLASH CKT TRANSFORMER     | AUXILIARY     | 587.00     | CD EMER DSL GEN RM           |
| 4           | 1     | 2-TR21A        | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21A SUPPLY TRANSFORMER   | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR AREA      |
| 4           | 1     | 2-TR21B        | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21B SUPPLY TRANSFORMER   | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR AREA      |
| 4           | 2     | 2-TR21C        | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21C SUPPLY TRANSFORMER   | AUXILIARY     | 609.00     | 4KV RM - CD 4KV SWGR AREA    |
| 4           | 2     | 2-TR21D        | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21D SUPPLY TRANSFORMER   | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR AREA      |
| 5           | 12    | 12-PP-31S      | 0      | SPENT FUEL PIT COOLING/CLEANUP / SOUTH SPENT FUEL PIT PUMP  | U#2 AUXILIARY | 609.00     | SPENT FUEL PIT HEAT XCHGR RM |
| 5           | 2     | 2-PP-10E       | 0      | COMPONENT COOLING WATER / EAST COMPONENT COOLING WATER PUMP   | AUXILIARY     | 609.00     | 609 HALLWAY                  |
| 5           | 1     | 2-PP-10W       | 0      | COMPONENT COOLING WATER / WEST COMPONENT COOLING WATER PUMP   | AUXILIARY     | 609.00     | 609 HALLWAY                  |
| 5           | 2     | 2-PP-26N       | 0      | SAFETY INJECTION / NORTH SAFETY INJECTION PUMP  | AUXILIARY     | 587.00     | N SAFETY INJ PMP RM          |
| 5           | 1     | 2-PP-26S       | 0      | SAFETY INJECTION / SOUTH SAFETY INJECTION PUMP  | AUXILIARY     | 587.00     | S SAFETY INJ PMP RM          |
| 5           | 2     | 2-PP-3E        | 0      | AUXILIARY FEEDWATER / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP  | TURBINE       | 591.00     | E MTR DRIV AUX FEEDWTR PMP   |
| 5           | 1     | 2-PP-3W        | 0      | AUXILIARY FEEDWATER / WEST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP  | TURBINE       | 591.00     | W MTR DRIVEN AUX FEEDWTR PMP |
| 5           | 12    | 2-PP-4         | 0      | AUXILIARY FEEDWATER / TURBINE DRIVEN AUXILIARY FEED PUMP  | TURBINE       | 591.00     | TB DRIVEN AUX FEEDWTR PMP    |



**DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR RELAY REVIEW**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description   | Building    | Floor Elev | Room or Row Col               |
|-------------|-------|--------------|--------|--|-------------|------------|-------------------------------|
| 5           | 2     | 2-PP-46-3    | 0      | BORON MAKEUP (CVCS) / BORIC ACID STORAGE TANKS TRANSFER PUMP #3  | AUXILIARY   | 587.00     | BORIC ACID STOR TANK AREA     |
| 5           | 1     | 2-PP-46-4    | 0      | BORON MAKEUP (CVCS) / BORIC ACID STORAGE TANKS TRANSFER PUMP #4  | AUXILIARY   | 587.00     | BORIC ACID STOR TANK AREA     |
| 5           | 12    | 2-PP-49      | 0      | CHARGING (CVCS) / RECIPROCATING CHARGING PUMP  | AUXILIARY   | 587.00     | RECIPROCATING CHARG PMP RM    |
| 5           | 2     | 2-PP-50E     | 0      | CHARGING (CVCS) / EAST CENTRIFUGAL CHARGING PUMP   | AUXILIARY   | 587.00     | E CENTRIFUGAL CHARG PMP ROOM  |
| 5           | 1     | 2-PP-50W     | 0      | CHARGING (CVCS) / WEST CENTRIFUGAL CHARGING PUMP   | AUXILIARY   | 587.00     | W CENTRIFUGAL CHARG PMP RM    |
| 5           | 2     | 2-PP-82N     | 0      | CONTROL ROOM AIR CONDITIONING CHILL WATER / CONTROL ROOM AIR CONDITIONING NORTH CHILL WATER CIRCULATION PUMP | AUXILIARY   | 650.00     | CTRL RM AIR CONDIT RM         |
| 5           | 1     | 2-PP-82S     | 0      | CONTROL ROOM AIR CONDITIONING CHILL WATER / CONTROL ROOM AIR CONDITIONING SOUTH CHILL WATER CIRCULATION PUMP | AUXILIARY   | 650.00     | CTRL RM AIR CONDIT RM         |
| 5           | 1     | 2-QT-108-AB1 | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL TRANSFER PUMP #1  | AUXILIARY   | 587.00     | AB EMER DSL FUEL OIL XFER PMP |
| 5           | 1     | 2-QT-108-AB2 | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL TRANSFER PUMP #2  | AUXILIARY   | 587.00     | AB EMER DSL FUEL OIL XFER PMP |
| 5           | 2     | 2-QT-108-CD1 | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL FUEL OIL TRANSFER PUMP #1  | AUXILIARY   | 587.00     | CD EMER DSL FUEL OIL XFER PMP |
| 5           | 2     | 2-QT-108-CD2 | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL FUEL OIL TRANSFER PUMP #2  | AUXILIARY   | 587.00     | CD EMER DSL FUEL OIL XFER PMP |
| 5           | 1     | 2-QT-111-AB  | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL LUBE OIL BEFORE AND AFTER PUMP   | AUXILIARY   | 579.00     | AB EMER DSL LUBE OIL PIT      |
| 5           | 2     | 2-QT-111-CD  | 0      | DIESEL LUBE OIL / CD EMERGENCY DIESEL LUBE OIL BEFORE AND AFTER PUMP   | AUXILIARY   | 579.00     | CD EMER DSL LUBE OIL PIT      |
| 5           | 1     | 2-QT-117-AB  | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL LUBE OIL HEATER QT-116-AB PUMP   | AUXILIARY   | 579.00     | AB EMER DSL LUBE OIL PIT      |
| 5           | 2     | 2-QT-117-CD  | 0      | DIESEL LUBE OIL / CD EMERGENCY DIESEL LUBE OIL HEATER QT-116-CD PUMP   | AUXILIARY   | 579.00     | CD EMER DSL LUBE OIL PIT      |
| 5           | 1     | 2-QT-119-AB  | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL BYPASS LUBE OIL FILTER QT-118-AB PUMP                                  | AUXILIARY   | 579.00     | AB EMER DSL LUBE OIL PIT      |
| 5           | 2     | 2-QT-119-CD  | 0      | DIESEL LUBE OIL / CD EMERGENCY DIESEL BYPASS LUBE OIL FILTER QT-118-CD PUMP                                  | AUXILIARY   | 579.00     | CD EMER DSL LUBE OIL PIT      |
| 5           | 1     | 2-QT-130-AB1 | 0      | DIESEL JACKET WATER / AB EMERGENCY DIESEL JACKET WATER PUMP #1   | AUXILIARY   | 587.00     | AB EMER DSL GEN RM            |
| 5           | 1     | 2-QT-130-AB2 | 0      | DIESEL JACKET WATER / AB EMERGENCY DIESEL JACKET WATER PUMP #2   | AUXILIARY   | 587.00     | AB EMER DSL GEN RM            |
| 5           | 2     | 2-QT-130-CD1 | 0      | DIESEL JACKET WATER / CD EMERGENCY DIESEL JACKET WATER PUMP 1  | AUXILIARY   | 587.00     | CD EMER DSL GEN RM            |
| 5           | 2     | 2-QT-130-CD2 | 0      | DIESEL JACKET WATER / CD EMERGENCY DIESEL JACKET WATER PUMP 2  | AUXILIARY   | 587.00     | CD EMER DSL GEN RM            |
| 5           | 1     | 2-QT-135-AB  | 0      | DIESEL JACKET WATER / AB EMERGENCY DIESEL AUXILIARY JACKET WATER PUMP  | AUXILIARY   | 587.00     | AB EMER DSL GEN RM            |
| 5           | 2     | 2-QT-135-CD  | 0      | DIESEL JACKET WATER / CD EMERGENCY DIESEL AUXILIARY JACKET WATER PUMP  | AUXILIARY   | 587.00     | CD EMER DSL GEN RM            |
| 6           | 2     | 2-PP-35E     | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL PUMP  | AUXILIARY   | 573.00     | EAST RHR PUMP RM              |
| 6           | 1     | 2-PP-35W     | 0      | RESIDUAL HEAT REMOVAL / WEST RESIDUAL HEAT REMOVAL PUMP  | AUXILIARY   | 573.00     | W RHR PMP RM                  |
| 6           | 2     | 2-PP-7E      | 0      | ESSENTIAL SERVICE WATER / EAST ESSENTIAL SERVICE WATER PUMP  | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR PMP RM      |
| 6           | 1     | 2-PP-7W      | 0      | ESSENTIAL SERVICE WATER / WEST ESSENTIAL SERVICE WATER PUMP  | SCREENHOUSE | 591.00     | W ESSNTL SERV WTR PMP RM      |
| 6           | 2     | 2-PP-9E      | 0      | CONTAINMENT SPRAY / EAST CONTAINMENT SPRAY PUMP  | AUXILIARY   | 573.00     | E CONT SPRAY PMP RM           |
| 6           | 1     | 2-PP-9W      | 0      | CONTAINMENT SPRAY / WEST CONTAINMENT SPRAY PUMP  | AUXILIARY   | 573.00     | W CONT SPRAY PMP RM           |
| 7           | 2     | 2-OCR-301    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #1 BLOWDOWN SAMPLE DSR-301 CONTAINMENT ISOLATION VALVE                    | AUXILIARY   | 591.00     | VESTIBULE                     |
| 7           | 1     | 2-OCR-302    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #2 BLOWDOWN SAMPLE DSR-302 CONTAINMENT ISOLATION VALVE                    | AUXILIARY   | 591.00     | VESTIBULE                     |
| 7           | 1     | 2-OCR-303    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #3 BLOWDOWN SAMPLE DSR-303 CONTAINMENT ISOLATION VALVE                    | AUXILIARY   | 591.00     | VESTIBULE                     |
| 7           | 2     | 2-OCR-304    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #4 BLOWDOWN SAMPLE DSR-304 CONTAINMENT ISOLATION VALVE                    | AUXILIARY   | 591.00     | VESTIBULE                     |
| 7           | 2     | 2-OCR-310    | 0      | BLOWDOWN / STEAM GENERATOR OME-3-1 BLOWDOWN CONTAINMENT ISOLATION VALVE                                      | AUXILIARY   | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 7           | 1     | 2-OCR-320    | 0      | BLOWDOWN / STEAM GENERATOR OME-3-2 BLOWDOWN CONTAINMENT ISOLATION VALVE                                      | AUXILIARY   | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 7           | 1     | 2-OCR-330    | 0      | BLOWDOWN / STEAM GENERATOR OME-3-3 BLOWDOWN CONTAINMENT ISOLATION VALVE                                      | AUXILIARY   | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 7           | 2     | 2-OCR-340    | 0      | BLOWDOWN / STEAM GENERATOR OME-3-4 BLOWDOWN CONTAINMENT ISOLATION VALVE                                      | AUXILIARY   | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 7           | 12    | 2-DRV-407    | 0      | STEAM LINE DRAINS / MAIN STEAM LEADS CONDENSATION DRAIN TANK TK-150 OUTLET SHUTOFF VALVE                     | AUXILIARY   | 600.00     | MN STM LINES VERT PIPE CHASE  |

**DONALD C. COOK NUCLEAR PLANT UNIT # 2**  
**SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**  
**FOR RELAY REVIEW**

| Equip Class | Train | Equipment ID  | Rev No | System / Equipment Description  | Building    | Floor Elev | Room or Row Col               |
|-------------|-------|---------------|--------|---|-------------|------------|-------------------------------|
| 7           | 1     | 2-FRV-247     | 0      | AUXILIARY FEEDWATER / WEST MOTOR DRIVEN AUXILIARY FEED PUMP PP-3W EMERGENCY 1 in AIR OPERATED LEAKOFF GLOBE VALVE                   | TURBINE     | 591.00     | W MTR DRIVEN AUX FDWTR PMP    |
| 7           | 2     | 2-FRV-257     | 0      | AUXILIARY FEEDWATER / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP PP-3E EMERGENCY 1 in AIR OPERATED LEAKOFF VALVE                    | TURBINE     | 591.00     | E MTR DRIV AUX FEEDWTR PMP    |
| 7           | 12    | 2-FRV-258     | 0      | AUXILIARY FEEDWATER / TURBINE DRIVEN AUXILIARY FEED PUMP EMERGENCY 1 in AIR OPERATED LEAKOFF GLOBE VALVE                            | TURBINE     | 591.00     | TB DRIVEN AUX FDWTR PMP       |
| 7           | 12    | 2-GCR-314     | 0      | NITROGEN (REACTOR PLANT SERVICE) / NITROGEN SUPPLY TO ACCUMULATOR TANKS CONTAINMENT ISOLATION VALVE                                 | AUXILIARY   | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 7           | 12    | 2-GRV-341     | 0      | NITROGEN (REACTOR PLANT SERVICE) / NITROGEN SUPPLY TO ACCUMULATOR TANKS VENT VALVE  | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 2           |
| 7           | 12    | 2-HV-SGR-MD-1 | 0      | AUXILIARY BUILDING VENTILATION / CONTROL ROD DRIVE EQUIPMENT ROOM AND INVERTER AREA VENTILATION RECIRCULATING AIR INLET DAMPER      | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR AREA       |
| 7           | 12    | 2-HV-SGR-MD-2 | 0      | AUXILIARY BUILDING VENTILATION / CONTROL ROD DRIVE EQUIPMENT ROOM AND INVERTER AREA VENTILATION OUTSIDE AIR INLET DAMPER            | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR AREA       |
| 7           | 2     | 2-IRV-112     | 0      | NITROGEN (REACTOR PLANT SERVICE) / ACCUMULATOR TANK OME-6-1 NITROGEN SUPPLY/VENT VALVE  | CONTAINMENT | 612.00     | ACCUMULATOR TANK #1 AREA      |
| 7           | 1     | 2-IRV-122     | 0      | NITROGEN (REACTOR PLANT SERVICE) / ACCUMULATOR TANK OME-6-2 NITROGEN SUPPLY/VENT VALVE  | CONTAINMENT | 612.00     | ACCUMULATOR TANK #2 AREA      |
| 7           | 12    | 2-IRV-132     | 0      | NITROGEN (REACTOR PLANT SERVICE) / ACCUMULATOR TANK OME-6-3 NITROGEN SUPPLY/VENT VALVE  | CONTAINMENT | 612.00     | ACCUMULATOR TANK #3 AREA      |
| 7           | 12    | 2-IRV-142     | 0      | NITROGEN (REACTOR PLANT SERVICE) / ACCUMULATOR TANK OME-6-4 NITROGEN SUPPLY/VENT VALVE  | CONTAINMENT | 612.00     | ACCUMULATOR TANK #4 AREA      |
| 7           | 1     | 2-IRV-149     | 0      | RESIDUAL HEAT REMOVAL / WEST RESIDUAL HEAT REMOVAL TO REACTOR COOLANT LOOPS #2 AND #3 0.75 in AIR OPERATED TEST (GLOBE) VALVE       | CONTAINMENT | 612.00     | HV-CEQ-2 FAN RM               |
| 7           | 2     | 2-IRV-150     | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL TO REACTOR COOLANT LOOPS #1 AND #4 0.75 in AIR OPERATED TEST VALVE               | CONTAINMENT | 612.00     | HV-CEQ-2 FAN RM               |
| 7           | 2     | 2-IRV-156     | 0      | RESIDUAL HEAT REMOVAL / ACCUMULATOR TANK OME-6-1 0.75 in AIR OPERATED OUTLET AND SAFETY INJECTION TO RC LOOP #1 COLD LEG TEST VALVE | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 1           |
| 7           | 1     | 2-IRV-157     | 0      | RESIDUAL HEAT REMOVAL / WEST RHR AND SAFETY INJECTION TO REACTOR COOLANT LOOPS #2 AND #3 0.75 in AIR OPERATED TEST VALVE            | CONTAINMENT | 612.00     | HV-CEQ-2 FAN RM               |
| 7           | 2     | 2-IRV-158     | 0      | RESIDUAL HEAT REMOVAL / EAST RHR AND NORTH SAFETY INJECTION TO REACTOR COOLANT PUMPS #1 AND #4 0.75 in AIR OPERATED TEST VALVE      | CONTAINMENT | 612.00     | HV-CEQ-2 FAN RM               |
| 7           | 1     | 2-IRV-166     | 0      | RESIDUAL HEAT REMOVAL / ACCUMULATOR TANK OME-6-2 0.75 in AIR OPERATED OUTLET AND SAFETY INJECTION TO RC LOOP #2 COLD LEG TEST VALVE | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 2           |
| 7           | 2     | 2-IRV-176     | 0      | RESIDUAL HEAT REMOVAL / ACCUMULATOR TANK OME-6-3 0.75 in AIR OPERATED OUTLET AND SAFETY INJECTION TO RC LOOP #3 COLD LEG TEST VALVE | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 3           |
| 7           | 1     | 2-IRV-186     | 0      | RESIDUAL HEAT REMOVAL / ACCUMULATOR TANK OME-6-4 1 in AIR OPERATED OUTLET AND SAFETY INJECTION TO RC LOOP #4 COLD LEG TEST VALVE    | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 4           |
| 7           | 12    | 2-IRV-200     | 0      | SAFETY INJECTION / SAFETY INJECTION TEST LINE SHUTOFF VALVE   | AUXILIARY   | 597.00     | S SAFETY INJ PMP RM           |
| 7           | 2     | 2-IRV-310     | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17E 8 in AIR OPERATED OUTLET FLOW CONTROL VALVE                | AUXILIARY   | 609.00     | E RHR HEAT XCHGR RM           |
| 7           | 12    | 2-IRV-311     | 0      | RESIDUAL HEAT REMOVAL / RESIDUAL HEAT REMOVAL HEAT EXCHANGERS BYPASS FLOW 8 in AIR OPERATED CONTROL VALVE                           | AUXILIARY   | 609.00     | E RHR HEAT XCHGR RM           |
| 7           | 1     | 2-IRV-320     | 0      | RESIDUAL HEAT REMOVAL / WEST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17W 8 in AIR OPERATED OUTLET FLOW CONTROL VALVE                | AUXILIARY   | 609.00     | W RHR HEAT XCHGR RM           |
| 7           | 12    | 2-IRV-50      | 0      | BORON INJECTION / BORON INJECTION TO ACCUMULATOR FILL LINE CONTROL VALVE  | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 2           |
| 7           | 12    | 2-IRV-60      | 0      | SAFETY INJECTION / SAFETY INJECTION TO ACCUMULATOR FILL LINE CONTROL VALVE  | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 2           |
| 7           | 2     | 2-MCR-251     | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #1 STEAM SAMPLE MSX-101 CONTAINMENT ISOLATION VALVE  | AUXILIARY   | 591.00     | VESTIBULE                     |



**DONALD C. COOK NUCLEAR PLANT UNIT # 2**  
**SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**  
**FOR RELAY REVIEW**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description  | Building    | Floor Elev | Room or Row Col            |
|-------------|-------|--------------|--------|---|-------------|------------|----------------------------|
| 7           | 1     | 2-MCR-252    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #2 STEAM SAMPLE MSX-102 CONTAINMENT ISOLATION VALVE  | AUXILIARY   | 591.00     | VESTIBULE                  |
| 7           | 1     | 2-MCR-253    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #3 STEAM SAMPLE MSX-103 CONTAINMENT ISOLATION VALVE  | AUXILIARY   | 591.00     | VESTIBULE                  |
| 7           | 2     | 2-MCR-254    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #4 STEAM SAMPLE MSX-104 CONTAINMENT ISOLATION VALVE  | AUXILIARY   | 591.00     | VESTIBULE                  |
| 7           | 2     | 2-MRV-151    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #1 STEAM SAMPLE MSX-101 SAMPLE SHUTOFF VALVE   | CONTAINMENT | 612.00     | E CONT LOWER VENT RM       |
| 7           | 1     | 2-MRV-152    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #2 STEAM SAMPLE MSX-102 SAMPLE SHUTOFF VALVE   | CONTAINMENT | 612.00     | W CONT LOWER VENT RM       |
| 7           | 1     | 2-MRV-153    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #3 STEAM SAMPLE MSX-103 SAMPLE SHUTOFF VALVE   | CONTAINMENT | 612.00     | W CONT LOWER VENT RM       |
| 7           | 2     | 2-MRV-154    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #4 STEAM SAMPLE MSX-104 SAMPLE SHUTOFF VALVE   | CONTAINMENT | 612.00     | E CONT LOWER VENT RM       |
| 7           | 2     | 2-MRV-211    | 0      | MAIN STEAM / STEAM GENERATOR #1 STOP VALVE MRV-210 STEAM CYLINDER TRAIN 'A' DUMP VALVE  | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL       |
| 7           | 2     | 2-MRV-212    | 0      | MAIN STEAM / STEAM GENERATOR #1 STOP VALVE MRV-210 STEAM CYLINDER TRAIN 'B' DUMP VALVE  | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL       |
| 7           | 1     | 2-MRV-221    | 0      | MAIN STEAM / STEAM GENERATOR #2 STOP VALVE MRV-220 STEAM CYLINDER TRAIN 'A' DUMP VALVE  | AUXILIARY   | 633.00     | W MN STM STOP ENCL         |
| 7           | 1     | 2-MRV-222    | 0      | MAIN STEAM / STEAM GENERATOR #2 STOP VALVE MRV-220 STEAM CYLINDER TRAIN 'B' DUMP VALVE  | AUXILIARY   | 633.00     | W MN STM STOP ENCL         |
| 7           | 1     | 2-MRV-231    | 0      | MAIN STEAM / STEAM GENERATOR #3 STOP VALVE MRV-230 STEAM CYLINDER TRAIN 'A' DUMP VALVE  | AUXILIARY   | 633.00     | W MN STM STOP ENCL         |
| 7           | 1     | 2-MRV-232    | 0      | MAIN STEAM / STEAM GENERATOR #3 STOP VALVE MRV-230 STEAM CYLINDER TRAIN 'B' DUMP VALVE  | AUXILIARY   | 633.00     | W MN STM STOP ENCL         |
| 7           | 2     | 2-MRV-241    | 0      | MAIN STEAM / STEAM GENERATOR #4 STOP VALVE MRV-240 STEAM CYLINDER TRAIN 'A' DUMP VALVE  | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL       |
| 7           | 2     | 2-MRV-242    | 0      | MAIN STEAM / STEAM GENERATOR #4 STOP VALVE MRV-240 STEAM CYLINDER TRAIN 'B' DUMP VALVE  | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL       |
| 7           | 2     | 2-NRV-101    | 0      | NUCLEAR SAMPLING / REACTOR COOLANT LOOP #1 HOT LEG SAMPLE NSX-101 SHUTOFF VALVE   | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 1        |
| 7           | 12    | 2-NRV-102    | 0      | NUCLEAR SAMPLING / PRESSURIZER LIQUID SPACE SAMPLE NSX-102 SHUTOFF VALVE  | CONTAINMENT | 612.00     | INSTRUMENTATION RM         |
| 7           | 1     | 2-NRV-103    | 0      | NUCLEAR SAMPLING / REACTOR COOLANT LOOP #3 HOT LEG SAMPLE NSX-103 SHUTOFF VALVE   | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 3        |
| 7           | 12    | 2-NRV-104    | 0      | NUCLEAR SAMPLING / PRESSURIZER STEAM SPACE SAMPLE NSX-104 SHUTOFF VALVE   | CONTAINMENT | 612.00     | INSTRUMENTATION RM         |
| 7           | 1     | 2-NRV-151    | 0      | PRESSURIZER / PRESSURIZER TRAIN 'B' PRESSURE RELIEF VALVE   | CONTAINMENT | 650.00     | PRESSURIZER ENCL, INTERIOR |
| 7           | 1     | 2-NRV-152    | 0      | PRESSURIZER / PRESSURIZER TRAIN 'B' PRESSURE RELIEF VALVE   | CONTAINMENT | 650.00     | PRESSURIZER ENCL, INTERIOR |
| 7           | 2     | 2-NRV-153    | 0      | PRESSURIZER / PRESSURIZER OME-4 TRAIN 'A' PRESSURE RELIEF VALVE   | CONTAINMENT | 650.00     | PRESSURIZER ENCL, INTERIOR |
| 7           | 12    | 2-QRV-10     | 0      | REACTOR COOLANT PUMP SEAL WATER IN/LEAKOFF / REACTOR COOLANT PUMP #1 SEAL #1 LEAKOFF TO RCP SEAL WATER RETURN FILTER QC-109 2 IN AIR OPERATED SHUTOFF VALVE         | CONTAINMENT | 617.00     | LOWER CONT, QUAD NO. 1     |
| 7           | 2     | 2-QRV-111    | 0      | LETDOWN (CVCS) / REACTOR COOLANT NORMAL LETDOWN TRAIN 'A' SHUTOFF VALVE   | CONTAINMENT | 612.00     | LOWER CONT, QUAD NO. 4     |
| 7           | 2     | 2-QRV-112    | 0      | LETDOWN (CVCS) / REACTOR COOLANT NORMAL LETDOWN TRAIN 'B' SHUTOFF VALVE   | CONTAINMENT | 612.00     | LOWER CONT, QUAD NO. 4     |
| 7           | 1     | 2-QRV-113    | 0      | LETDOWN (CVCS) / REACTOR COOLANT EXCESS LETDOWN TO EXCESS LETDOWN HEAT EXCHANGER HE-13 1 IN AIR OPERATED TRAIN 'B' SHUTOFF VALVE                                    | CONTAINMENT | 612.00     | LOWER CONT, QUAD NO. 4     |
| 7           | 2     | 2-QRV-114    | 0      | LETDOWN (CVCS) / REACTOR COOLANT EXCESS LETDOWN TO EXCESS LETDOWN HEAT EXCHANGER HE-13 1 IN AIR OPERATED TRAIN 'A' SHUTOFF VALVE                                    | CONTAINMENT | 612.00     | LOWER CONT, QUAD NO. 4     |
| 7           | 12    | 2-QRV-150    | 0      | REACTOR COOLANT PUMP SEAL WATER IN/LEAKOFF / REACTOR COOLANT PUMPS STARTUP SEAL SYSTEM BYPASS TO SEAL WATER RETURN FILTER QC-109 0.75 IN AIR OPERATED SHUTOFF VALVE | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 2        |
| 7           | 12    | 2-QRV-170    | 0      | LETDOWN (CVCS) / EXCESS LETDOWN HEAT EXCHANGER HE-13 1 IN AIR OPERATED OUTLET PRESSURE CONTROL VALVE  | CONTAINMENT | 612.00     | REGEN HEAT XCHGR RM        |

**DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR RELAY REVIEW**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description   | Building    | Floor Elev | Room or Row Col            |
|-------------|-------|--------------|--------|--|-------------|------------|----------------------------|
| 7           | 12    | 2-QRV-171    | 0      | LETDOWN (CVCS) / EXCESS LETDOWN HEAT EXCHANGER HE-13 1 IN AIR OPERATED OUTLET DIVERSION VALVE  | CONTAINMENT | 612.00     | REGEN HEAT XCHGR RM        |
| 7           | 12    | 2-QRV-20     | 0      | REACTOR COOLANT PUMP SEAL WATER INJ/LEAKOFF / REACTOR COOLANT PUMP #2 SEAL #1 LEAKOFF TO RCP SEAL WATER RETURN FILTER QC-109 2 IN AIR OPERATED SHUTOFF GLOBE VALVE | CONTAINMENT | 625.00     | LOWER CONT, QUAD NO. 2     |
| 7           | 12    | 2-QRV-251    | 0      | CHARGING (CVCS) / CVCS CENTRIFUGAL CHARGING PUMPS DISCHARGE FLOW 3 IN AIR OPERATED CONTROL GLOBE VALVE   | AUXILIARY   | 587.00     | RECIPROCATING CHARG PMP RM |
| 7           | 12    | 2-QRV-30     | 0      | REACTOR COOLANT PUMP SEAL WATER INJ/LEAKOFF / REACTOR COOLANT PUMP #3 SEAL #1 LEAKOFF TO RCP SEAL WATER RETURN FILTER QC-109 2 IN AIR OPERATED SHUTOFF GLOBE VALVE | CONTAINMENT | 612.00     | LOWER CONT, QUAD NO. 3     |
| 7           | 12    | 2-QRV-40     | 0      | REACTOR COOLANT PUMP SEAL WATER INJ/LEAKOFF / REACTOR COOLANT PUMP #4 SEAL #1 LEAKOFF TO RCP SEAL WATER RETURN FILTER QC-109 2 IN AIR OPERATED SHUTOFF GLOBE VALVE | CONTAINMENT | 612.00     | LOWER CONT, QUAD NO. 4     |
| 7           | 12    | 2-QRV-400    | 0      | BORON MAKEUP (CVCS) / SOUTH BORIC ACID BLENDER QP-21 2 IN AIR OPERATED TO CVCS CHARGING PUMPS SUCTION SHUTOFF VALVE  | AUXILIARY   | 609.00     | VOL CTRL TANK E HALLWAY    |
| 7           | 12    | 2-QRV-421    | 0      | BORON MAKEUP (CVCS) / SOUTH BORIC ACID FILTER TO CVCS CHARGING PUMPS AND SOUTH BORIC ACID BLENDER 1 IN AIR OPERATED FLOW CONTROL GLOBE VALVE                       | AUXILIARY   | 587.00     | BORIC ACID STOR TANK AREA  |
| 7           | 12    | 2-QRV-430    | 0      | BORON MAKEUP (CVCS) / SOUTH BORIC ACID STORAGE TANK TK-12S 2 IN AIR OPERATED INLET FLOW CONTROL GLOBE VALVE  | AUXILIARY   | 587.00     | BORIC ACID STOR TANK AREA  |
| 7           | 12    | 2-QRV-451    | 0      | BORON MAKEUP (CVCS) / SOUTH BORIC ACID BLENDER QP-21 TO REACTOR COOLANT LETDOWN VOLUME CONTROL TANK SHUTOFF VALVE  | AUXILIARY   | 609.00     | VOL CTRL TANK E HALLWAY    |
| 7           | 2     | 2-VRV-315    | 0      | CONTROL ROOM AIR CONDITIONING CHILL WATER / CONTROL ROOM VENTILATION UNIT HV-ACRA-1 CHILL WATER INLET/BYPASS VALVE   | AUXILIARY   | 650.00     | CTRL RM AIR CONDIT RM      |
| 7           | 1     | 2-VRV-325    | 0      | CONTROL ROOM AIR CONDITIONING CHILL WATER / CONTROL ROOM VENTILATION UNIT HV-ACRA-2 CHILL WATER INLET/BYPASS VALVE   | AUXILIARY   | 650.00     | CTRL RM AIR CONDIT RM      |
| 7           | 1     | 2-WRV-728-AB | 0      | ESSENTIAL SERVICE WATER / AB EMERGENCY DIESEL SOUTH COMBUSTION AIR AFTERCOOLER HE-47-ABS ESW INLET/BYPASS VALVE  | AUXILIARY   | 587.00     | AB EMER DSL GEN RM         |
| 7           | 2     | 2-WRV-763    | 0      | ESSENTIAL SERVICE WATER / EAST ESSENTIAL SERVICE WATER PUMP PP-7E DISCHARGE STRAINER WEST BASKET BACKWASH OUTLET SHUTOFF VALVE                                     | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR PMP RM   |
| 7           | 1     | 2-WRV-764    | 0      | ESSENTIAL SERVICE WATER / WEST ESSENTIAL SERVICE WATER PUMP PP-7W DISCHARGE STRAINER WEST BASKET BACKWASH OUTLET SHUTOFF VALVE                                     | SCREENHOUSE | 591.00     | W ESSNTL SERV WTR PMP RM   |
| 7           | 2     | 2-WRV-768    | 0      | ESSENTIAL SERVICE WATER / EAST ESSENTIAL SERVICE WATER PUMP PP-7E DISCHARGE STRAINER WEST BASKET BACKWASH INLET SHUTOFF VALVE                                      | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR PMP RM   |
| 7           | 1     | 2-WRV-769    | 0      | ESSENTIAL SERVICE WATER / WEST ESSENTIAL SERVICE WATER PUMP PP-7W DISCHARGE STRAINER WEST BASKET BACKWASH INLET SHUTOFF VALVE                                      | SCREENHOUSE | 591.00     | W ESSNTL SERV WTR PMP RM   |
| 7           | 2     | 2-WRV-773    | 0      | ESSENTIAL SERVICE WATER / EAST ESSENTIAL SERVICE WATER PUMP PP-7E DISCHARGE STRAINER EAST BASKET BACKWASH OUTLET SHUTOFF VALVE                                     | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR PMP RM   |
| 7           | 1     | 2-WRV-774    | 0      | ESSENTIAL SERVICE WATER / WEST ESSENTIAL SERVICE WATER PUMP PP-7W DISCHARGE STRAINER EAST BASKET BACKWASH OUTLET SHUTOFF VALVE                                     | SCREENHOUSE | 591.00     | W ESSNTL SERV WTR PMP RM   |
| 7           | 2     | 2-WRV-778    | 0      | ESSENTIAL SERVICE WATER / EAST ESSENTIAL SERVICE WATER PUMP PP-7E DISCHARGE STRAINER EAST BASKET BACKWASH INLET SHUTOFF VALVE                                      | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR PMP RM   |
| 7           | 1     | 2-WRV-779    | 0      | ESSENTIAL SERVICE WATER / WEST ESSENTIAL SERVICE WATER PUMP PP-7W DISCHARGE STRAINER EAST BASKET BACKWASH INLET SHUTOFF VALVE                                      | SCREENHOUSE | 591.00     | W ESSNTL SERV WTR PMP RM   |
| 7           | 1     | 2-XRV-220    | 0      | DIESEL STARTING AIR / AB EMERGENCY DIESEL STARTING AIR JET ASSIST CONTROL VALVE  | AUXILIARY   | 587.00     | AB EMER DSL GEN RM         |
| 7           | 1     | 2-XRV-222    | 0      | DIESEL STARTING AIR / AB EMERGENCY DIESEL REAR BANK STARTING AIR SHUTOFF VALVE   | AUXILIARY   | 587.00     | AB EMER DSL GEN RM         |
| 7           | 2     | 2-XRV-225    | 0      | DIESEL STARTING AIR / CD EMERGENCY DIESEL STARTING AIR JET ASSIST CONTROL VALVE  | AUXILIARY   | 587.00     | CD EMER DSL GEN RM         |

**DONALD C. COOK NUCLEAR PLANT UNIT # 2**  
**SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**  
**FOR RELAY REVIEW**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description  | Building  | Floor Elev | Room or Row Col                     |
|-------------|-------|--------------|--------|---|-----------|------------|-------------------------------------|
| 7           | 2     | 2-XRV-226    | 0      | DIESEL STARTING AIR / CD EMERGENCY<br>DIESEL FRONT BANK STARTING AIR<br>SHUTOFF VALVE   | AUXILIARY | 587.00     | CD EMER DSL GEN<br>RM               |
| 7           | 2     | 2-XRV-227    | 0      | DIESEL STARTING AIR / CD EMERGENCY<br>DIESEL REAR BANK STARTING AIR<br>SHUTOFF VALVE  | AUXILIARY | 587.00     | CD EMER DSL GEN<br>RM               |
| 8           | 2     | 2-CCM-451    | 0      | COMPONENT COOLING WATER / RC PUMPS<br>BEARING OIL COOLERS CCW RETURN<br>HEADER TRAIN 'A' CONTAINMENT<br>ISOLATION VALVE                               | AUXILIARY | 591.00     | STARTUP<br>BLOWDOWN<br>FLASHTANK RM |
| 8           | 1     | 2-CCM-452    | 0      | COMPONENT COOLING WATER / RC PUMPS<br>BEARING OIL COOLERS CCW RETURN<br>HEADER TRAIN 'B' CONTAINMENT<br>ISOLATION VALVE                               | AUXILIARY | 591.00     | STARTUP<br>BLOWDOWN<br>FLASHTANK RM |
| 8           | 2     | 2-CCM-453    | 0      | COMPONENT COOLING WATER / RCP<br>THERMAL BARRIER COMPONENT COOLING<br>WATER OUTLET TRAIN 'A' CONTAINMENT<br>ISOLATION VALVE                           | AUXILIARY | 591.00     | STARTUP<br>BLOWDOWN<br>FLASHTANK RM |
| 8           | 1     | 2-CCM-454    | 0      | COMPONENT COOLING WATER / RC PUMPS<br>THERMAL BARRIER CCW RETURN HEADER<br>TRAIN 'B' CONTAINMENT ISOLATION VALVE                                      | AUXILIARY | 591.00     | STARTUP<br>BLOWDOWN<br>FLASHTANK RM |
| 8           | 2     | 2-CCM-458    | 0      | COMPONENT COOLING WATER /<br>COMPONENT COOLING WATER TO<br>REACTOR COOLANT PUMPS TRAIN 'A'<br>CONTAINMENT ISOLATION VALVE                             | AUXILIARY | 591.00     | STARTUP<br>BLOWDOWN<br>FLASHTANK RM |
| 8           | 1     | 2-CCM-459    | 0      | COMPONENT COOLING WATER /<br>COMPONENT COOLING WATER TO<br>REACTOR COOLANT PUMPS TRAIN 'B'<br>CONTAINMENT ISOLATION VALVE                             | AUXILIARY | 591.00     | STARTUP<br>BLOWDOWN<br>FLASHTANK RM |
| 8           | 2     | 2-CMO-410    | 0      | COMPONENT COOLING WATER / EAST<br>COMPONENT COOLING WATER HEAT<br>EXCHANGER HE-15E COMPONENT<br>COOLING WATER OUTLET SHUTOFF VALVE                    | AUXILIARY | 609.00     | 609 HALLWAY                         |
| 8           | 2     | 2-CMO-411    | 0      | COMPONENT COOLING WATER /<br>COMPONENT COOLING WATER PUMPS<br>SUCTION CROSSTIE TRAIN 'A' SHUTOFF<br>VALVE   | AUXILIARY | 609.00     | 609 HALLWAY                         |
| 8           | 2     | 2-CMO-412    | 0      | COMPONENT COOLING WATER /<br>COMPONENT COOLING WATER PUMPS<br>DISCHARGE CROSSTIE TRAIN 'A' SHUTOFF<br>VALVE   | AUXILIARY | 609.00     | 609 HALLWAY                         |
| 8           | 1     | 2-CMO-413    | 0      | COMPONENT COOLING WATER /<br>COMPONENT COOLING WATER PUMPS<br>SUCTION CROSSTIE TRAIN 'B' SHUTOFF<br>VALVE   | AUXILIARY | 609.00     | 609 HALLWAY                         |
| 8           | 1     | 2-CMO-414    | 0      | COMPONENT COOLING WATER /<br>COMPONENT COOLING WATER PUMPS<br>DISCHARGE CROSSTIE TRAIN 'B' SHUTOFF<br>VALVE   | AUXILIARY | 609.00     | 609 HALLWAY                         |
| 8           | 2     | 2-CMO-415    | 0      | COMPONENT COOLING WATER /<br>COMPONENT COOLING WATER TO<br>MISCELLANEOUS SERVICE TRAIN 'A'<br>SHUTOFF VALVE   | AUXILIARY | 609.00     | 609 HALLWAY                         |
| 8           | 1     | 2-CMO-416    | 0      | COMPONENT COOLING WATER / CCW TO<br>MISCELLANEOUS SERVICE HEADER 'B' 16 in<br>MOTOR OPERATED SHUTOFF VALVE  | AUXILIARY | 609.00     | 609 HALLWAY                         |
| 8           | 2     | 2-CMO-419    | 0      | COMPONENT COOLING WATER / EAST<br>RESIDUAL HEAT REMOVAL HEAT<br>EXCHANGER HE-17E COMPONENT<br>COOLING WATER OUTLET SHUTOFF VALVE                      | AUXILIARY | 609.00     | 609 HALLWAY                         |
| 8           | 1     | 2-CMO-420    | 0      | COMPONENT COOLING WATER / WEST<br>COMPONENT COOLING WATER HEAT<br>EXCHANGER COMPONENT COOLING<br>WATER OUTLET SHUTOFF VALVE                           | AUXILIARY | 609.00     | 609 HALLWAY                         |
| 8           | 1     | 2-CMO-429    | 0      | COMPONENT COOLING WATER / WEST RHR<br>HEAT EXCHANGER HE-17W CCW OUTLET<br>SHUTOFF VALVE   | AUXILIARY | 633.00     | 633 HALLWAY                         |
| 8           | 1     | 2-FMO-211    | 0      | AUXILIARY FEEDWATER / TURBINE DRIVEN<br>AUXILIARY FEED PUMP PP-4 DISCHARGE<br>TO STEAM GENERATOR OME-3-1 4 in<br>MOTOR OPERATED CONTROL VALVE         | AUXILIARY | 612.00     | E MAIN STM STOP<br>ENCL             |
| 8           | 1     | 2-FMO-212    | 0      | AUXILIARY FEEDWATER / WEST MOTOR<br>DRIVEN AUXILIARY FEEDWATER PUMP<br>SUPPLY TO STEAM GENERATOR OME-3-1 4<br>in MOTOR OPERATED CONTROL VALVE         | AUXILIARY | 612.00     | E MAIN STM STOP<br>ENCL             |
| 8           | 2     | 2-FMO-221    | 0      | AUXILIARY FEEDWATER / TURBINE DRIVEN<br>AUXILIARY FEED PUMP PP-4 DISCHARGE<br>TO STEAM GENERATOR OME-3-2 4 in<br>MOTOR OPERATED CONTROL VALVE         | AUXILIARY | 591.00     | STARTUP<br>BLOWDOWN<br>FLASHTANK RM |
| 8           | 2     | 2-FMO-222    | 0      | AUXILIARY FEEDWATER / EAST MOTOR<br>DRIVEN AUXILIARY FEEDWATER PUMP PP-<br>3E SUPPLY TO STEAM GENERATOR OME-3-<br>2 4 in MOTOR OPERATED CONTROL VALVE | AUXILIARY | 591.00     | STARTUP<br>BLOWDOWN<br>FLASHTANK RM |
| 8           | 2     | 2-FMO-231    | 0      | AUXILIARY FEEDWATER / TURBINE DRIVEN<br>AUXILIARY FEED PUMP SUPPLY TO STEAM<br>GENERATOR OME-3-3 4 in MOTOR<br>OPERATED CONTROL VALVE                 | AUXILIARY | 591.00     | STARTUP<br>BLOWDOWN<br>FLASHTANK RM |
| 8           | 2     | 2-FMO-232    | 0      | AUXILIARY FEEDWATER / EAST MOTOR<br>DRIVEN AUXILIARY FEEDWATER PUMP PP-<br>3E SUPPLY TO STEAM GENERATOR OME-3-<br>3 4 in MOTOR OPERATED CONTROL VALVE | AUXILIARY | 591.00     | STARTUP<br>BLOWDOWN<br>FLASHTANK RM |

**DONALD C. COOK NUCLEAR PLANT UNIT # 2**  
**SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**  
**FOR RELAY REVIEW**

| Equip Class | Train | Equipment ID  | Rev No | System / Equipment Description  | Building    | Floor Elev | Room or Row Col                 |
|-------------|-------|---------------|--------|---|-------------|------------|---------------------------------|
| 8           | 1     | 2-FMO-241     | 0      | AUXILIARY FEEDWATER / TURBINE DRIVEN<br>AUXILIARY FEED PUMP SUPPLY TO STEAM<br>GENERATOR OME-3-4 4 in MOTOR<br>OPERATED CONTROL VALVE         | AUXILIARY   | 612.00     | E MAIN STM STOP<br>ENCL         |
| 8           | 1     | 2-FMO-242     | 0      | AUXILIARY FEEDWATER / WEST MOTOR<br>DRIVEN AUXILIARY FEEDWATER PUMP<br>SUPPLY TO STEAM GENERATOR OME-3-4 4<br>in MOTOR OPERATED CONTROL VALVE | AUXILIARY   | 612.00     | E MAIN STM STOP<br>ENCL         |
| 8           | 1     | 2-HV-DOP-AB1  | 0      | DIESEL ROOM VENTILATION / AB<br>EMERGENCY DIESEL GENERATOR ROOM<br>VENTILATION EXHAUST FAN HV-DGX-2<br>TEMPERING AIR DAMPER                   | AUXILIARY   | 587.00     | AB EMER DSL GEN<br>RM           |
| 8           | 1     | 2-HV-DOP-AB2  | 0      | DIESEL ROOM VENTILATION / AB<br>EMERGENCY DIESEL GENERATOR ROOM<br>VENTILATION SUPPLY FAN HV-DGS-2<br>TEMPERING AIR DAMPER                    | AUXILIARY   | 587.00     | AB EMER DSL GEN<br>RM           |
| 8           | 2     | 2-HV-DOP-CD1  | 0      | DIESEL ROOM VENTILATION / CD<br>EMERGENCY DIESEL GENERATOR ROOM<br>VENTILATION EXHAUST FAN HV-DGX-1<br>TEMPERING AIR DAMPER                   | AUXILIARY   | 587.00     | CD EMER DSL GEN<br>RM           |
| 8           | 2     | 2-HV-DOP-CD2  | 0      | DIESEL ROOM VENTILATION / CD<br>EMERGENCY DIESEL GENERATOR ROOM<br>VENTILATION SUPPLY FAN HV-DGS-1<br>TEMPERING AIR DAMPER                    | AUXILIARY   | 587.00     | CD EMER DSL GEN<br>RM           |
| 8           | 1     | 2-HV-DGS-DAB  | 0      | DIESEL ROOM VENTILATION / AB<br>EMERGENCY DIESEL GENERATOR ROOM<br>VENTILATION SUPPLY FAN HV-DGS-1<br>OUTSIDE AIR SHUTOFF DAMPER              | AUXILIARY   | 598.00     | INNER PLANT<br>GROUNDS          |
| 8           | 2     | 2-HV-DGS-DCD  | 0      | DIESEL ROOM VENTILATION / CD<br>EMERGENCY DIESEL GENERATOR ROOM<br>VENTILATION SUPPLY FAN HV-DGS-2<br>OUTSIDE AIR SHUTOFF DAMPER              | AUXILIARY   | 598.00     | RCTR CABLE TUNN,<br>QUAD 2      |
| 8           | 1     | 2-HV-SGR-MD-3 | 0      | AUXILIARY BUILDING VENTILATION / 4KV RM<br>600 VOLT SWITCHGEAR XFORMERS TR21A<br>& TR21C AREA VENT SUPPLY FAN HV-<br>SGRS-8 SUCTION DAMPER    | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR<br>AREA      |
| 8           | 2     | 2-HV-SGR-MD-4 | 0      | AUXILIARY BUILDING VENTILATION / 4KV<br>ROOM 600V SWITCHGEAR TRANSFORMERS<br>AREA VENTILATION SUPPLY FAN HV-SGRS-<br>7 SUCTION DAMPER         | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR<br>AREA      |
| 8           | 1     | 2-HV-SGR-MD-5 | 0      | AUXILIARY BUILDING VENTILATION / 600VAC<br>MOTOR CONTROL CENTER MEZZANINE<br>AREA VENTILATION SUPPLY FAN HV-SGRS-<br>9 VENT DAMPER            | AUXILIARY   | 613.00     | 4KV ROOM -<br>MEZZANINE AREA    |
| 8           | 12    | 2-ICM-111     | 0      | RESIDUAL HEAT REMOVAL / RHR TO<br>REACTOR COOLANT LOOPS #2 & #3 COLD<br>LEGS CONTAINMENT ISOLATION VALVE                                      | CONTAINMENT | 598.00     | ANNULUS, QUAD NO.<br>2          |
| 8           | 2     | 2-ICM-129     | 0      | RESIDUAL HEAT REMOVAL / REACTOR<br>COOLANT LOOP #2 HOT LEG TO RESIDUAL<br>HEAT REMOVAL PUMPS SUCTION<br>CONTAINMENT ISOLATION VALVE           | CONTAINMENT | 598.00     | ANNULUS, QUAD NO.<br>2          |
| 8           | 2     | 2-ICM-250     | 0      | BORON INJECTION / BORON INJECTION<br>TANK TRAIN 'A' OUTLET CONTAINMENT<br>ISOLATION VALVE   | AUXILIARY   | 612.00     | BORON INJ TANK<br>OUTLET VLV RM |
| 8           | 1     | 2-ICM-251     | 0      | BORON INJECTION / BORON INJECTION<br>TANK TRAIN 'B' OUTLET CONTAINMENT<br>ISOLATION VALVE   | AUXILIARY   | 612.00     | BORON INJ TANK<br>OUTLET VLV RM |
| 8           | 2     | 2-ICM-260     | 0      | SAFETY INJECTION / NORTH SAFETY<br>INJECTION PUMP PP-26N DISCHARGE<br>CONTAINMENT ISOLATION VALVE   | AUXILIARY   | 587.00     | N SAFETY INJ PMP<br>RM          |
| 8           | 1     | 2-ICM-265     | 0      | SAFETY INJECTION / SOUTH SAFETY<br>INJECTION PUMP PP-26S DISCHARGE<br>CONTAINMENT ISOLATION VALVE   | AUXILIARY   | 587.00     | S SAFETY INJ PMP<br>RM          |
| 8           | 2     | 2-ICM-305     | 0      | RESIDUAL HEAT REMOVAL /<br>RECIRCULATION SUMP TO EAST RHR/CTS<br>PUMPS SUCTION CONTAINMENT ISOLATION<br>VALVE                                 | AUXILIARY   | 591.00     | VESTIBULE                       |
| 8           | 1     | 2-ICM-306     | 0      | RESIDUAL HEAT REMOVAL /<br>RECIRCULATION SUMP TO WEST RHR/CTS<br>PUMPS SUCTION CONTAINMENT ISOLATION<br>VALVE                                 | AUXILIARY   | 591.00     | VESTIBULE                       |
| 8           | 2     | 2-ICM-311     | 0      | RESIDUAL HEAT REMOVAL / EAST<br>RESIDUAL HEAT REMOVAL TO RC LOOPS #1<br>AND #4 COLD LEGS CONTAINMENT<br>ISOLATION VALVE                       | AUXILIARY   | 609.00     | E RHR HEAT XCHGR<br>RM          |
| 8           | 1     | 2-ICM-321     | 0      | RESIDUAL HEAT REMOVAL / WEST RHR TO<br>REACTOR COOLANT LOOPS #2 AND #3<br>COLD LEGS CONTAINMENT ISOLATION<br>VALVE                            | AUXILIARY   | 609.00     | W RHR HEAT XCHGR<br>RM          |
| 8           | 1     | 2-IMO-128     | 0      | RESIDUAL HEAT REMOVAL / REACTOR<br>COOLANT LOOP #2 HOT LEG TO RESIDUAL<br>HEAT REMOVAL PUMPS SUCTION SHUTOFF<br>VALVE                         | CONTAINMENT | 617.00     | LOWER CONT, QUAD<br>NO. 2       |
| 8           | 2     | 2-IMO-210     | 0      | CONTAINMENT SPRAY / EAST<br>CONTAINMENT SPRAY PUMP PP-9E 10 in<br>MOTOR OPERATED DISCHARGE SHUTOFF<br>VALVE                                   | AUXILIARY   | 573.00     | E CONT SPRAY PMP<br>RM          |
| 8           | 2     | 2-IMO-211     | 0      | CONTAINMENT SPRAY / EAST<br>CONTAINMENT SPRAY PUMP PP-9E 10 in<br>MOTOR OPERATED DISCHARGE SHUTOFF<br>VALVE                                   | AUXILIARY   | 573.00     | E CONT SPRAY PMP<br>RM          |



**DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR RELAY REVIEW**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description  | Building    | Floor Elev | Room or Row Col         |
|-------------|-------|--------------|--------|---|-------------|------------|-------------------------|
| 8           | 2     | 2-IMO-212    | 0      | CONTAINMENT SPRAY / EAST<br>CONTAINMENT SPRAY PUMP PP-9E 2 in<br>MOTOR OPERATED DISCHARGE TO<br>CONTAINMENT SPRAY ADDITIVE EDUCTOR<br>SHUTOFF VALVE | AUXILIARY   | 573.00     | E CONT SPRAY PMP<br>RM  |
| 8           | 2     | 2-IMO-215    | 0      | CONTAINMENT SPRAY / REFUELING WATER<br>STORAGE TANK TO EAST CONTAINMENT<br>SPRAY PUMP PP-9E SUCTION 12 in MOTOR<br>OPERATED SHUTOFF VALVE           | AUXILIARY   | 573.00     | E CONT SPRAY PMP<br>RM  |
| 8           | 1     | 2-IMO-220    | 0      | CONTAINMENT SPRAY / WEST<br>CONTAINMENT SPRAY PUMP PP-9W 10 in<br>MOTOR OPERATED DISCHARGE SHUTOFF<br>VALVE   | AUXILIARY   | 573.00     | W CONT SPRAY PMP<br>RM  |
| 8           | 1     | 2-IMO-221    | 0      | CONTAINMENT SPRAY / WEST<br>CONTAINMENT SPRAY PUMP PP-9W<br>DISCHARGE SHUTOFF 10 in MOTOR<br>OPERATED VALVE   | AUXILIARY   | 573.00     | W CONT SPRAY PMP<br>RM  |
| 8           | 1     | 2-IMO-222    | 0      | CONTAINMENT SPRAY / WEST<br>CONTAINMENT SPRAY PUMP PP-9W<br>DISCHARGE TO CONTAINMENT SPRAY<br>ADDITIVE EDUCTOR 2 in MOTOR OPERATED<br>SHUTOFF VALVE | AUXILIARY   | 573.00     | W CONT SPRAY PMP<br>RM  |
| 8           | 1     | 2-IMO-225    | 0      | CONTAINMENT SPRAY / REFUELING WATER<br>STORAGE TANK TO WEST CONTAINMENT<br>SPRAY PUMP PP-9W SUCTION 12 in MOTOR<br>OPERATED SHUTOFF VALVE           | AUXILIARY   | 573.00     | W CONT SPRAY PMP<br>RM  |
| 8           | 2     | 2-IMO-255    | 0      | BORON INJECTION / BORON INJECTION<br>TANK TRAIN 'A' INLET SHUTOFF VALVE   | AUXILIARY   | 612.00     | BORON INJ TANK RM       |
| 8           | 1     | 2-IMO-256    | 0      | BORON INJECTION / BORON INJECTION<br>TANK TRAIN 'B' INLET SHUTOFF VALVE   | AUXILIARY   | 612.00     | BORON INJ TANK RM       |
| 8           | 12    | 2-IMO-261    | 0      | REFUELING WATER STORAGE TANK<br>SUPPLY / REFUELING WATER STORAGE<br>TANK TK-33 SUPPLY TO SAFETY INJECTION<br>PUMPS SHUTOFF VALVE                    | AUXILIARY   | 587.00     | S SAFETY INJ PMP<br>RM  |
| 8           | 2     | 2-IMO-262    | 0      | REFUELING WATER STORAGE TANK<br>SUPPLY / SAFETY INJECTION PUMPS<br>RECIRC TO REFUELING WATER STORAGE<br>TANK TK-33 TRAIN 'A' SHUTOFF VALVE          | AUXILIARY   | 587.00     | N SAFETY INJ PMP<br>RM  |
| 8           | 1     | 2-IMO-263    | 0      | REFUELING WATER STORAGE TANK<br>SUPPLY / SAFETY INJECTION PUMPS<br>RECIRC TO REFUELING WATER STORAGE<br>TANK TK-33 TRAIN 'B' SHUTOFF VALVE          | AUXILIARY   | 587.00     | N SAFETY INJ PMP<br>RM  |
| 8           | 2     | 2-IMO-270    | 0      | SAFETY INJECTION / SAFETY INJECTION<br>PUMPS DISCHARGE CROSSTIE TRAIN 'A'<br>SHUTOFF VALVE  | AUXILIARY   | 587.00     | N SAFETY INJ PMP<br>RM  |
| 8           | 1     | 2-IMO-275    | 0      | SAFETY INJECTION / SAFETY INJECTION<br>PUMPS DISCHARGE CROSSTIE TRAIN 'B'<br>SHUTOFF VALVE  | AUXILIARY   | 587.00     | S SAFETY INJ PMP<br>RM  |
| 8           | 2     | 2-IMO-310    | 0      | RESIDUAL HEAT REMOVAL / EAST<br>RESIDUAL HEAT REMOVAL PUMP PP-35E<br>SUCTION SHUTOFF VALVE  | AUXILIARY   | 573.00     | EAST RHR PUMP RM        |
| 8           | 2     | 2-IMO-312    | 0      | RESIDUAL HEAT REMOVAL / EAST<br>RESIDUAL HEAT REMOVAL HEAT<br>EXCHANGER HE-17E OUTLET MINI-FLOW<br>LINE SHUTOFF VALVE                               | AUXILIARY   | 609.00     | E RHR HEAT XCHGR<br>RM  |
| 8           | 2     | 2-IMO-314    | 0      | RESIDUAL HEAT REMOVAL / EAST<br>RESIDUAL HEAT REMOVAL PUMP PP-35E<br>DISCHARGE CROSSTIE SHUTOFF VALVE   | AUXILIARY   | 609.00     | E RHR HEAT XCHGR<br>RM  |
| 8           | 2     | 2-IMO-315    | 0      | RESIDUAL HEAT REMOVAL / EAST RHR AND<br>NORTH SAFETY INJECTION TO REACTOR<br>COOLANT LOOPS #1 AND #4 HOT LEGS<br>SHUTOFF VALVE                      | CONTAINMENT | 612.00     | E CONT LOWER<br>VENT RM |
| 8           | 2     | 2-IMO-316    | 0      | RESIDUAL HEAT REMOVAL / EAST RHR AND<br>NORTH SAFETY INJECTION TO REACTOR<br>COOLANT LOOPS #1 AND #4 COLD LEGS<br>SHUTOFF VALVE                     | CONTAINMENT | 612.00     | E CONT LOWER<br>VENT RM |
| 8           | 1     | 2-IMO-320    | 0      | RESIDUAL HEAT REMOVAL / WEST<br>RESIDUAL HEAT REMOVAL PUMP PP-35W<br>SUCTION SHUTOFF VALVE  | AUXILIARY   | 573.00     | W RHR PMP RM            |
| 8           | 1     | 2-IMO-322    | 0      | RESIDUAL HEAT REMOVAL / WEST<br>RESIDUAL HEAT REMOVAL HEAT<br>EXCHANGER HE-17W OUTLET MINI-FLOW<br>LINE SHUTOFF VALVE                               | AUXILIARY   | 609.00     | W RHR HEAT XCHGR<br>RM  |
| 8           | 1     | 2-IMO-324    | 0      | RESIDUAL HEAT REMOVAL / WEST<br>RESIDUAL HEAT REMOVAL PUMP PP-35W<br>DISCHARGE CROSSTIE SHUTOFF VALVE   | AUXILIARY   | 609.00     | W RHR HEAT XCHGR<br>RM  |
| 8           | 1     | 2-IMO-325    | 0      | RESIDUAL HEAT REMOVAL / WEST RHR<br>AND SOUTH SAFETY INJECTION TO<br>REACTOR COOLANT LOOPS #2 AND #3 HOT<br>LEGS SHUTOFF VALVE                      | CONTAINMENT | 612.00     | W CONT LOWER<br>VENT RM |
| 8           | 1     | 2-IMO-326    | 0      | RESIDUAL HEAT REMOVAL / WEST RHR<br>AND SOUTH SAFETY INJECTION TO<br>REACTOR COOLANT LOOPS #2 AND #3<br>COLD LEGS SHUTOFF VALVE                     | CONTAINMENT | 612.00     | W CONT LOWER<br>VENT RM |
| 8           | 2     | 2-IMO-330    | 0      | RESIDUAL HEAT REMOVAL / EAST<br>RESIDUAL HEAT REMOVAL TO UPPER<br>CONTAINMENT SPRAY SHUTOFF VALVE   | AUXILIARY   | 609.00     | E RHR HEAT XCHGR<br>RM  |
| 8           | 1     | 2-IMO-331    | 0      | RESIDUAL HEAT REMOVAL / WEST RHR TO<br>UPPER CONTAINMENT SPRAY SHUTOFF<br>VALVE   | AUXILIARY   | 609.00     | W RHR HEAT XCHGR<br>RM  |

**DONALD C. COOK NUCLEAR PLANT UNIT # 2**  
**SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**  
**FOR RELAY REVIEW**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description   | Building    | Floor Elev | Room or Row Col              |
|-------------|-------|--------------|--------|--|-------------|------------|------------------------------|
| 8           | 12    | 2-MO-340     | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER TO CHARGING PUMPS SUCTION SHUTOFF VALVE                        | AUXILIARY   | 609.00     | E RHR HEAT XCHGR RM          |
| 8           | 12    | 2-MO-350     | 0      | RESIDUAL HEAT REMOVAL / WEST RHR HEAT EXCHANGER OUTLET TO SAFETY INJECTION PUMP SUCTION SHUTOFF VALVE                            | AUXILIARY   | 609.00     | W RHR HEAT XCHGR RM          |
| 8           | 12    | 2-MO-360     | 0      | SAFETY INJECTION / SAFETY INJECTION PUMPS TO CVCS CHARGING PUMPS SUCTION HEADER CROSSTIE SHUTOFF VALVE                           | AUXILIARY   | 587.00     | W CENTRIFUGAL CHARG PMP RM   |
| 8           | 2     | 2-MO-361     | 0      | SAFETY INJECTION / SAFETY INJECTION PUMPS SUCTION TO AND FROM CHARGING PUMPS SUCTION TRAIN 'A' SHUTOFF VALVE                     | AUXILIARY   | 587.00     | N SAFETY INJ PMP RM          |
| 8           | 1     | 2-MO-362     | 0      | SAFETY INJECTION / SAFETY INJECTION PUMPS SUCTION TO AND FROM CHARGING PUMPS SUCTION TRAIN 'B' SHUTOFF VALVE                     | AUXILIARY   | 587.00     | N SAFETY INJ PMP RM          |
| 8           | 12    | 2-MO-390     | 0      | RESIDUAL HEAT REMOVAL / REFUELING WATER STORAGE TANK TK-33 TO RESIDUAL HEAT REMOVAL PUMPS SUCTION SHUTOFF VALVE                  | AUXILIARY   | 591.00     | VESTIBULE                    |
| 8           | 2     | 2-MO-51      | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP #1 SHUTOFF VALVE   | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 1          |
| 8           | 1     | 2-MO-52      | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP #2 SHUTOFF VALVE   | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 2          |
| 8           | 1     | 2-MO-53      | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP #3 SHUTOFF VALVE   | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 3          |
| 8           | 2     | 2-MO-54      | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP #4 SHUTOFF VALVE   | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 4          |
| 8           | 2     | 2-MO-910     | 0      | REFUELING WATER STORAGE TANK SUPPLY / REFUELING WATER STORAGE TANK TO CVCS CHARGING PUMPS SUCTION HEADER TRAIN 'A' SHUTOFF VALVE | AUXILIARY   | 587.00     | RECIPROCATING CHARG PMP RM   |
| 8           | 1     | 2-MO-911     | 0      | REFUELING WATER STORAGE TANK SUPPLY / REFUELING WATER STORAGE TANK TO CVCS CHARGING PUMPS SUCTION HEADER TRAIN 'B' SHUTOFF VALVE | AUXILIARY   | 587.00     | E CENTRIFUGAL CHARG PMP ROOM |
| 8           | 1     | 2-LSO-240    | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL UPPER VALVE GEAR LUBRICATION CONTROL SOLENOID #1   | AUXILIARY   | 587.00     | AB EMER DSL GEN RM           |
| 8           | 1     | 2-LSO-241    | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL UPPER VALVE GEAR LUBRICATION CONTROL SOLENOID #2   | AUXILIARY   | 587.00     | AB EMER DSL GEN RM           |
| 8           | 2     | 2-LSO-245    | 0      | DIESEL LUBE OIL / CD EMER DIESEL GEN UPPER VALVE GEAR LUBRICATION CONTROL SOLENOID #1  | AUXILIARY   | 587.00     | CD EMER DSL GEN RM           |
| 8           | 2     | 2-LSO-246    | 0      | DIESEL LUBE OIL / CD EMER DIESEL GEN UPPER VALVE GEAR LUBRICATION CONTROL SOLENOID #2  | AUXILIARY   | 587.00     | CD EMER DSL GEN RM           |
| 8           | 1     | 2-MCM-221    | 0      | MAIN STEAM / MAIN STEAM LEAD #2 TO AUXILIARY FEED PUMP TURBINE 4 IN MOTOR OPERATED SHUTOFF VALVE                                 | AUXILIARY   | 633.00     | W MN STM STOP ENCL           |
| 8           | 1     | 2-MCM-231    | 0      | MAIN STEAM / MAIN STEAM LEAD #3 TO AUXILIARY FEED PUMP TURBINE 4 IN MOTOR OPERATED SHUTOFF VALVE                                 | AUXILIARY   | 633.00     | W MN STM STOP ENCL           |
| 8           | 2     | 2-MMO-210    | 0      | MAIN STEAM / STEAM STOP VALVE MRV-210 STEAM CYLINDER DUMP 4 IN MOTOR OPERATED VALVES SELECTOR VALVE                              | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL         |
| 8           | 1     | 2-MMO-220    | 0      | MAIN STEAM / STEAM STOP VALVE MRV-220 STEAM CYLINDER DUMP 4 IN MOTOR OPERATED VALVES SELECTOR VALVE                              | AUXILIARY   | 633.00     | W MN STM STOP ENCL           |
| 8           | 1     | 2-MMO-230    | 0      | MAIN STEAM / STEAM STOP VALVE MRV-230 STEAM CYLINDER DUMP VALVES 4 IN MOTOR OPERATED SELECTOR VALVE                              | AUXILIARY   | 633.00     | W MN STM STOP ENCL           |
| 8           | 2     | 2-MMO-240    | 0      | MAIN STEAM / STEAM STOP VALVE MRV-240 STEAM CYLINDER DUMP VALVE 4 IN MOTOR OPERATED SELECTOR VALVE                               | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL         |
| 8           | 1     | 2-NMO-151    | 0      | PRESSURIZER / PRESSURIZER RELIEF VALVE NRV-151 UPSTREAM 3 IN MOTOR OPERATED SHUTOFF VALVE  | CONTAINMENT | 650.00     | PRESSURIZER ENCL, INTERIOR   |
| 8           | 1     | 2-NMO-152    | 0      | PRESSURIZER / PRESSURIZER RELIEF VALVE NRV-152 UPSTREAM 3 IN MOTOR OPERATED SHUTOFF VALVE  | CONTAINMENT | 650.00     | PRESSURIZER ENCL, INTERIOR   |
| 8           | 2     | 2-NMO-153    | 0      | PRESSURIZER / PRESSURIZER RELIEF VALVE NRV-153 UPSTREAM 3 IN MOTOR OPERATED SHUTOFF VALVE  | CONTAINMENT | 650.00     | PRESSURIZER ENCL, INTERIOR   |
| 8           | 2     | 2-NSO-61     | 0      | REACTOR COOLANT SYSTEM VENTS / PRESSURIZER OME-4 POST-ACCIDENT VENT TRAIN 'A' SOLENOID VALVE                                     | CONTAINMENT | 650.00     | PRESSURIZER ENCL, INTERIOR   |
| 8           | 2     | 2-NSO-62     | 0      | REACTOR COOLANT SYSTEM VENTS / PRESSURIZER OME-4 POST-ACCIDENT VENT TRAIN 'A' SOLENOID VALVE                                     | CONTAINMENT | 650.00     | PRESSURIZER ENCL, INTERIOR   |
| 8           | 1     | 2-NSO-63     | 0      | REACTOR COOLANT SYSTEM VENTS / PRESSURIZER OME-4 POST-ACCIDENT VENT TRAIN 'B' SOLENOID VALVE                                     | CONTAINMENT | 650.00     | PRESSURIZER ENCL, INTERIOR   |

**DONALD C. COOK NUCLEAR PLANT UNIT #2**  
**SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**  
**FOR RELAY REVIEW**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description  | Building    | Floor Elev | Room or Row Col                 |
|-------------|-------|--------------|--------|---|-------------|------------|---------------------------------|
| 8           | 1     | 2-NSO-64     | 0      | REACTOR COOLANT SYSTEM VENTS / PRESSURIZER OME-4 POST-ACCIDENT VENT TRAIN 'B' SOLENOID VALVE  | CONTAINMENT | 650.00     | PRESSURIZER ENCL. INTERIOR      |
| 8           | 2     | 2-QCM-250    | 0      | REACTOR COOLANT PUMP SEAL WATER IN/LEAKOFF / REACTOR COOLANT PUMP SEAL WATER RETURN TRAIN 'A' CONTAINMENT ISOLATION 4 IN MOTOR OPERATED VALVE | CONTAINMENT | 598.00     | ANNULUS, QUAD NO. 2             |
| 8           | 1     | 2-QCM-350    | 0      | REACTOR COOLANT PUMP SEAL WATER IN/LEAKOFF / REACTOR COOLANT PUMP SEAL WATER RETURN TRAIN 'B' CONTAINMENT ISOLATION 4 IN MOTOR OPERATED VALVE | AUXILIARY   | 591.00     | VESTIBULE                       |
| 8           | 2     | 2-QMO-200    | 0      | CHARGING (CVCS) / CVCS CHARGING TO REGENERATIVE HEAT EXCHANGER TRAIN 'A' SHUTOFF VALVE  | AUXILIARY   | 587.00     | RECIPROCATING CHARG PMP RM      |
| 8           | 1     | 2-QMO-201    | 0      | CHARGING (CVCS) / CVCS CHARGING TO REGENERATIVE HEAT EXCHANGER TRAIN 'B' SHUTOFF VALVE  | AUXILIARY   | 587.00     | RECIPROCATING CHARG PMP RM      |
| 8           | 2     | 2-QMO-225    | 0      | CHARGING (CVCS) / WEST CENTRIFUGAL CHARGING PUMP MINI-FLOW TO RCP SEAL WATER HEAT EXCHANGER HE-11 2 IN MOTOR OPERATED SHUTOFF VALVE           | AUXILIARY   | 587.00     | WEST CENTRIFUGAL CHARG PMP ROOM |
| 8           | 1     | 2-QMO-228    | 0      | CHARGING (CVCS) / WEST CENTRIFUGAL CHARGING PUMP MINI-FLOW TO RCP SEAL WATER HEAT EXCHANGER HE-11 2 IN MOTOR OPERATED SHUTOFF VALVE           | AUXILIARY   | 587.00     | W CENTRIFUGAL CHARG PMP RM      |
| 8           | 12    | 2-QMO-420    | 0      | BORON MAKEUP (CVCS) / EMERGENCY BORATION TO CVCS CHARGING PUMPS SUCTION HEADER SHUTOFF VALVE  | AUXILIARY   | 587.00     | BORIC ACID STOR TANK AREA       |
| 8           | 2     | 2-QMO-451    | 0      | LETDOWN (CVCS) / REACTOR COOLANT LETDOWN VOLUME CONTROL TANK TK-10 TO CVCS CHARGING PUMPS TRAIN 'A' SHUTOFF 4 IN MOTOR OPERATED VALVE         | AUXILIARY   | 609.00     | VOL CTRL TANK E HALLWAY         |
| 8           | 1     | 2-QMO-452    | 0      | LETDOWN (CVCS) / REACTOR COOLANT LETDOWN VOLUME CONTROL TANK TK-10 TO CVCS CHARGING PUMPS TRAIN 'B' SHUTOFF 4 IN MOTOR OPERATED VALVE         | AUXILIARY   | 609.00     | VOL CTRL TANK E HALLWAY         |
| 8           | 12    | 2-QT-506     | 0      | MAIN STEAM / TURBINE DRIVEN AUX FEED PUMP PP-4 TRIP AND THROTTLE VALVE  | TURBINE     | 591.00     | TB DRIVEN AUX FLOWTR PMP        |
| 8           | 2     | 2-WMO-703    | 0      | ESSENTIAL SERVICE WATER / EAST ESSENTIAL SERVICE WATER PUMP PP-7E DISCHARGE SHUTOFF VALVE   | SCREENHOUSE | 591.00     | E SSNTL SERV WTR PMP RM         |
| 8           | 1     | 2-WMO-704    | 0      | ESSENTIAL SERVICE WATER / WEST ESSENTIAL SERVICE WATER PUMP PP-7W DISCHARGE SHUTOFF VALVE   | SCREENHOUSE | 591.00     | W ESSNTL SERV WTR PMP RM        |
| 8           | 1     | 2-WMO-708    | 0      | ESSENTIAL SERVICE WATER / WEST ESSENTIAL SERVICE WATER SUPPLY HEADER CROSSTIE TO UNIT 1 SHUTOFF VALVE   | TURBINE     | 589.00     | ESSNTL SERV WTR PIPE TUNN       |
| 8           | 2     | 2-WMO-708    | 0      | ESSENTIAL SERVICE WATER / EAST ESSENTIAL SERVICE WATER SUPPLY HEADER CROSSTIE TO UNIT 1 SHUTOFF VALVE   | TURBINE     | 589.00     | ESSNTL SERV WTR PIPE TUNN       |
| 8           | 2     | 2-WMO-712    | 0      | ESSENTIAL SERVICE WATER / EAST CONTAINMENT SPRAY HEAT EXCHANGER HE-18E ESSENTIAL SERVICE WATER INLET SHUTOFF VALVE                            | AUXILIARY   | 633.00     | 633 HALLWAY                     |
| 8           | 2     | 2-WMO-714    | 0      | ESSENTIAL SERVICE WATER / EAST CONTAINMENT SPRAY HEAT EXCHANGER HE-18E ESSENTIAL SERVICE WATER OUTLET SHUTOFF VALVE                           | AUXILIARY   | 609.00     | 609 HALLWAY                     |
| 8           | 1     | 2-WMO-716    | 0      | ESSENTIAL SERVICE WATER / WEST CONTAINMENT SPRAY HEAT EXCHANGER ESSENTIAL SERVICE WATER INLET SHUTOFF VALVE                                   | AUXILIARY   | 633.00     | 633 HALLWAY                     |
| 8           | 1     | 2-WMO-718    | 0      | ESSENTIAL SERVICE WATER / WEST CONTAINMENT SPRAY HEAT EXCHANGER ESSENTIAL SERVICE WATER OUTLET SHUTOFF VALVE                                  | AUXILIARY   | 609.00     | 609 HALLWAY                     |
| 8           | 1     | 2-WMO-722-AB | 0      | ESSENTIAL SERVICE WATER / WEST ESSENTIAL SERVICE WATER SUPPLY HEADER TO AB EMERGENCY DIESEL HEAT EXCHANGERS SHUTOFF VALVE                     | AUXILIARY   | 587.00     | 2CD DSL RM N PIPE TUNNEL        |
| 8           | 2     | 2-WMO-724-AB | 0      | ESSENTIAL SERVICE WATER / EAST ESSENTIAL SERVICE WATER SUPPLY HEADER TO AB EMERGENCY DIESEL HEAT EXCHANGERS SHUTOFF VALVE                     | AUXILIARY   | 587.00     | 2CD DSL RM N PIPE TUNNEL        |
| 8           | 2     | 2-WMO-726-CD | 0      | ESSENTIAL SERVICE WATER / EAST ESSENTIAL SERVICE WATER SUPPLY HEADER TO CD EMERGENCY DIESEL HEAT EXCHANGERS SHUTOFF VALVE                     | AUXILIARY   | 587.00     | 2CD DSL RM N PIPE TUNNEL        |
| 8           | 1     | 2-WMO-728-CD | 0      | ESSENTIAL SERVICE WATER / WEST ESSENTIAL SERVICE WATER SUPPLY HEADER TO CD EMERGENCY DIESEL HEAT EXCHANGERS SHUTOFF VALVE                     | AUXILIARY   | 587.00     | 2CD DSL RM N PIPE TUNNEL        |
| 8           | 2     | 2-WMO-732    | 0      | ESSENTIAL SERVICE WATER / EAST COMPONENT COOLING WATER HEAT EXCHANGER HE-15E ESSENTIAL SERVICE WATER INLET SHUTOFF VALVE                      | AUXILIARY   | 609.00     | 609 HALLWAY                     |





**DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR RELAY REVIEW**

| Equip Class | Train | Equipment ID   | Rev No | System / Equipment Description   | Building    | Floor Elev | Room or Row Col            |
|-------------|-------|----------------|--------|--|-------------|------------|----------------------------|
| 8           | 2     | 2-WMO-734      | 0      | ESSENTIAL SERVICE WATER / EAST COMPONENT COOLING WATER HEAT EXCHANGER HE-15E ESSENTIAL SERVICE WATER OUTLET SHUTOFF VALVE          | AUXILIARY   | 609.00     | 609 HALLWAY                |
| 8           | 1     | 2-WMO-736      | 0      | ESSENTIAL SERVICE WATER / WEST COMPONENT COOLING WATER HEAT EXCHANGER ESSENTIAL SERVICE WATER INLET SHUTOFF VALVE                  | AUXILIARY   | 609.00     | 609 HALLWAY                |
| 8           | 1     | 2-WMO-738      | 0      | ESSENTIAL SERVICE WATER / WEST COMPONENT COOLING WATER HEAT EXCHANGER ESSENTIAL SERVICE WATER OUTLET SHUTOFF VALVE                 | AUXILIARY   | 609.00     | 609 HALLWAY                |
| 8           | 1     | 2-WMO-744      | 0      | AUXILIARY FEED WATER SYSTEM / ESW TO WEST MOTOR DRIV AUX FEED PUMP PP-3W SHUTOFF 4 IN MOTOR OPERATED VALVE                         | TURBINE     | 591.00     | W MTR DRIVEN AUX FDWTR PMP |
| 8           | 12    | 2-WMO-753      | 0      | AUXILIARY FEED WATER / ESW TO TURB DRIVEN AUX FEED PUMP PP-4 SHUTOFF 6 IN MOTOR OPERATED VALVE                                     | TURBINE     | 591.00     | TB DRIVEN AUX FDWTR PMP    |
| 8           | 2     | 2-WMO-754      | 0      | ESSENTIAL SERVICE WATER / ESSENTIAL SERVICE WATER TO EAST MOTOR DRIVEN AUXILIARY FEED PUMP PP-3E 4 IN MOTOR OPERATED SHUTOFF VALVE | TURBINE     | 591.00     | E MTR DRIV AUX FEEDWTR PMP |
| 8           | 12    | 2-XSO-505      | 0      | CONTROL AIR / PRESSURIZER TRAIN 'B' PRESSURE RELIEF VALVE NR-152 CONTROL SOLENOID  | CONTAINMENT | 650.00     | PRESSURIZER ENCL INTERIOR  |
| 8           | 2     | 2-XSO-507      | 0      | CONTROL AIR / PRESSURIZER TRAIN 'A' PRESSURE RELIEF VALVE NR-153 CONTROL SOLENOID  | CONTAINMENT | 650.00     | PRESSURIZER ENCL INTERIOR  |
| 9           | 2     | 12-HV-ESW-1    | 0      | SCREENHOUSE VENTILATION / UNIT 2 EAST ESSENTIAL SERVICE WATER PUMP ROOM SUPPLY VENTILATION FAN                                     | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR PMP RM   |
| 9           | 2     | 12-HV-ESW-2    | 0      | SCREENHOUSE VENTILATION / UNIT 2 EAST ESSENTIAL SERVICE WATER PUMP ROOM SUPPLY VENTILATION FAN                                     | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR PMP RM   |
| 9           | 1     | 12-HV-ESW-3    | 0      | SCREENHOUSE VENTILATION / UNIT 2 WEST ESSENTIAL SERVICE WATER PUMP ROOM SUPPLY VENTILATION FAN                                     | SCREENHOUSE | 591.00     | W ESSNTL SERV WTR PMP RM   |
| 9           | 1     | 12-HV-ESW-4    | 0      | SCREENHOUSE VENTILATION / UNIT 2 WEST ESSENTIAL SERVICE WATER PUMP ROOM SUPPLY VENTILATION FAN                                     | SCREENHOUSE | 591.00     | W ESSNTL SERV WTR PMP RM   |
| 9           | 2     | 2-HV-AES-1     | 0      | AUXILIARY BUILDING VENTILATION / AUXILIARY BUILDING VENTILATION ENGINEERED SAFETY FEATURE EXHAUST UNIT 1                           | AUXILIARY   | 633.00     | NORM BLOWDOWN FLASHTANK RM |
| 9           | 1     | 2-HV-AES-2     | 0      | AUXILIARY BUILDING VENTILATION / AUXILIARY BUILDING VENTILATION ENGINEERED SAFETY FEATURE EXHAUST UNIT                             | AUXILIARY   | 633.00     | NORM BLOWDOWN FLASHTANK RM |
| 9           | 2     | 2-HV-AFP-BRE-1 | 0      | AUXILIARY BUILDING VENTILATION / TRAIN 'N' BATTERY ROOM EAST EXHAUST FAN   | AUXILIARY   | 633.00     | NORM BLOWDOWN FLASHTANK RM |
| 9           | 1     | 2-HV-AFP-BRE-2 | 0      | AUXILIARY BUILDING VENTILATION / TRAIN 'N' BATTERY ROOM WEST EXHAUST FAN   | AUXILIARY   | 633.00     | NORM BLOWDOWN FLASHTANK RM |
| 9           | 2     | 2-HV-AFP-M1    | 0      | TURBINE BUILDING VENTILATION / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP ROOM EXHAUST FAN   | TURBINE     | 591.00     | E MTR DRIV AUX FEEDWTR PMP |
| 9           | 2     | 2-HV-AFP-M2    | 0      | TURBINE BUILDING VENTILATION / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP ROOM SUPPLY FAN  | TURBINE     | 591.00     | E MTR DRIV AUX FEEDWTR PMP |
| 9           | 2     | 2-HV-AFP-T1    | 0      | TURBINE BUILDING VENTILATION / TURBINE DRIVEN AUXILIARY FEED PUMP ROOM NORTH EXHAUST FAN   | TURBINE     | 591.00     | TB DRIVEN AUX FDWTR PMP    |
| 9           | 1     | 2-HV-AFP-T2    | 0      | TURBINE BUILDING VENTILATION / TURBINE DRIVEN AUXILIARY FEED PUMP ROOM SOUTH EXHAUST FAN   | TURBINE     | 591.00     | TB DRIVEN AUX FDWTR PMP    |
| 9           | 1     | 2-HV-AFP-X1    | 0      | TURBINE BUILDING VENTILATION / WEST MOTOR DRIVEN AUXILIARY FEED PUMP ROOM EAST EXHAUST FAN   | TURBINE     | 591.00     | W MTR DRIVEN AUX FDWTR PMP |
| 9           | 1     | 2-HV-AFP-X2    | 0      | TURBINE BUILDING VENTILATION / WEST MOTOR DRIVEN AUXILIARY FEED PUMP ROOM WEST EXHAUST FAN   | TURBINE     | 591.00     | TB 591 ELEV BASMNT         |
| 9           | 1     | 2-HV-CEQ-1     | 0      | HYDROGEN SKIMMER / CONTAINMENT HYDROGEN SKIMMER VENTILATION FAN #1   | CONTAINMENT | 625.00     | HV-CEQ-1 FAN RM            |
| 9           | 2     | 2-HV-CEQ-2     | 0      | HYDROGEN SKIMMER / CONTAINMENT HYDROGEN SKIMMER VENTILATION FAN #2   | CONTAINMENT | 625.00     | HV-CEQ-2 FAN RM            |
| 9           | 2     | 2-HV-DGS-1     | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN  | AUXILIARY   | 587.00     | CD EMER DSL GEN RM         |
| 9           | 1     | 2-HV-DGS-2     | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN  | AUXILIARY   | 587.00     | AB EMER DSL GEN RM         |
| 9           | 1     | 2-HV-DGS-3     | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM CABINET VENTILATION SUPPLY FAN  | AUXILIARY   | 587.00     | AB EMER DSL GEN RM         |
| 9           | 2     | 2-HV-DGS-4     | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM CABINET VENTILATION SUPPLY FAN  | AUXILIARY   | 587.00     | CD EMER DSL GEN RM         |
| 9           | 2     | 2-HV-DGX-1     | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FAN   | AUXILIARY   | 587.00     | CD EMER DSL GEN RM         |



**DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR RELAY REVIEW**

| Equip Class | Train | Equipment ID   | Rev No | System / Equipment Description   | Building  | Floor Elev | Room or Row Col                            |
|-------------|-------|----------------|--------|--|-----------|------------|--|
| 9           | 1     | 2-HV-DGX-2     | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FAN                                   | AUXILIARY | 587.00     | AB EMER DSL GEN RM                         |
| 9           | 1     | 2-HV-SGRS-1A   | 0      | AUXILIARY BUILDING VENTILATION / CONTROL ROD DRIVE EQUIPMENT ROOM AND INVERTER AREA VENTILATION NORTH SUPPLY FAN       | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                    |
| 9           | 1     | 2-HV-SGRS-2    | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM AB 4KV SWITCHGEAR AREA VENTILATION SUPPLY FAN                                | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR AREA                  |
| 9           | 2     | 2-HV-SGRS-3    | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM CD 4KV SWITCHGEAR AREA VENTILATION SUPPLY FAN                                | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR AREA                  |
| 9           | 2     | 2-HV-SGRS-4A   | 0      | AUXILIARY BUILDING VENTILATION / CONTROL ROD DRIVE EQUIPMENT ROOM AND INVERTER AREA VENTILATION SOUTH SUPPLY FAN       | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                    |
| 9           | 2     | 2-HV-SGRS-7    | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600 VOLT SWITCHGEAR TRANSFORMERS TR21B AND TR21D AREA VENTILATION SUPPLY FAN | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                    |
| 9           | 1     | 2-HV-SGRS-8    | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600 VOLT SWITCHGEAR TRANSFORMERS TR21A AND TR21C AREA VENTILATION SUPPLY FAN | AUXILIARY | 609.00     | 4KV RM - 600V SWGR AREA                    |
| 9           | 1     | 2-HV-SGRS-9    | 0      | AUXILIARY BUILDING VENTILATION / 600VAC MOTOR CONTROL CENTER MEZZANINE AREA VENTILATION SUPPLY FAN                     | AUXILIARY | 613.00     | 4KV ROOM - MEZZANINE AREA                  |
| 9           | 1     | 2-HV-SGRX-2    | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM AB 4KV SWITCHGEAR AREA VENTILATION EXHAUST FAN                               | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR AREA                  |
| 9           | 2     | 2-HV-SGRX-3    | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM CD 4KV SWITCHGEAR AREA VENTILATION EXHAUST FAN                               | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR AREA                  |
| 9           | 1     | 2-HV-SGRX-5    | 0      | AUXILIARY BUILDING VENTILATION / AB BATTERY EQUIPMENT AREA BATTERY ROOM VENTILATION EXHAUST FAN                        | AUXILIARY | 609.00     | AB BATTERY EQUIP AREA                      |
| 9           | 2     | 2-HV-SGRX-6    | 0      | AUXILIARY BUILDING VENTILATION / CD BATTERY EQUIPMENT AREA BATTERY ROOM VENTILATION EXHAUST FAN                        | AUXILIARY | 628.00     | CD BATTERY EQUIP AREA                      |
| 10          | 2     | 2-HV-ACRA-1    | 0      | CONTROL ROOM VENTILATION / CONTROL ROOM VENTILATION NORTH AIR CONDITIONING UNIT  | AUXILIARY | 650.00     | CTRL RM AIR CONDIT RM                      |
| 10          | 1     | 2-HV-ACRA-2    | 0      | CONTROL ROOM VENTILATION / CONTROL ROOM VENTILATION SOUTH AIR CONDITIONING UNIT  | AUXILIARY | 650.00     | CTRL RM AIR CONDIT RM                      |
| 11          | 2     | 2-HV-ACR-1     | 0      | CONTROL ROOM AIR CONDITIONING CHILL WATER / CONTROL ROOM AIR CONDITIONING NORTH LIQUID CHILLER                         | AUXILIARY | 650.00     | CTRL RM AIR CONDIT RM                      |
| 11          | 1     | 2-HV-ACR-2     | 0      | CONTROL ROOM AIR CONDITIONING CHILL WATER / CONTROL ROOM AIR CONDITIONING SOUTH LIQUID CHILLER                         | AUXILIARY | 650.00     | CTRL RM AIR CONDIT RM                      |
| 15          | 1     | 2-BATT-AB      | 0      | 250VDC DISTRIBUTION / PLANT BATTERY AB   | AUXILIARY | 609.00     | AB BATTERY EQUIP AREA                      |
| 15          | 2     | 2-BATT-CD      | 0      | 250VDC DISTRIBUTION / PLANT BATTERY CD   | AUXILIARY | 628.00     | CD BATTERY EQUIP AREA                      |
| 15          | 12    | 2-BATT-N       | 0      | 250VDC CONTROL AND INSTRUMENTATION / TRAIN 'N' PLANT BATTERY   | AUXILIARY | 633.00     | NORMAL BLOWDOWN FLASHTANK ROOM 633 HALLWAY |
| 16          | 12    | 2-BC-A         | 0      | 250VDC CONTROL AND INSTRUMENTATION / BATTERY CHARGER A FOR N-TRAIN BATTERY   | AUXILIARY | 633.00     | 633 HALLWAY                                |
| 16          | 1     | 2-BC-AB1       | 0      | 250VDC DISTRIBUTION / PLANT BATTERY BATT-AB BATTERY CHARGER #1   | AUXILIARY | 613.00     | 4KV ROOM - MEZZANINE AREA                  |
| 16          | 1     | 2-BC-AB2       | 0      | 250VDC DISTRIBUTION / PLANT BATTERY BATT-AB BATTERY CHARGER #2   | AUXILIARY | 613.00     | 4KV ROOM - MEZZANINE AREA                  |
| 16          | 12    | 2-BC-B         | 0      | 250VDC CONTROL AND INSTRUMENTATION / BATTERY CHARGER B FOR N-TRAIN BATTERY   | AUXILIARY | 633.00     | 633 HALLWAY                                |
| 16          | 2     | 2-BC-CD1       | 0      | 250VDC DISTRIBUTION / PLANT BATTERY BATT-CD CHARGER #1   | AUXILIARY | 628.00     | CD BATTERY EQUIP AREA                      |
| 16          | 2     | 2-BC-CD2       | 0      | 250VDC DISTRIBUTION / PLANT BATTERY BATT-CD CHARGER #2   | AUXILIARY | 628.00     | CD BATTERY EQUIP AREA                      |
| 16          | 2     | 2-CRID-I-INV   | 0      | 120VAC CONTROL ROOM INSTRUMENTATION DISTRIBUTION SYSTEM / INVERTER   | AUXILIARY | 609.00     | INVERTER AREA                              |
| 16          | 2     | 2-CRID-II-INV  | 0      | 120V CONTROL ROOM INSTRUMENTATION DISTR / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CHANNEL II INVERTER       | AUXILIARY | 609.00     | INVERTER AREA                              |
| 16          | 1     | 2-CRID-III-INV | 0      | 120V CONTROL ROOM INSTRUMENTATION DISTR / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CHANNEL III INVERTER      | AUXILIARY | 609.00     | INVERTER AREA                              |
| 16          | 1     | 2-CRID-IV-INV  | 0      | 120V CONTROL ROOM INSTRUMENTATION DISTR / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CHANNEL IV INVERTER       | AUXILIARY | 609.00     | CONTROL ROOM                               |

**DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR RELAY REVIEW**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description  | Building    | Floor Elev | Room or Row Col            |
|-------------|-------|--------------|--------|---|-------------|------------|----------------------------|
| 16          | 1     | 2-OGAB-INV   | 0      | DIESEL GENERATOR, CONTROL & INSTRUMENTATION / AB EMERGENCY DIESEL GENERATOR OME-150-AB INVERTER                                       | AUXILIARY   | 587.00     | AB EMER DSL GEN RM         |
| 16          | 2     | 2-DGCD-INV   | 0      | DIESEL GENERATION, CONTROL & INSTRUMENTATION / CD EMERGENCY DIESEL GENERATOR OME-150-CD INVERTER                                      | AUXILIARY   | 587.00     | CD EMER DSL GEN RM         |
| 17          | 1     | 2-OME-150-AB | 0      | DIESEL GENERATION, CONTROL & INSTRUMENTATION / AB EMERGENCY DIESEL GENERATOR  | AUXILIARY   | 587.00     | AB EMER DSL GEN RM         |
| 17          | 2     | 2-OME-150-CD | 0      | DIESEL GENERATION, CONTROL & INSTRUMENTATION / CD EMERGENCY DIESEL GENERATOR  | AUXILIARY   | 587.00     | CD EMER DSL GEN RM         |
| 18          | 2     | 2-CLJ-113    | 0      | CONDENSATE STORAGE TANK SUPPLY / CONDENSATE STORAGE TANK TK-32 LEVEL INDICATOR TRANSMITTER  | AUXILIARY   | 586.00     | STORAGE TANK PIPE TUNNEL   |
| 18          | 1     | 2-CLJ-114    | 0      | CONDENSATE STORAGE TANK SUPPLY / CONDENSATE STORAGE TANK TK-32 LEVEL INDICATOR TRANSMITTER  | AUXILIARY   | 586.00     | STORAGE TANK PIPE TUNNEL   |
| 18          | 1     | 2-FFI-210    | 0      | AUXILIARY FEEDWATER / AUXILIARY FEEDWATER TO STEAM GENERATOR OME-3-1 FLOW INDICATOR TRANSMITTER                                       | AUXILIARY   | 621.00     | E MAIN STM STOP ENCL       |
| 18          | 2     | 2-FFI-220    | 0      | AUXILIARY FEEDWATER / AUXILIARY FEEDWATER TO STEAM GENERATOR OME-3-2 FLOW INDICATOR TRANSMITTER                                       | AUXILIARY   | 621.00     | W MN STM STOP ENCL         |
| 18          | 2     | 2-FFI-230    | 0      | AUXILIARY FEEDWATER / AUXILIARY FEEDWATER TO STEAM GENERATOR OME-3-3 FLOW INDICATOR TRANSMITTER                                       | AUXILIARY   | 621.00     | W MN STM STOP ENCL         |
| 18          | 1     | 2-FFI-240    | 0      | FEEDWATER / AUXILIARY FEEDWATER TO STEAM GENERATOR OME-3-4 FLOW INDICATOR TRANSMITTER   | AUXILIARY   | 621.00     | E MAIN STM STOP ENCL       |
| 18          | 2     | 2-WDS-703    | 0      | ESSENTIAL SERVICE WATER / EAST ESSENTIAL SERVICE WATER PUMP PP-7E DISCHARGE STRAINER OME-34E HIGH DIFFERENTIAL PRESSURE SWITCH        | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR PMP RM   |
| 18          | 1     | 2-WDS-704    | 0      | ESSENTIAL SERVICE WATER / WEST ESSENTIAL SERVICE WATER PUMP PP-7W DISCHARGE STRAINER OME-34W HIGH DIFFERENTIAL PRESSURE SWITCH        | SCREENHOUSE | 591.00     | W ESSNTL SERV WTR PMP RM   |
| 18          | 2     | 2-WPS-702    | 0      | ESSENTIAL SERVICE WATER / EAST ESSENTIAL SERVICE WATER SUPPLY HEADER PRESSURE SWITCH  | TURBINE     | 569.00     | ESSNTL SERV WTR PIPE TUNN  |
| 18          | 1     | 2-WPS-703    | 0      | ESSENTIAL SERVICE WATER / WEST ESSENTIAL SERVICE WATER SUPPLY HEADER PRESSURE SWITCH  | TURBINE     | 569.00     | ESSNTL SERV WTR PIPE TUNN  |
| 19          | 2     | 2-VTS-201    | 0      | TURBINE BUILDING VENTILATION / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP ROOM EXHAUST FAN HV-AFP-M1                                  | TURBINE     | 591.00     | E MTR DRIV AUX FEEDWTR PMP |
| 19          | 2     | 2-VTS-203    | 0      | TURBINE BUILDING VENTILATION / TURBINE DRIVEN AUXILIARY FEED PUMP ROOM NORTH EXHAUST FAN HV-AFP-T1                                    | TURBINE     | 591.00     | TB DRIVEN AUX FDWTR PMP    |
| 19          | 1     | 2-VTS-204    | 0      | TURBINE BUILDING VENTILATION / TURBINE DRIVEN AUXILIARY FEED PUMP ROOM SOUTH EXHAUST FAN HV-AFP-T2                                    | TURBINE     | 591.00     | TB DRIVEN AUX FDWTR PMP    |
| 19          | 1     | 2-VTS-205    | 0      | TURBINE BUILDING VENTILATION / WEST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP ROOM WEST EXHAUST FAN HV-AFP-X2                             | TURBINE     | 591.00     | W MTR DRIVEN AUX FDWTR PMP |
| 19          | 1     | 2-VTS-340    | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN HV-DGS-2 OUTSIDE AIR THERMOSTAT                   | GROUND      | 609.00     | REFUEL WTR STOR TANK AREA  |
| 19          | 1     | 2-VTS-341    | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION FANS HV-DGX-2 THERMOSTAT                                     | AUXILIARY   | 587.00     | AB EMER DSL GEN RM         |
| 19          | 2     | 2-VTS-345    | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN HV-DGS-1 OUTSIDE AIR THERMOSTAT                   | AUXILIARY   | 596.00     | RCTR CABLE TUNN, QUAD 3    |
| 19          | 2     | 2-VTS-348    | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FAN HV-DGX-1 THERMOSTAT                              | AUXILIARY   | 587.00     | CD EMER DSL GEN RM         |
| 19          | 12    | 2-VTS-350    | 0      | AUXILIARY BUILDING VENTILATION / CONTROL ROD DRIVE EQUIP ROOM AND INV AREA VENT NORTH SUPPLY FAN HV-SGRS-1A TEMPERATURE SWITCH        | AUXILIARY   | 609.00     | INVERTER AREA              |
| 19          | 12    | 2-VTS-351    | 0      | AUXILIARY BUILDING VENTILATION / CONTROL ROD DRIVE EQUIP ROOM AND INV AREA VENT NORTH SUPPLY FAN HV-SGRS-1A TEMPERATURE SWITCH        | AUXILIARY   | 609.00     | CRD EQUIP RM               |
| 19          | 12    | 2-VTS-352    | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600 VOLT SWITCHGEAR XFRMS TR21B AND TR21D AREA VENT SUPPLY FAN HV-SGRS-7 TEMPERATURE SWITCH | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR AREA    |
| 19          | 1     | 2-VTS-353    | 0      | AUXILIARY BUILDING VENTILATION / 600VAC MOTOR CONTROL CENTER MEZZANINE AREA VENT SUPPLY FAN HV-SGRS-9 TEMPERATURE SWITCH              | AUXILIARY   | 613.00     | 4KV ROOM - MEZZANINE AREA  |



**DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR RELAY REVIEW**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description  | Building        | Floor Elev | Room or Row Col           |
|-------------|-------|--------------|--------|---|-----------------|------------|---------------------------|
| 19          | 12    | 2-VTS-354    | 0      | AUXILIARY BUILDING VENTILATION / CTRL ROD DRY EQUIP ROOM AND INV AREA VENT OUTSIDE AIR INLET DAMPER HV-SGR-MD-2 TEMPERATURE SWITCH  | AUXILIARY       | 609.00     | INVERTER AREA             |
| 19          | 12    | 2-VTS-355    | 0      | AUXILIARY BUILDING VENTILATION / CTRL ROD DRIVE EQUIP ROOM AND INV AREA VENT RECIRC AIR INLET DAMPER HV-SGR-MD-1 TEMPERATURE SWITCH | AUXILIARY       | 609.00     | INVERTER AREA             |
| 19          | 12    | 2-VTS-356    | 0      | AUXILIARY BUILDING VENTILATION / CRD EQUIPMENT ROOM AND INVERTER AREA VENTILATION NORTH SUPPLY FAN HV-SGRS-4A TEMP SWITCH           | AUXILIARY       | 609.00     | INVERTER AREA             |
| 19          | 12    | 2-VTS-357    | 0      | AUXILIARY BUILDING VENTILATION / CTRL ROD DRIVE EQUIP ROOM AND INV AREA VENTILATION SOUTH SUPPLY FAN HV-SGRS-4A TEMPERATURE SWITCH  | AUXILIARY       | 609.00     | CRD EQUIP RM              |
| 19          | 2     | 2-VTS-702    | 0      | SCREENHOUSE VENTILATION / UNIT 2 EAST ESW PUMP ROOM TEMPERATURE SWITCH  | SCREENHOUSE     | 591.00     | E ESSNTL SERV WTR PMP RM  |
| 19          | 1     | 2-VTS-704    | 0      | SCREENHOUSE VENTILATION / UNIT 2 WEST ESW PUMP ROOM TEMPERATURE SWITCH  | U#2 SCREENHOUSE | 591.00     | W ESSNTL SERV WTR PMP RM  |
| 19          | 1     | 2-VTS-802    | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM AB 4KV SWITCHGEAR AREA VENTILATION SUPPLY FAN HV-SGRS-2 THERMAL SENSOR                    | AUXILIARY       | 609.00     | 4KV RM - AB 4KV SWGR AREA |
| 19          | 2     | 2-VTS-803    | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM CD 4KV SWITCHGEAR AREA VENTILATION SUPPLY FAN HV-SGRS-3 THERMAL SENSOR                    | AUXILIARY       | 609.00     | 4KV RM - CD 4KV SWGR AREA |
| 19          | 2     | 2-VTS-805    | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600V SWGR XFMRs TR21B AND TR21D AREA VENT SUPPLY FAN HV-SGRS-7 TEMP SWITCH THERMAL SENSOR | AUXILIARY       | 613.00     | 4KV ROOM - MEZZANINE AREA |
| 19          | 1     | 2-VTS-808    | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600V SWGR XFMRs TR21A AND TR21C AREA VENT SUPPLY FAN HV-SGRS-8 TEMP SWITCH TEMP SWITCH    | AUXILIARY       | 609.00     | 4KV RM - 600V SWGR AREA   |





**APPENDIX B**

**DONALD C. COOK NUCLEAR PLANT**

**FLOOR RESPONSE SPECTRA**

**AS PER SQUG-GIP CRITERIA**

**Donald C. Cook Nuclear Plant**  
DBE Ground Response Elevation 608 feet  
2% and 5% Damping

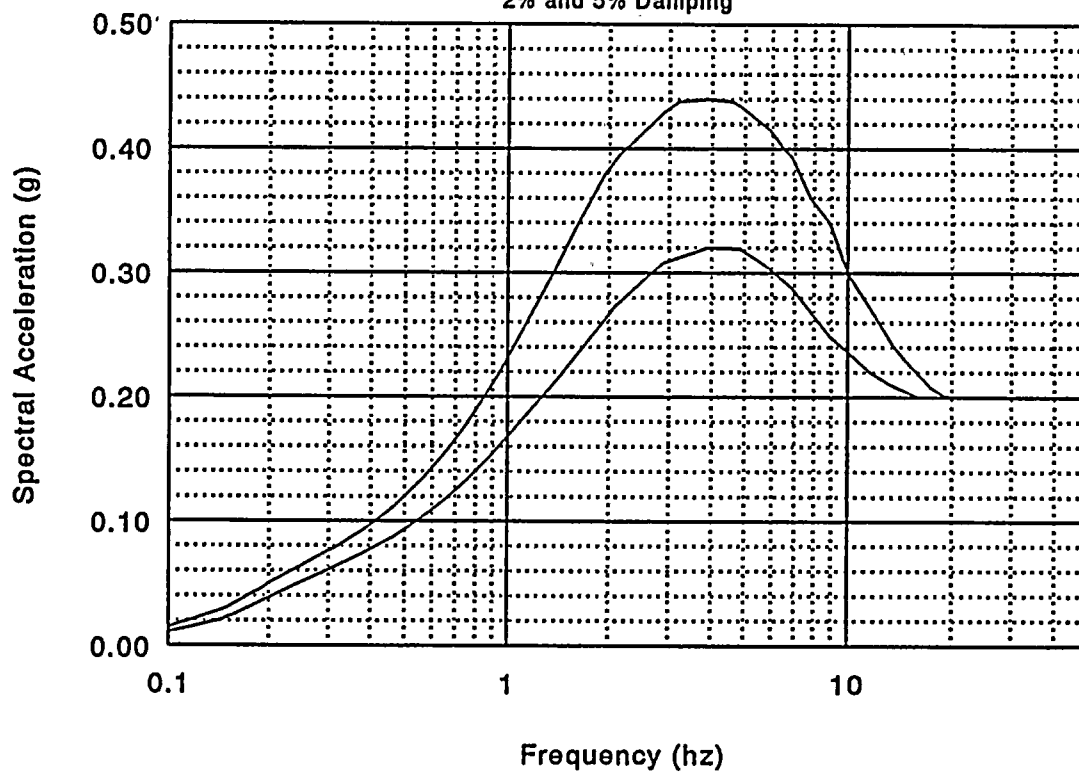


Figure B-1

# Donald C. Cook Nuclear Plant

Auxiliary Building Elevation 587 feet

2% and 5% Damping

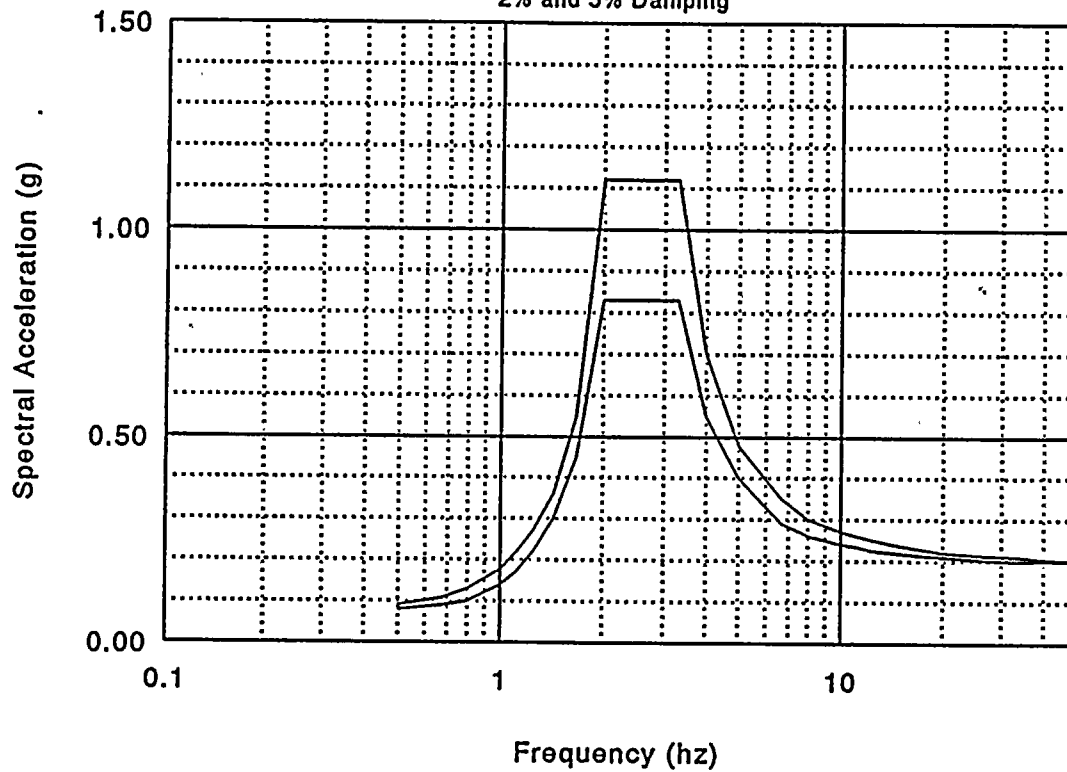


Figure B-2

**Donald C. Cook Nuclear Plant**  
Auxiliary Building Elevation 633 feet  
2% and 5% Damping

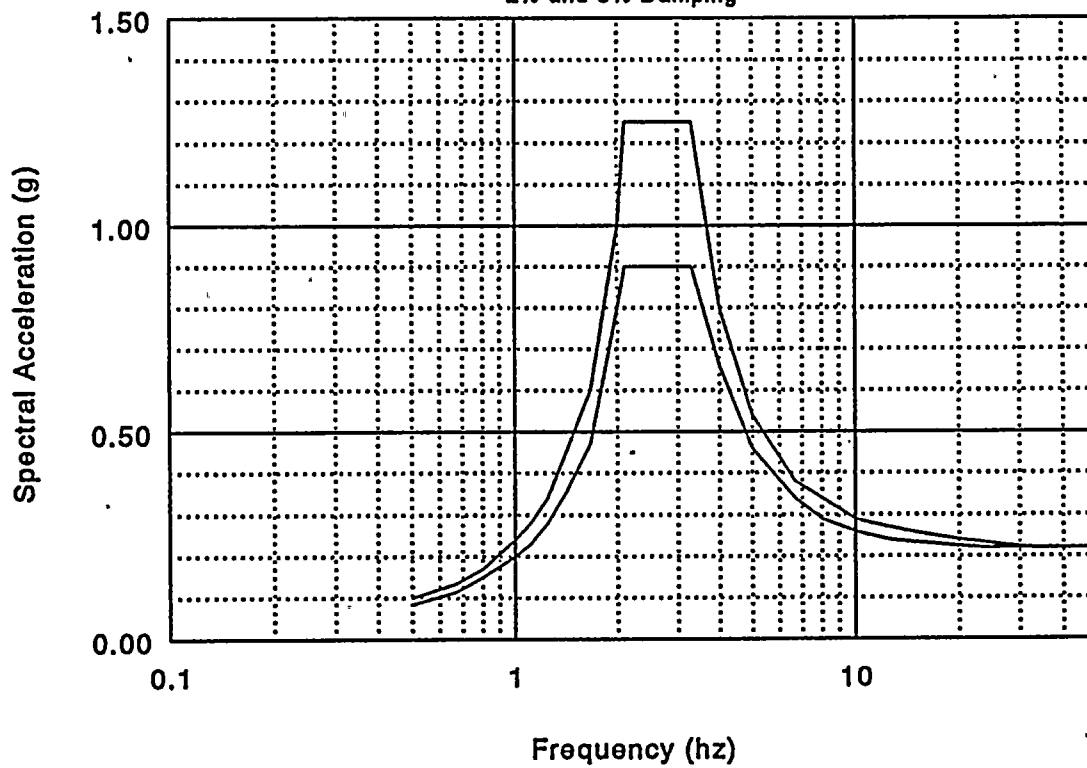


Figure B-3

# Donald C. Cook Nuclear Plant

Auxiliary Building Elevation 650 feet

2% and 5% Damping

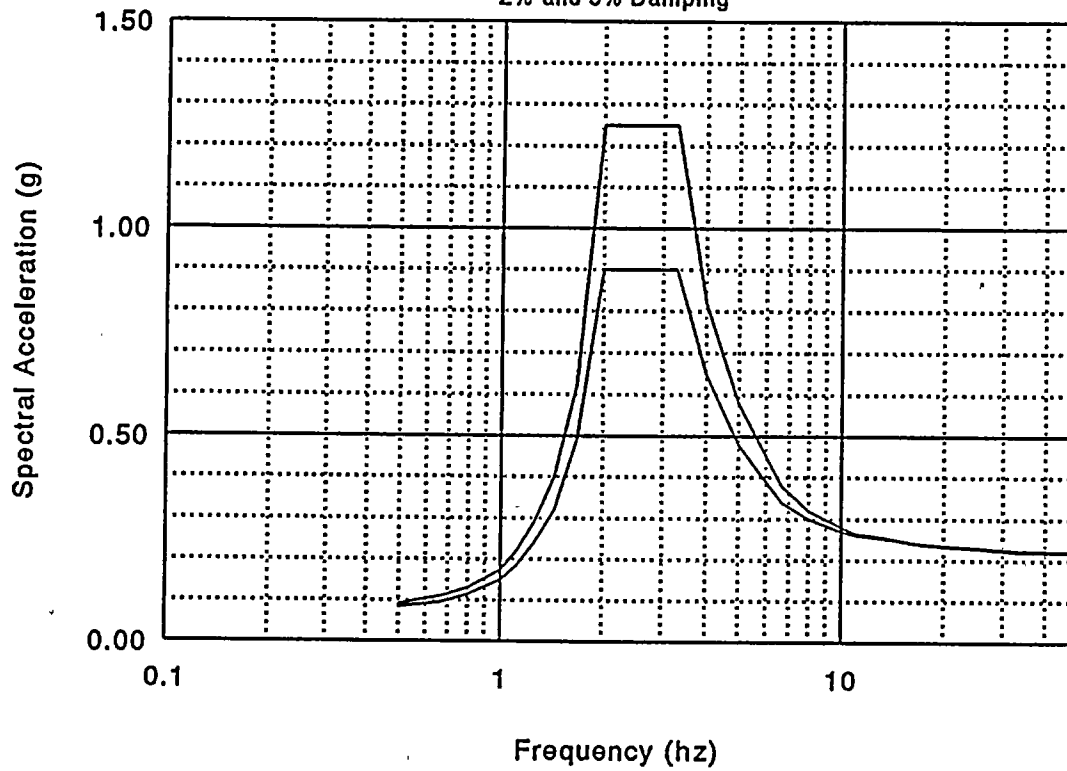


Figure B-4

# Donald C. Cook Nuclear Plant

Diesel Generator Bldg Elevation 609 feet

2% and 5% Damping

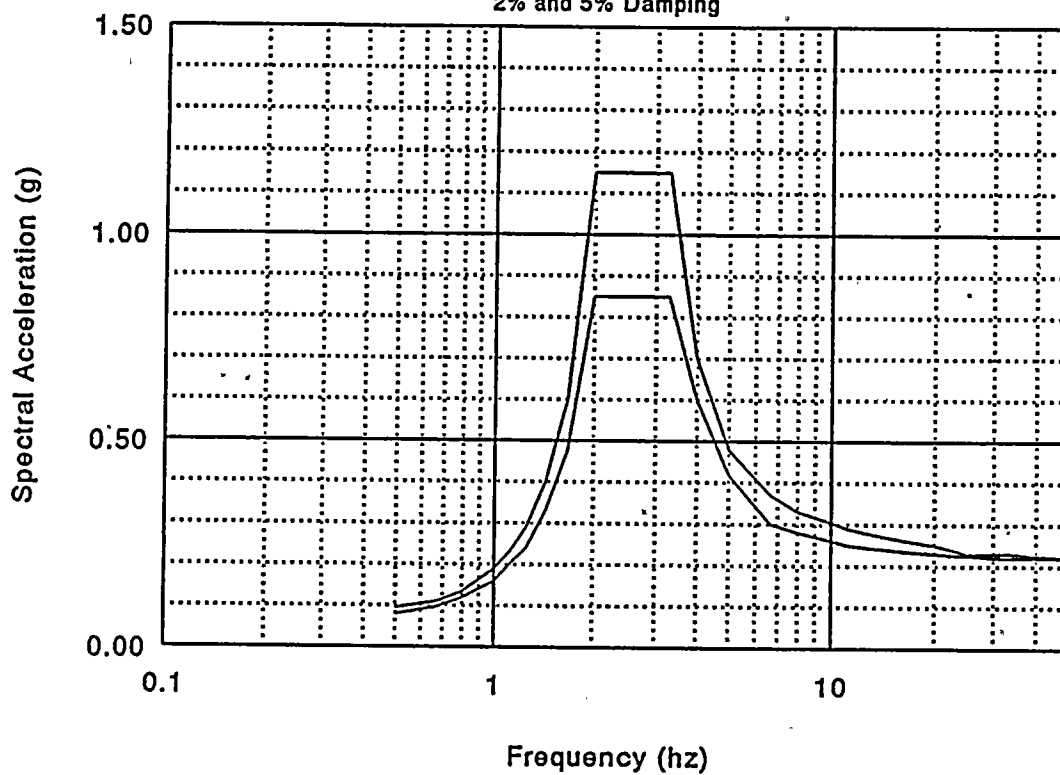


Figure B-5

# Donald C. Cook Nuclear Plant

Turbine Building Elevation 591 feet

2% and 5% Damping

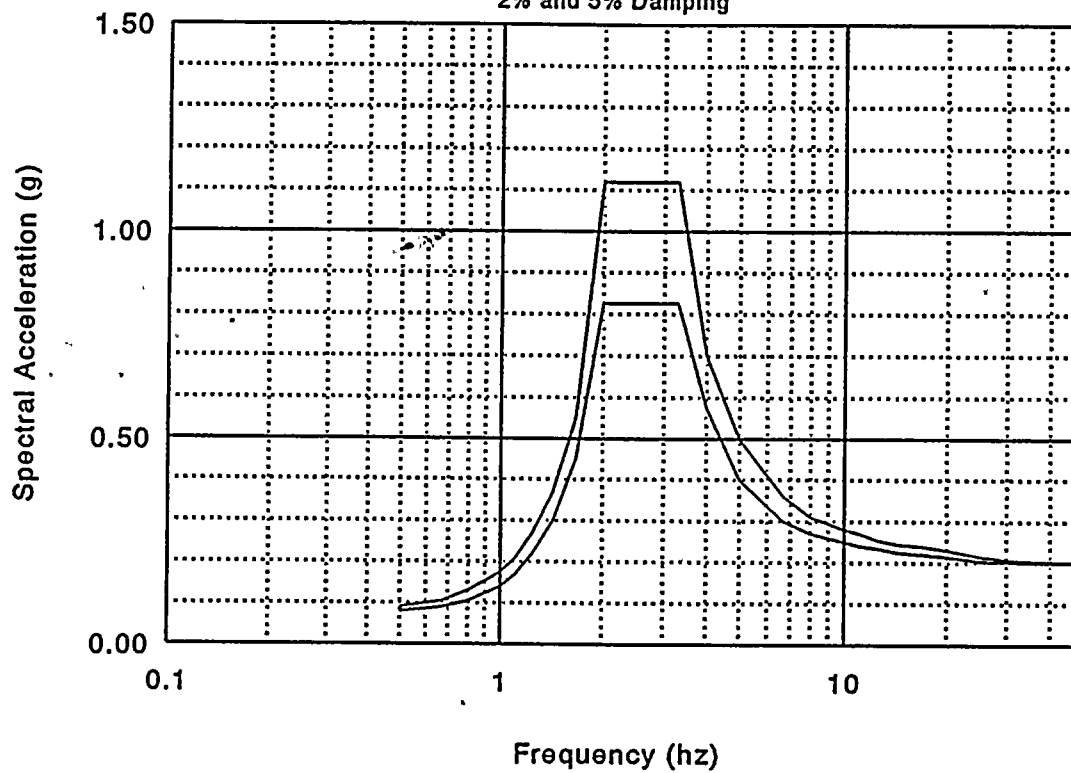


Figure B-6

**Donald C. Cook Nuclear Plant**  
Containment Building Elevation 597 feet  
2% and 5% Damping

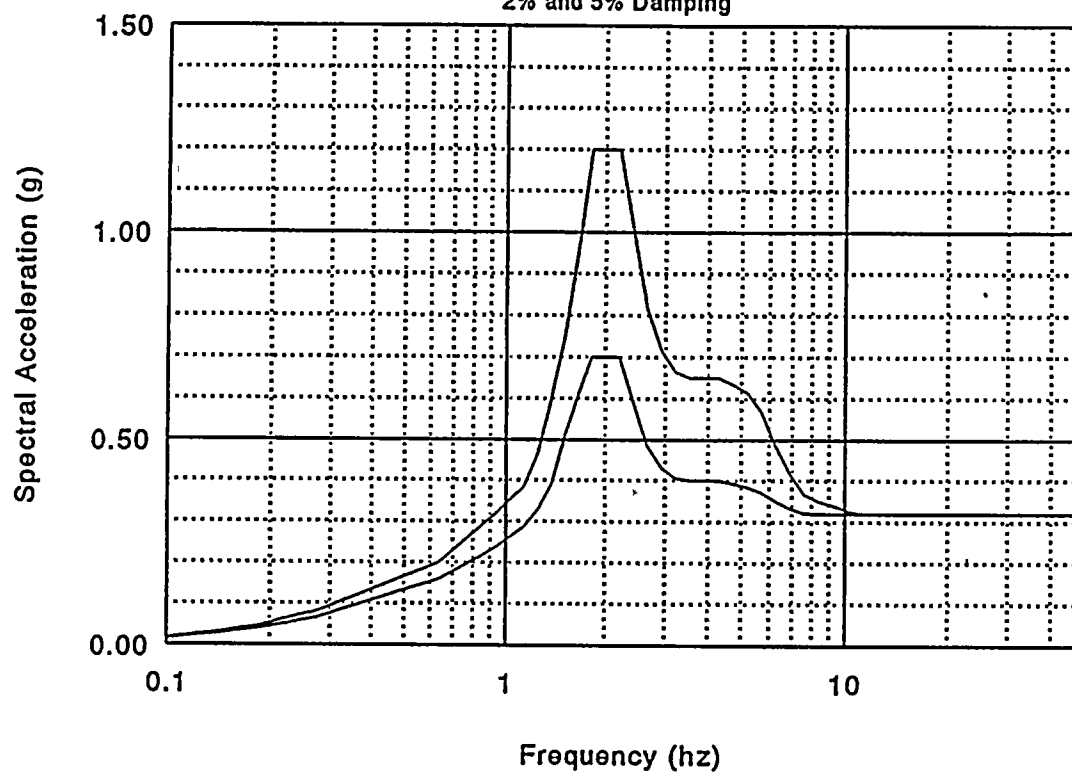


Figure B-7



**Donald C. Cook Nuclear Plant**  
Containment Building Elevation 612 feet  
2% and 5% Damping

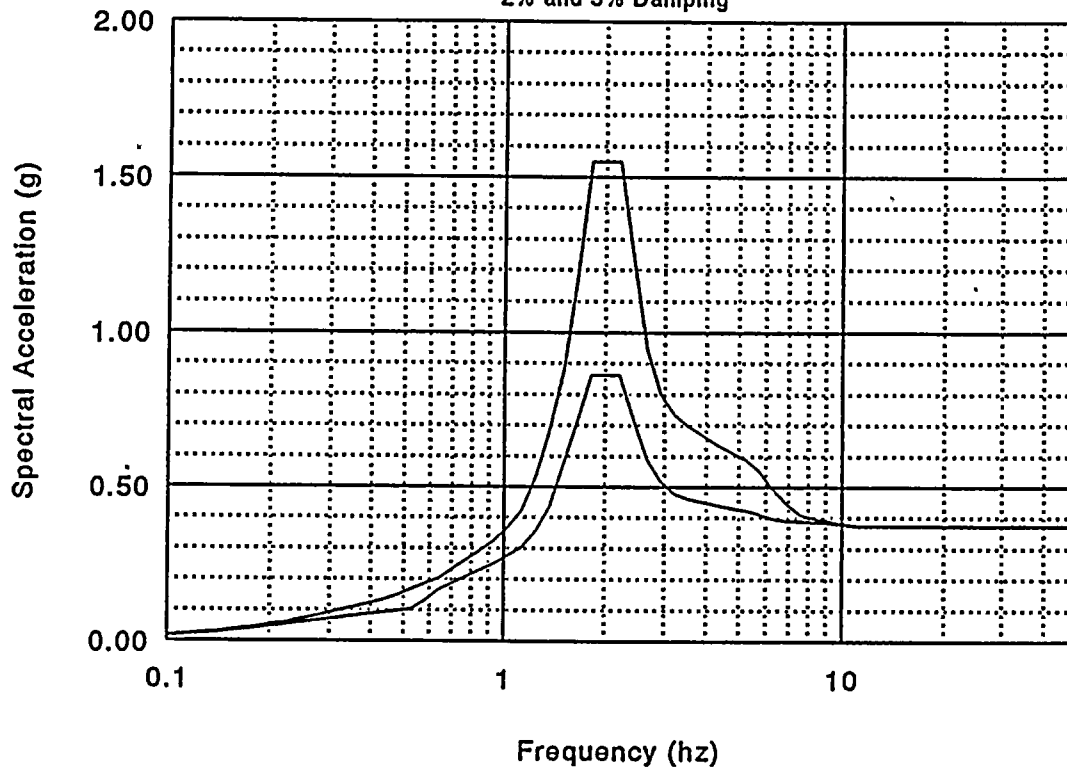


Figure B-8

# Donald C. Cook Nuclear Plant

Containment Building Elevation 625 feet

2% and 5% Damping

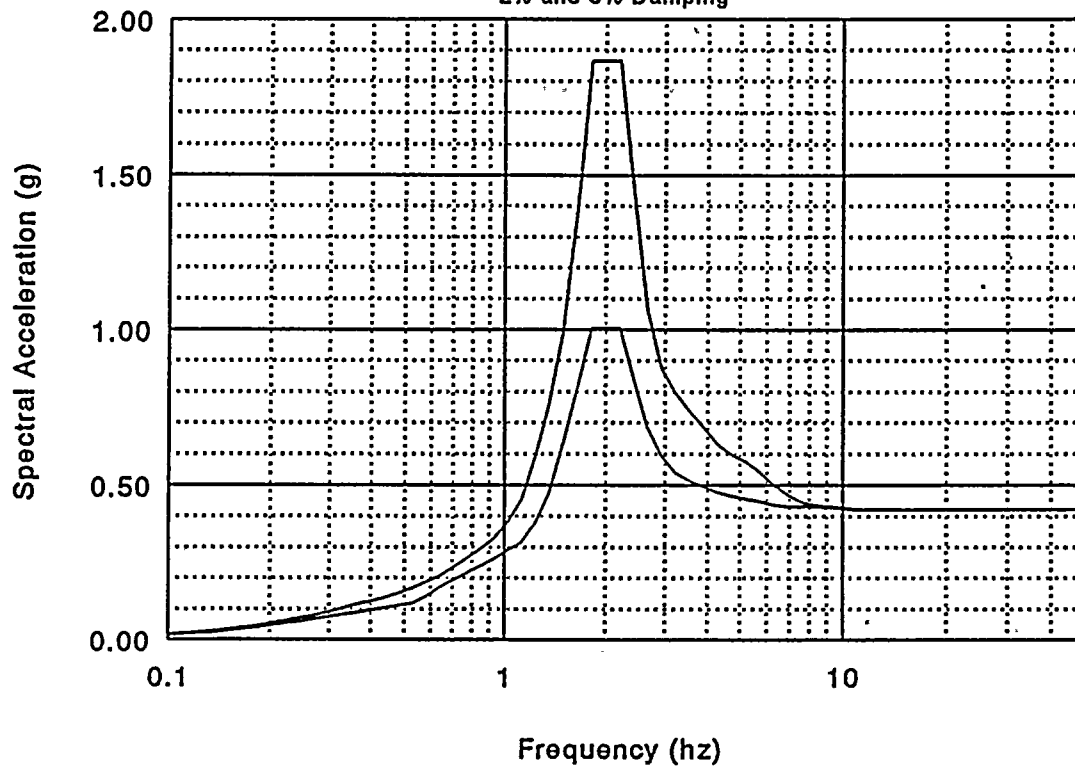


Figure B-9



# Donald C. Cook Nuclear Plant

Containment Building Elevation 651 feet

2% and 5% Damping

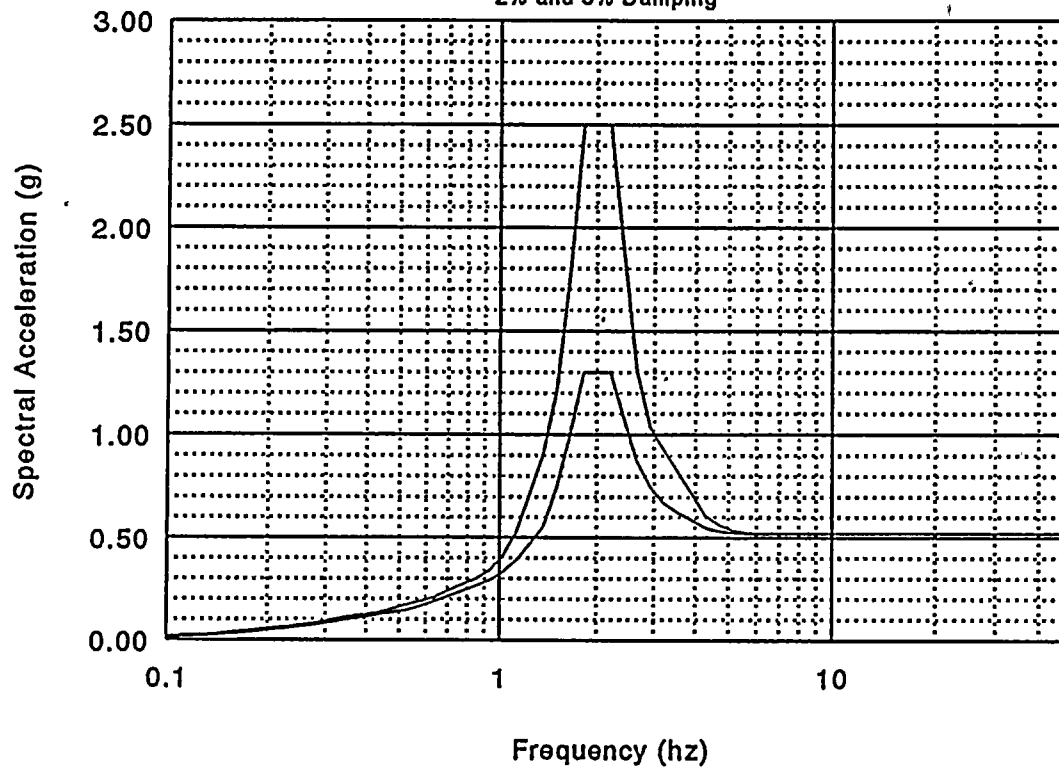


Figure B-10



# Donald C. Cook Nuclear Plant

Containment Building Elevation 663 feet

2% and 5% Damping

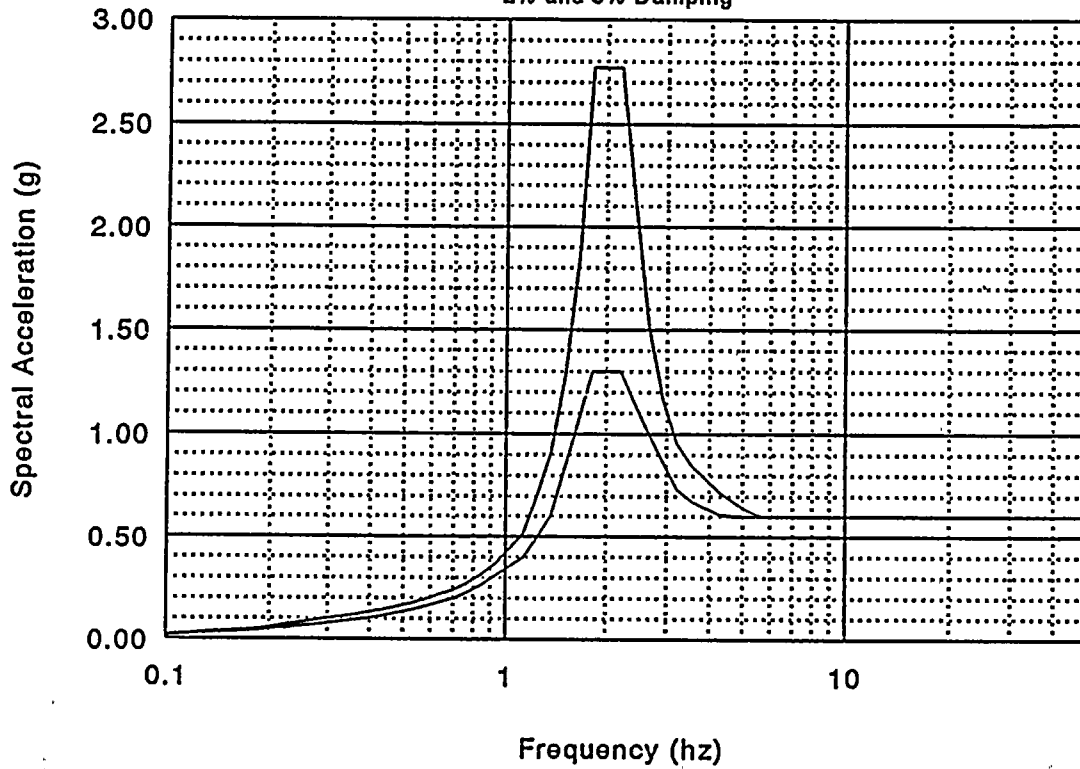


Figure B-11

# Donald C. Cook Nuclear Plant

Containment Building Elevation 675 feet

2% and 5% Damping

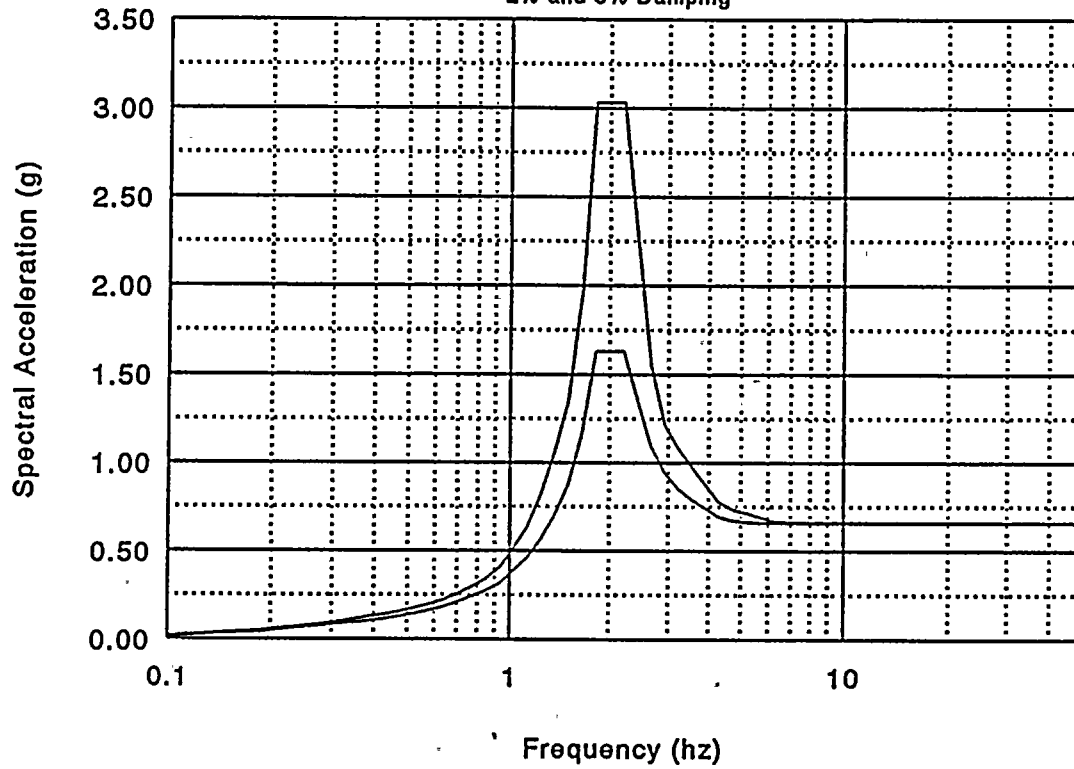


Figure B-12





# Donald C. Cook Nuclear Plant

Containment Building Elevation 687 feet

2% and 5% Damping

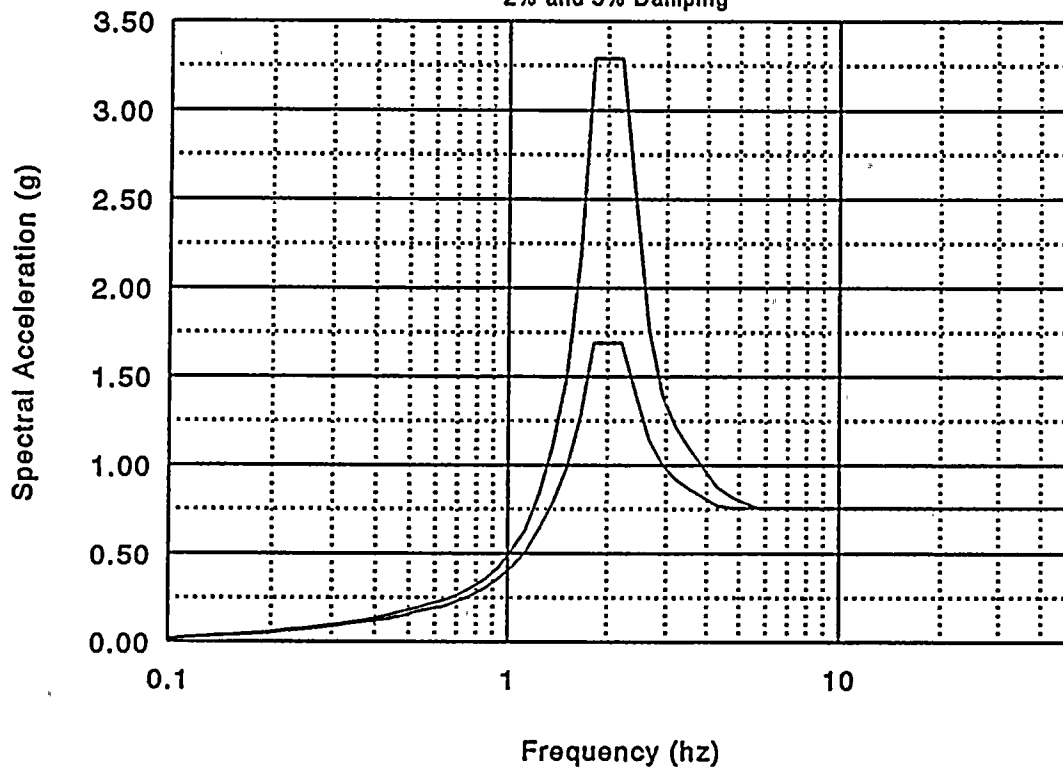


Figure B-13

# Donald C. Cook Nuclear Plant

Containment Building Elevation 699 feet

2% and 5% Damping

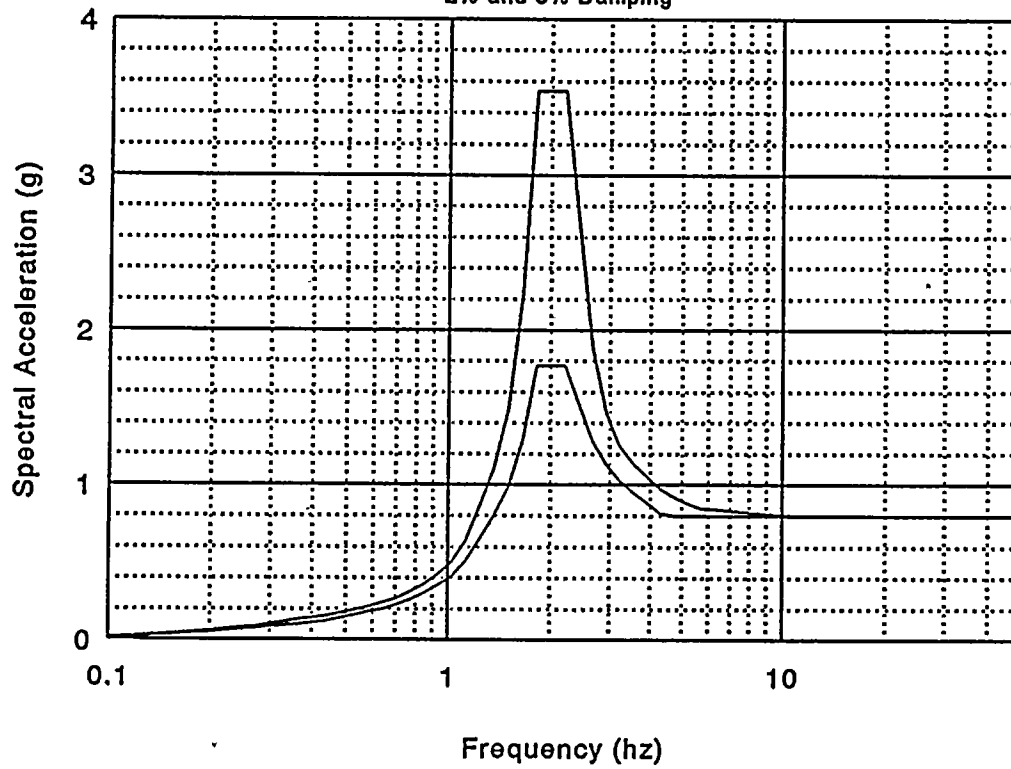


Figure B-14

**Donald C. Cook Nuclear Plant**  
Containment Building Elevation 711 feet  
2% and 5% Damping

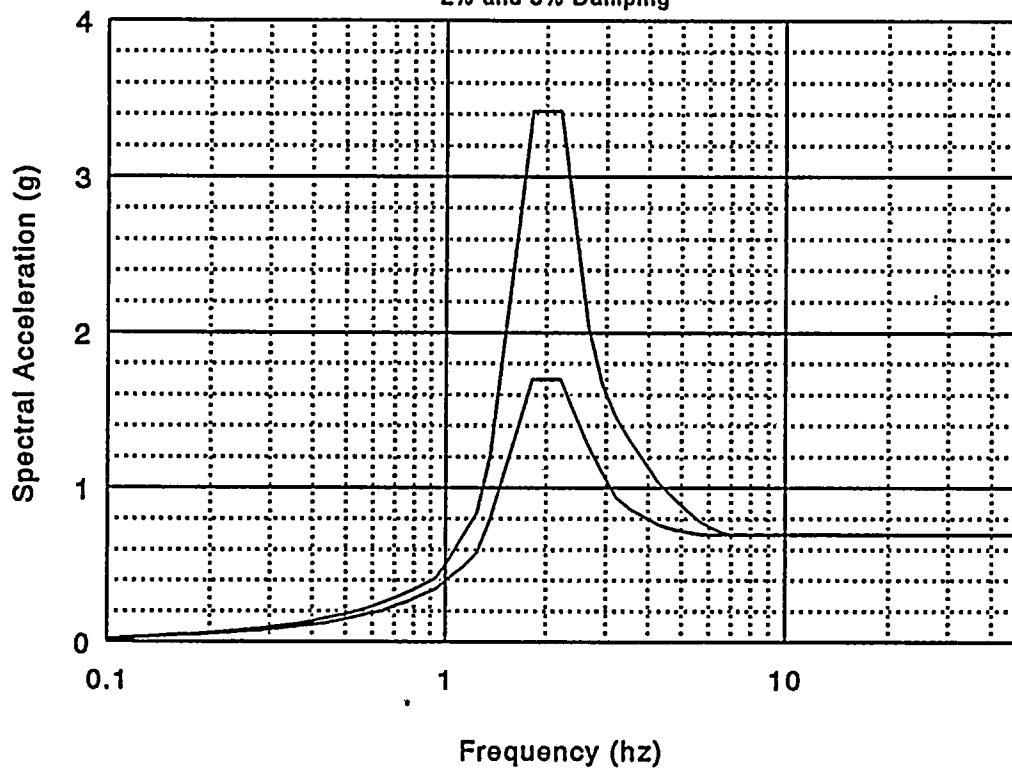


Figure B-15

# Donald C. Cook Nuclear Plant

Containment Building Elevation 714 feet

2% and 5% Damping

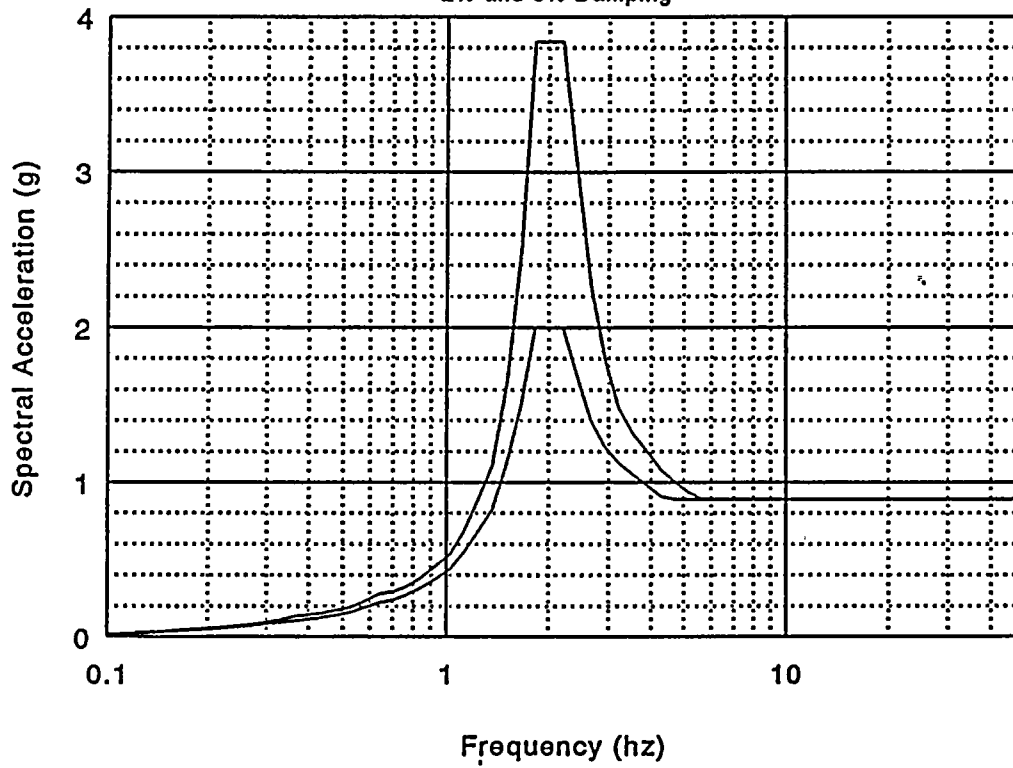


Figure B-16

## **APPENDIX C**

**DONALD C. COOK NUCLEAR PLANT - UNIT 2**

**SCREENING VERIFICATION  
DATA SHEETS (SVDS)**

**(AS PER SQUG GENERIC IMPLEMENTATION  
PROCEDURE, SECTION 4)**



## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip.ID No. | Rev No | System/Equipment Description   | Building    | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis                                     | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|--------------|--------|--|-------------|-------------|--|------------|------|---|---------------|-------------|------------|--------------|-----------|
| 1    | 0      | 12-HE-19S    | 0      | BORON RECOVERY (CVCS) / SOUTH BORIC ACID EVAPORATOR SKID                             | AUXILIARY   | 587.00      | S BORIC ACID EVAP RM - IN THE CENTER OF THE ROOM   | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 2    | 0      | 12-HE-25A    | 0      | RADIOACTIVE WASTE EV / 15GPM RADIOACTIVE WASTE EVAPORATOR HE-25 CONDENSER            | AUXILIARY   | 600.00      | 15 GPM WASTE EVAP RM - 8 FEET WEST OF THE BARRIER WALL, 10 FEET ABOVE THE 594 ELEVATION PLATFORM, 2 FEET ABOVE 15 GPM RADIOACTIVE WASTE EVAP DISTILLATE TANK | 609.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | No         | No           | No        |
| 3    | 0      | 12-HE-25B    | 0      | RADIOACTIVE WASTE EV / 15 GPM RADIOACTIVE WASTE EVAPORATOR HE-25 DISTILLATE COOLER   | AUXILIARY   | 587.00      | 15 GPM WASTE EVAP RM - 10 FEET SOUTH OF THE ROOM'S DOORWAY, ON THE WEST WALL   | 609.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 4    | 0      | 12-HE-25C    | 0      | RADIOACTIVE WASTE EV / 15 GPM RADIOACTIVE WASTE EVAPORATOR HE-25 CONCENTRATES COOLER | AUXILIARY   | 587.00      | 15 GPM WASTE EVAP RM - ON THE EAST SIDE OF THE DIVIDER WALL, IN THE MIDDLE OF THE ROOM   | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 5    | 0      | 2-MRV-210    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 STOP VALVE                                      | AUXILIARY   | 633.00      | E MAIN STM STOP ENCL - IN THE NORTHWEST REGION OF THE ROOM, GOING FROM 612 ELEVATION TO 640 ELEVATION THROUGH THE PLATFORM                                   | 633.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 6    | 0      | 2-MRV-220    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2 STOP VALVE                                      | AUXILIARY   | 633.00      | WMN STM STOP ENCL - 15 FEET SOUTH OF THE NORTH WALL, IN THE CENTER OF THE 647 PLATFORM   | 633.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 7    | 0      | 2-MRV-230    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3 STOP VALVE                                      | AUXILIARY   | 633.00      | WMN STM STOP ENCL - IN THE MIDDLE SOUTH PART OF THE ROOM   | 633.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | No           | No        |
| 8    | 0      | 2-MRV-240    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 STOP VALVE                                      | AUXILIARY   | 633.00      | E MAIN STM STOP ENCL - IN THE SOUTHWEST REGION OF THE ROOM, AT THE 640 ELEVATION PLATFORM  | 633.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 9    | 0      | 2-OME-34E    | 0      | ESSENTIAL SERVICE WA / EAST ESSENTIAL SERVICE WATER PUMP PP-7E DISCHARGE STRAINER    | SCREENHOUSE | 591.00      | E ESSNTL SERV WTR PMP RM - IN THE MIDDLE WEST END OF THE ROOM  | 591.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 10   | 0      | 2-OME-34W    | 0      | ESSENTIAL SERVICE WA / WEST ESSENTIAL SERVICE WATER PUMP PP-7W DISCHARGE STRAINER    | SCREENHOUSE | 591.00      | WESSNTL SERV WTR PMP RM - 5 FEET NORTH OF WEST ESSENTIAL SERVICE WATER PUMP #2-PP-7W   | 591.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 11   | 0      | 2-QC-12      | 0      | BORON MAKEUP (CVCS) / SOUTH BORIC ACID FILTER  | AUXILIARY   | 587.00      | BORIC ACID STOR TANK AREA - IN THE MIDDLE EAST REGION OF THE ROOM, 10 FEET NORTHEAST OF SOUTH BORIC ACID STORAGE TANK #2-TK-12S, NEAR THE FLOOR              | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 12   | 0      | 2-QT-100-AB  | 0      | DIESEL COMBUSTION AI / AB EMERGENCY DIESEL AIR INTAKE FILTER                         | GROUND      | 609.00      | INNER PLANT GROUND - 50 FEET NORTHWEST OF REFUELING WATER STORAGE TANK #2-TK-33  | 608.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 13   | 0      | 2-QT-100-CD  | 0      | DIESEL COMBUSTION AI / CD EMERGENCY DIESEL AIR INTAKE FILTER                         | GROUND      | 609.00      | INNER PLANT GROUND - 60 FEET NORTHWEST OF REFUELING WATER STORAGE TANK #2-TK-23  | 609.00     | Unk  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 14   | 0      | 2-QT-104-AB  | 0      | DIESEL COMBUSTION AI / AB EMERGENCY DIESEL EXHAUST SILENCER                          | GROUND      | 609.00      | INNER PLANT GROUND - 50 FEET SOUTHWEST OF UNIT 2 CONTAINMENT DOME  | 608.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 15   | 0      | 2-QT-104-CD  | 0      | DIESEL COMBUSTION AI / CD EMERGENCY DIESEL EXHAUST SILENCER                          | GROUND      | 609.00      | INNER PLANT GROUND - 20 FEET SOUTHWEST OF UNIT 2 DOME  | 608.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

John D. Stevenson  
Print or Type Name

*John D. Stevenson*  
Signature

12/11/95  
Date

Paul R. Wilson  
Print or Type Name

*Paul R. Wilson*  
Signature

12-11-95  
Date





## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description                                       | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|--|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 1    | 1      | 2-AB-A        | 0      | ELECTRICAL DISTRIBUT / 600VAC MOTOR CONTROL CENTER AB-A            | AUXILIARY | 587.00      | 587 HALLWAY - IN THE SOUTH REGION OF THE HALLWAY, 5 FEET SOUTHEAST OF CVCS MONITOR TANKS SOUTH TRANSFER PUMP #12-PP-47S, NEAR THE EAST     | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 2    | 1      | 2-AB-D        | 0      | ELECTRICAL DISTRIBUT / 600VAC MOTOR CONTROL CENTER AB-D            | AUXILIARY | 587.00      | 587 HALLWAY - IN THE SOUTH REGION OF THE HALLWAY, 5 FEET EAST OF CVCS MONITOR TANKS NORTH TRANSFER PUMP #12-PP-47N, NEAR THE EAST          | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 3    | 1      | 2-AB-N        | 0      | 250VDC CONTROL AND I / CONTROL CENTER VALVE                        | AUXILIARY | 587.00      | 587 HALLWAY - IN THE SOUTH REGION OF THE HALLWAY, 5 FEET NORTHWEST OF CVCS MONITOR TANKS NORTH TRANSFER PUMP #12-PP-47N                    | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 4    | 1      | 2-ABD-A       | 0      | ELECTRICAL DISTRIBUT / 600VAC MOTOR CONTROL CENTER ABD-A           | AUXILIARY | 587.00      | AB EMER DSL GEN RM - IN THE NORTHWEST CORNER OF THE ROOM, 3 FEET SOUTH OF THE NORTH WALL   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 5    | 1      | 2-ABD-B       | 0      | ELECTRICAL DISTRIBUT / 600VAC MOTOR CONTROL CENTER ABD-B           | AUXILIARY | 587.00      | AB EMER DSL GEN RM - IN THE NORTHWEST CORNER OF THE ROOM, 3 FEET SOUTH OF THE NORTH WALL   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 6    | 1      | 2-ABD-C       | 0      | ELECTRICAL DISTRIBUT / 600VAC MOTOR CONTROL CENTER ABD-C           | AUXILIARY | 587.00      | CD EMER DSL GEN RM - IN THE SOUTHWEST CORNER OF THE ROOM, ON THE SOUTH WALL, 10 FEET WEST OF EMERGENCY DIESEL GENERATOR #2-OME-150-CD      | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 7    | 1      | 2-ABD-D       | 0      | ELECTRICAL DISTRIBUT / 600VAC MOTOR CONTROL CENTER ABD-D           | AUXILIARY | 587.00      | CD EMER DSL GEN RM - IN THE SOUTHWEST CORNER OF THE ROOM, NEAR THE SOUTH WALL, 10 FEET WEST OF CD EMERGENCY DIESEL GENERATOR #2-OME-150-CD | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 8    | 1      | 2-ABV-A       | 0      | ELECTRICAL DISTRIBUT / 600VAC VALVE CONTROL CENTER ABV-A           | AUXILIARY | 587.00      | 587 HALLWAY - IN THE SOUTH END OF THE HALLWAY, 15 FEET SOUTHEAST OF SOUTH BORIC ACID EVAPORATOR SUBPANEL #12-BAES, NEAR THE SOUTH WALL     | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 9    | 1      | 2-ABV-D       | 0      | ELECTRICAL DISTRIBUT / 600VAC VALVE CONTROL CENTER ABV-D           | AUXILIARY | 587.00      | 587 HALLWAY - IN THE SOUTHWEST REGION OF THE HALLWAY, NEAR THE WEST WALL, 3 FEET NORTHEAST OF THE WASTE GAS STORAGE TANK AREA              | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 10   | 1      | 2-AM-A        | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER AM-A | AUXILIARY | 633.00      | 633 HALLWAY - NEAR THE SOUTH SECTION OF THE HALLWAY, 2 FEET NORTH OF NBFT ROOM'S ENTRANCE  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 11   | 1      | 2-AM-D        | 0      | ELECTRICAL DISTRIBUT / 600VAC MOTOR CONTROL CENTER AM-D            | AUXILIARY | 633.00      | 633 HALLWAY - IN THE SOUTH SECTION OF THE HALLWAY, 2 FEET NORTH OF CONTAINMENT AUXILIARIES SUBPANEL #2-CAS, NEAR THE WEST WALL             | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 12   | 1      | 2-AZV-A       | 0      | ELECTRICAL DISTRIBUT / 600VAC VALVE CONTROL CENTER AZV-A           | AUXILIARY | 609.00      | 609 HALLWAY - 15 FEET EAST OF THE NORTHEAST SIDE OF EAST COMPONENT COOLING WATER HEAT EXCHANGER #2-HE-15E, 5 FEET ABOVE THE FLOOR          | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 13   | 1      | 2-EZC-A       | 0      | ELECTRICAL DISTRIBUT / 600VAC MOTOR CONTROL CENTER EZC-A           | AUXILIARY | 613.00      | 4KV ROOM - MEZZANINE AREA - IN THE SOUTHEAST PART OF THE ROOM, 10 FEET NORTH OF THE SOUTH WALL   | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 14   | 1      | 2-EZC-B       | 0      | ELECTRICAL DISTRIBUT / 600VAC MOTOR CONTROL CENTER EZC-B           | AUXILIARY | 613.00      | 4KV ROOM - MEZZANINE AREA - IN THE SOUTHEAST PART OF THE ROOM, 4 FEET NORTH OF THE SOUTH END OF THE ROOM                                   | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All Information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

  
Signature

12/16/95  
Date

T.R. Satyan Sharma  
Print or Type Name

  
Signature

12/20/95  
Date

1-1

1-1

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description   | Building    | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|--|-------------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 15   | 1      | 2-EZC-C       | 0      | ELECTRICAL DISTRIBUT / 600VAC MOTOR CONTROL CENTER EZC-C                                     | AUXILIARY   | 613.00      | 4KV ROOM - MEZZANINE AREA - IN THE NORTHEAST CORNER OF THE ROOM, 4 FEET SOUTH OF THE NORTH WALL, 5 FEET NORTH OF 600VAC MOTOR CONTROL | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 16   | 1      | 2-EZC-D       | 0      | ELECTRICAL DISTRIBUT / 600VAC MOTOR CONTROL CENTER EZC-D                                     | AUXILIARY   | 613.00      | 4KV ROOM - MEZZANINE AREA - IN THE NORTHEAST PART OF THE ROOM, 8 FEET SOUTH OF THE NORTH WALL   | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 17   | 1      | 2-PS-A        | 0      | ELECTRICAL DISTRIBUT / 600VAC MOTOR CONTROL CENTER PS-A                                      | SCREENHOUSE | 594.00      | TRAVEL SCRNM MCC UPPER RM - 10 FEET NORTHWEST OF THE ROOM'S ENTRANCE DOORWAY, ON THE WEST WALL  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 18   | 1      | 2-PS-D        | 0      | ELECTRICAL DISTRIBUT / 600VAC MOTOR CONTROL CENTER PS-D                                      | SCREENHOUSE | 594.00      | TRAVEL SCRNM MCC UPPER RM - ON THE WEST WALL OF THE ROOM, 2 FEET NORTH OF THE ROOM'S ENTRANCE   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 19   | 2      | 2-21A         | 0      | ELECTRICAL DISTRIBUT / 600V BUS 21A SWITCHGEAR   | AUXILIARY   | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHWEST REGION OF THE ROOM, 20 FEET NORTH OF 600 VAC TRANSFORMER #2-TR-21A                         | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 20   | 2      | 2-21A1        | 0      | ELECTRICAL DISTRIBUT / REACTOR ROD CONTROL SOUTH MOTOR-GENERATOR SET CRDMG-2S SUPPLY BREAKER | AUXILIARY   | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHWEST REGION OF THE ROOM, IN 600VAC SWITCHGEAR #2-21A, 6 FEET ABOVE THE FLOOR                    | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 21   | 2      | 2-21A10       | 0      | ELECTRICAL DISTRIBUT / WEST TURBINE AUXILIARY COOLING WATER PUMP PP-14W SUPPLY BREAKER       | AUXILIARY   | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHWEST REGION OF THE ROOM, IN 600VAC SWITCHGEAR #2-21A  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 22   | 2      | 2-21A11       | 0      | ELECTRICAL DISTRIBUT / 600VAC BUS 21A SUPPLY BREAKER   | AUXILIARY   | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NW REGION OF THE ROOM, IN 600V AC SWITCHGEAR #2-21A, 6 FEET ABOVE                                    | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 23   | 2      | 2-21A2        | 0      | ELECTRICAL DISTRIBUT / 600VAC MCC AM-A SUPPLY BREAKER  | AUXILIARY   | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NW REGION OF THE ROOM, ON 600V AC SWITCHGEAR #2-21A, 5 FEET ABOVE THE FLOOR                          | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 24   | 2      | 2-21A4        | 0      | ELECTRICAL DISTRIBUT / SOUTH PLANT LIGHTING TRANSFORMER TR-LTG-9S SUPPLY BREAKER             | AUXILIARY   | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHWEST REGION OF THE ROOM, IN 600VAC SWITCHGEAR #2-21A, 6 FEET ABOVE THE FLOOR                    | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 25   | 2      | 2-21A5        | 0      | ELECTRICAL DISTRIBUT / 600VAC MCC ABD-A SUPPLY BREAKER                                       | AUXILIARY   | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NW REGION OF THE ROOM, ON 600V AC SWITCHGEAR #2-21A, 3 FT ABOVE                                      | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 26   | 2      | 2-21A6        | 0      | ELECTRICAL DISTRIBUT / 600VAC MCCS AB-A, PS-A, TPP-A, AND VCCS ABV-A, AZV-A SUPPLY BREAKER   | AUXILIARY   | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NE REGION OF THE ROOM, ON 600V AC SWITCHGEAR #2-21A, 1 FOOT ABOVE                                    | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 27   | 2      | 2-21A8        | 0      | ELECTRICAL DISTRIBUT / 600VAC BORIC ACID HEAT TRACE CONTROL CENTER BHT-A SUPPLY BREAKER      | AUXILIARY   | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHWEST REGION OF THE ROOM, IN 600VAC SWITCHGEAR #2-21A, 4 FEET ABOVE THE FLOOR                    | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 28   | 2      | 2-21A9        | 0      | ELECTRICAL DISTRIBUT / 600VAC MCC EZC-A SUPPLY BREAKER                                       | AUXILIARY   | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NW REGION OF THE ROOM, ON 600V AC SWITCHGEAR #2-21A, 1 FOOT ABOVE THE FLOOR                          | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/16/15  
Date

T.R. Satyan Sharma  
Print or Type Name

*T.R. Satyan Sharma*  
Signature

12/20/15  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip.ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|--------------|--------|--|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 29   | 2      | 2-21AC       | 0      | ELECTRICAL DISTRIBUT / 600V BUS 21A TO 600V BUS 21C TIE BREAKER                                      | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHWEST REGION OF THE ROOM, IN 600VAC SWITCHGEAR #2-21A, 2 FEET ABOVE THE FLOOR | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 30   | 2      | 2-21B        | 0      | ELECTRICAL DISTRIBUT / 600V BUS 21B SWITCHGEAR   | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHWEST REGION OF THE ROOM, IN 600VAC SWITCHGEAR #2-21A, 2 FEET ABOVE THE FLOOR | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 31   | 2      | 2-21B1       | 0      | ELECTRICAL DISTRIBUT / 600VAC MCC ABD-B SUPPLY BREAKER (2-ELSC)                                      | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NE REGION OF THE ROOM, 6 FEET ABOVE THE FLOOR                                     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 32   | 2      | 2-21B10      | 0      | ELECTRICAL DISTRIBUT / PLANT AIR COMPRESSOR OME-41 SUPPLY BREAKER                                    | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHEAST REGION OF THE ROOM, IN 600VAC SWITCHGEAR #2-21B, NEAR THE FLOOR         | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 33   | 2      | 2-21B11      | 0      | ELECTRICAL DISTRIBUT / 600VAC BUS 21B SUPPLY BREAKER   | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NE REGION OF THE ROOM, ON 600V AC SWITCHGEAR #2-21B, 6 FEET ABOVE THE FLOOR       | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 34   | 2      | 2-21B12      | 0      | ELECTRICAL DISTRIBUT / SOUTH NON-ESSENTIAL SERVICE WATER PUMP PP-8S SUPPLY BREAKER                   | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHEAST REGION OF THE ROOM, IN 600VAC SWITCHGEAR #2-21B, 2 FEET ABOVE THE FLOOR | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 35   | 2      | 2-21B13      | 0      | ELECTRICAL DISTRIBUT / TURBINE ROOM INDUCTION HEATING, STRESS RELIEF AND BOLT HEATERS SUPPLY BREAKER | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHEAST REGION OF THE ROOM, IN 600VAC SWITCHGEAR #2-21B, NEAR THE FLOOR         | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 36   | 2      | 2-21B2       | 0      | ELECTRICAL DISTRIBUT / 600VAC MCC EZC-B SUPPLY BREAKER   | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NE REGION OF THE ROOM, IN 600V AC SWITCHGEAR #2-21B, 5 FEET ABOVE THE FLOOR       | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 37   | 2      | 2-21B3       | 0      | ELECTRICAL DISTRIBUT / 600V BUS 21B SPARE CIRCUIT BREAKER  | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHEAST REGION OF THE ROOM, IN 600VAC SWITCHGEAR #2-21B, 4 FEET ABOVE THE FLOOR | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 38   | 2      | 2-21B5       | 0      | ELECTRICAL DISTRIBUT / 600V MOTOR CONTROL CENTERS TBG-BW AND TBP-BN SUPPLY BREAKER                   | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHEAST REGION OF THE ROOM, IN 600VAC SWITCHGEAR #2-21B, 4 FEET ABOVE THE FLOOR | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 39   | 2      | 2-21B6       | 0      | ELECTRICAL DISTRIBUT / EAST TURBINE AUXILIARY COOLING WATER PUMP PP-14E SUPPLY BREAKER               | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHEAST REGION OF THE ROOM, IN 600VAC SWITCHGEAR #2-21B, 4 FEET ABOVE THE FLOOR | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 40   | 2      | 2-21BD       | 0      | ELECTRICAL DISTRIBUT / 600V BUS 21B TO 600V BUS 21D TIE BREAKER                                      | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHEAST REGION OF THE ROOM, IN 600VAC SWITCHGEAR #2-21B, 2 FEET ABOVE THE FLOOR | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 41   | 2      | 2-21C        | 0      | ELECTRICAL DISTRIBUT / 600V BUS 21C SWITCHGEAR   | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHWEST REGION OF THE ROOM, 20 FEET NORTH OF 600VAC SUPPLY TRANSFORMER #2-TR21C | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

  
Signature

12/16/95  
Date

T.R. Satyan Sharma  
Print or Type Name

  
Signature

12/20/95  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|---|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 42   | 2      | 2-21C1        | 0      | ELECTRICAL DISTRIBUT / 600V BUS 21C SUPPLY BREAKER  | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHWEST REGION OF THE ROOM, IN 600VAC SWITCHGEAR #2-21C, 4 FEET ABOVE THE FLOOR | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 43   | 2      | 2-21C10       | 0      | ELECTRICAL DISTRIBUT / 600VAC MCC ABD-C AND 2-AFW SUPPLY BREAKER                                | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHWEST REGION OF THE ROOM, IN 600VAC SWITCHGEAR #2-21C, 1 FOOT ABOVE THE FLOOR | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 44   | 2      | 2-21C11       | 0      | ELECTRICAL DISTRIBUT / 600V BUS 21C SPARE CIRCUIT BREAKER                                       | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHWEST REGION OF THE ROOM, IN 600VAC SWITCHGEAR #2-21C                         | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 45   | 2      | 2-21C12       | 0      | ELECTRICAL DISTRIBUT / SOUTH SPENT FUEL PIT PUMP 12-PP-31S SUPPLY BREAKER                       | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHWEST REGION OF THE ROOM, IN 600VAC SWITCHGEAR #2-21C                         | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 46   | 2      | 2-21C13       | 0      | ELECTRICAL DISTRIBUT / RECIPROCATING CHARGING PUMP PP-49 SUPPLY BREAKER                         | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHWEST REGION OF THE ROOM, IN 600VAC SWITCHGEAR #2-21C, 2 FEET ABOVE THE FLOOR | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 47   | 2      | 2-21C14       | 0      | ELECTRICAL DISTRIBUT / FIRE PROTECTION WATER HIGH DEMAND PUMP PP-11 SUPPLY BREAKER              | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHWEST REGION OF THE ROOM, IN 600VAC SWITCHGEAR #2-21C                         | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 48   | 2      | 2-21C16       | 0      | ELECTRICAL DISTRIBUT / 600VAC MOTOR CONTROL CENTER TBC-CN SUPPLY BREAKER                        | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHWEST REGION OF THE ROOM, IN 600VAC SWITCHGEAR #2-21C, 4 FEET ABOVE THE FLOOR | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 49   | 2      | 2-21C17       | 0      | ELECTRICAL DISTRIBUT / NORTH NON-ESSENTIAL SERVICE WATER PUMP PP-8N SUPPLY BREAKER              | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHWEST REGION OF THE ROOM, IN 600VAC SWITCHGEAR #2-21C, 4 FEET ABOVE THE FLOOR | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 50   | 2      | 2-21C18       | 0      | ELECTRICAL DISTRIBUT / MAIN TURBINE AUXILIARY LUBE OIL PUMP QT-201 SUPPLY BREAKER               | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHWEST REGION OF THE ROOM, IN 600VAC SWITCHGEAR #2-21C, NEAR THE FLOOR         | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 51   | 2      | 2-21C2        | 0      | ELECTRICAL DISTRIBUT / CONTAINMENT POLAR CRANE QM-4 SUPPLY BREAKER                              | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHWEST REGION OF THE ROOM, IN 600VAC SWITCHGEAR #2-21C, 2 FEET ABOVE THE FLOOR | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 52   | 2      | 2-21C3        | 0      | ELECTRICAL DISTRIBUT / 600V BUS 21C SPARE CIRCUIT BREAKER                                       | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHWEST REGION OF THE ROOM, IN 600VAC SWITCHGEAR #2-21C, NEAR THE FLOOR         | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 53   | 2      | 2-21C4        | 0      | ELECTRICAL DISTRIBUT / CIRCULATING WATER TRAVELING SCREEN SOUTH WASH PUMP PP-15S SUPPLY BREAKER | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHWEST REGION OF THE ROOM, IN 600VAC SWITCHGEAR #2-21C, 4 FEET ABOVE THE FLOOR | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 54   | 2      | 2-21C6        | 0      | ELECTRICAL DISTRIBUT / 600VAC MCC EZC-C SUPPLY BREAKER  | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHWEST REGION OF THE ROOM, ON THE 600VAC SWITCHGEAR #2-21C                     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 55   | 2      | 2-21C7        | 0      | ELECTRICAL DISTRIBUT / 600V BUS 21C SPARE CIRCUIT BREAKER                                       | AUXILIARY | 609.00      | 4KV RM - CD 4KV SWGR AREA - IN THE NORTHWEST REGION OF THE ROOM, IN 600VAC SWITCHGEAR #2-21C                       | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/16/95  
Date

T.R. Satyan Sharma  
Print or Type Name

*T.R. Satyan Sharma*  
Signature

12/20/95  
Date



## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No. | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|---------|---|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 56   | 2      | 2-21C8        | 0       | ELECTRICAL DISTRIBUT / PLANT AND CNTMT STANDBY LIGHTING TRANSFORMER TR-LTG-8 SUPPLY BREAKER                   | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHWEST REGION OF THE ROOM, IN 600VAC SWITCHGEAR #2-21C, 4 FEET ABOVE THE FLOOR     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 57   | 2      | 2-21C9        | 0       | ELECTRICAL DISTRIBUT / MAIN AND SPARE TRANSFORMER AUXILIARIES NORMAL DISTRIBUTION CABINET TCSN SUPPLY BREAKER | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHWEST REGION OF THE ROOM, IN 600VAC SWITCHGEAR #2-21C, 4 FEET ABOVE THE FLOOR     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 58   | 2      | 2-21D         | 0       | ELECTRICAL DISTRIBUT / 600V BUS 21D SWITCHGEAR  | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHEAST REGION OF THE ROOM, 20 FEET NORTHWEST OF 600VAC SUPPLY TRANSFORMER #2-TR21D | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 59   | 2      | 2-21D1        | 0       | ELECTRICAL DISTRIBUT / 600V BUS 21D SUPPLY BREAKER  | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHEAST CORNER OF THE ROOM, IN 600VAC SWITCHGEAR #2-21D, 4 FEET ABOVE THE FLOOR     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 60   | 2      | 2-21D10       | 0       | ELECTRICAL DISTRIBUT / NORTH PLANT LIGHTING TRANSFORMER TR-LTG-9N SUPPLY BREAKER                              | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHEAST REGION OF THE ROOM, IN 600V SWITCHGEAR #2-21D, NEAR THE FLOOR               | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 61   | 2      | 2-21D11       | 0       | ELECTRICAL DISTRIBUT / 600V BORIC ACID HEAT TRACE CONTROL CENTER BHT-D SUPPLY BREAKER                         | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHEAST REGION OF THE ROOM, ON 600V SWITCHGEAR #2-21D, 6 FEET ABOVE THE FLOOR       | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 62   | 2      | 2-21D13       | 0       | ELECTRICAL DISTRIBUT / REACTOR ROD CONTROL NORTH MOTOR-GENERATOR SET CRDMG-2N SUPPLY BREAKER                  | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHEAST REGION OF THE ROOM, ON 600V SWITCHGEAR #2-21D, 6 FEET ABOVE THE FLOOR       | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 63   | 2      | 2-21D14       | 0       | 600VAC DISTRIBUTION / 600VAC MCC 2-AB-D, VCC 2-ABV-D, MCC 2-PS-D SUPPLY BREAKER                               | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHEAST REGION OF THE ROOM, ON 600V AC SWITCHGEAR #2-21D, 1 FOOT ABOVE THE FLOOR    | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 64   | 2      | 2-21D3        | 0       | ELECTRICAL DISTRIBUT / CONTAINMENT LIGHTING TRANSFORMER TR-LTG-10 SUPPLY BREAKER                              | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHEAST PART OF THE ROOM, IN 600VAC SWITCHGEAR #2-21D, NEAR THE FLOOR               | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 65   | 2      | 2-21D4        | 0       | ELECTRICAL DISTRIBUT / 600V BUS 21D SPARE CIRCUIT BREAKER   | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHEAST PART OF THE ROOM, IN 600VAC SWITCHGEAR #2-21D, 4 FEET ABOVE THE FLOOR       | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 66   | 2      | 2-21D5        | 0       | ELECTRICAL DISTRIBUT / 600VAC MCC ABD-D SUPPLY BREAKER  | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHEAST REGION OF THE ROOM, IN 600VAC SWITCHGEAR #2-21D, 3 FEET ABOVE THE FLOOR     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 67   | 2      | 2-21D6        | 0       | ELECTRICAL DISTRIBUT / 600VAC MCC ECC-D SUPPLY BREAKER  | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHEAST REGION OF THE ROOM, IN 600VAC SWITCHGEAR #2-21D, 1 FOOT ABOVE THE FLOOR     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 68   | 2      | 2-21D8        | 0       | ELECTRICAL DISTRIBUT / 600VAC MCC AM-D SUPPLY BREAKER   | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHEAST REGION OF THE ROOM, IN 600VAC SWITCHGEAR #2-21D, 5 FEET ABOVE THE FLOOR     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/16/95  
Date

T.R. Satyan Sharma  
Print or Type Name

*T.R. Satyan Sharma*  
Signature

12/20/95  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|--|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 69   | 2      | 2-21D9        | 0      | ELECTRICAL DISTRIBUT / MAIN AND SPARE TRANSFORMER AUXILIARIES EMERGENCY DISTRIBUTION CABINET TCSE SUPPLY BREAKER | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHEAST REGION OF THE ROOM, IN 600VAC SWITCHGEAR #2-21D, 2 FEET ABOVE THE FLOOR         | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 70   | 2      | 2-52-BYA      | 0      | REACTOR TRIP BREAKER / REACTOR ROD CONTROL TR-A REACTOR TRIP BYPASS CIRCUIT BREAKER                              | AUXILIARY | 609.00      | CRD EQUIP RM - IN THE MIDDLE WEST REGION OF THE ROOM, ON 260/150 VAC ROD CONTROL MOTOR-GENERATOR SET SWITCHGEAR #2-CRDSWGR | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 71   | 2      | 2-52-BYB      | 0      | REACTOR TRIP BREAKER / REACTOR ROD CONTROL TRAIN B REACTOR TRIP BYPASS CIRCUIT BREAKER                           | AUXILIARY | 609.00      | CRD EQUIP RM - IN THE MIDDLE WEST REGION OF THE ROOM, ON 260/150 VAC ROD CONTROL MOTOR-GENERATOR SET SWITCHGEAR #2-CRDSWGR | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 72   | 2      | 2-52-RTA      | 0      | ROD CONTROL AND INST / REACTOR ROD CONTROL TRAIN 'A' REACTOR TRIP CIRCUIT BREAKER                                | AUXILIARY | 609.00      | CRD EQUIP RM - IN THE MIDDLE WEST REGION OF THE ROOM, IN BREAKER COMPARTMENT #2-52-RTA, 3 FEET ABOVE THE FLOOR             | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 73   | 2      | 2-52-RTB      | 0      | ROD CONTROL AND INST / REACTOR ROD CONTROL TRAIN 'B' REACTOR TRIP CIRCUIT BREAKER                                | AUXILIARY | 609.00      | CRD EQUIP RM - IN THE MIDDLE WEST REGION OF THE ROOM, IN BREAKER COMPARTMENT #2-52-RTB, NEAR THE FLOOR                     | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 74   | 3      | 2-T21A        | 0      | 4KV ELECTRICAL DISTR / 4KV BUS T21A SWITCHGEAR   | AUXILIARY | 609.00      | 4KV RM - AB 4KV SWGR AREA -  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | No          | Yes        | No           | No        |
| 75   | 3      | 2-T21A1       | 0      | ELECTRICAL DISTRIBUT / SOUTH SAFETY INJECTION PUMP PP-26S SUPPLY BREAKER   | AUXILIARY | 609.00      | 4KV RM - AB 4KV SWGR AREA - IN THE SE REGION OF THE ROOM, IN 4 KV SWITCHGEAR #2-T21A, IN BREAKER COMPARTMENT #2-T21A1      | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 76   | 3      | 2-T21A10      | 0      | ELECTRICAL DISTRIBUT / 600V BUS 21A SUPPLY TRANSFORMER TR21A SUPPLY BREAKER                                      | AUXILIARY | 609.00      | 4KV RM - AB 4KV SWGR AREA - IN THE MIDDLE SOUTH REGION OF THE ROOM, IN 4KV SWITCHGEAR #2-T21A, NEAR THE FLOOR              | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 77   | 3      | 2-T21A11      | 0      | ELECTRICAL DISTRIBUT / AB EMERGENCY DIESEL GENERATOR TO 4KV BUS T21A SUPPLY BREAKER                              | AUXILIARY | 609.00      | 4KV RM - AB 4KV SWGR AREA - IN THE MIDDLE SOUTH REGION OF THE ROOM, IN 4KV SWITCHGEAR #2-T21A, NEAR THE FLOOR              | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 78   | 3      | 2-T21A12      | 0      | ELECTRICAL DISTRIBUT / CIRCUIT BREAKER FROM 69KV TO BUS T21A   | AUXILIARY | 609.00      | 4KV RM - AB 4KV SWGR AREA - IN THE MIDDLE SOUTH REGION OF THE ROOM, IN 4KV SWITCHGEAR #2-T21A                              | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 79   | 3      | 2-T21A2       | 0      | ELECTRICAL DISTRIBUT / WEST MOTOR DRIVEN AUX FEEDWATER PUMP PP-3W SUPPLY BREAKER                                 | AUXILIARY | 609.00      | 4KV RM - AB 4KV SWGR AREA - IN THE SE REGION OF THE ROOM, IN 4KV SWITCHGEAR #2-T21A, NEAR THE FLOOR                        | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 80   | 3      | 2-T21A3       | 0      | ELECTRICAL DISTRIBUT / WEST CONTAINMENT SPRAY PUMP PP-9W SUPPLY BREAKER  | AUXILIARY | 609.00      | 4KV RM - AB 4KV SWGR AREA - IN THE SOUTHEAST REGION OF THE ROOM, IN 4KV SWITCHGEAR #2-T21A                                 | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 81   | 3      | 2-T21A4       | 0      | ELECTRICAL DISTRIBUT / WEST RESIDUAL HEAT REMOVAL PUMP PP-35W SUPPLY BREAKER                                     | AUXILIARY | 609.00      | 4KV RM - AB 4KV SWGR AREA - IN THE SOUTHEAST REGION OF THE ROOM, IN 4KV SWITCHGEAR #2-T21A, NEAR THE FLOOR                 | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 82   | 3      | 2-T21A5       | 0      | ELECTRICAL DISTRIBUT / WEST ESSENTIAL SERVICE WATER PUMP PP-7W SUPPLY BREAKER                                    | AUXILIARY | 609.00      | 4KV RM - AB 4KV SWGR AREA - IN THE SOUTHEAST REGION OF THE ROOM, IN 4KV SWITCHGEAR #2-T21A, NEAR THE FLOOR                 | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/16/95  
Date

T.R. Satyan Sharma  
Print or Type Name

*T.R. Satyan Sharma*  
Signature

12/20/95  
Date



## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|--|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 83   | 3      | 2-T21A6       | 0      | ELECTRICAL DISTRIBUT / 4KV BUS T21A TO 480V PRESSURIZER HEATER BUS SUPPLY TRANSFORMER TR21PHA SUPPLY BREAKER | AUXILIARY | 609.00      | 4KV RM - AB 4KV SWGR AREA - IN THE SOUTHEAST REGION OF THE ROOM, IN 4KV SWITCHGEAR #2-T21A                           | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 84   | 3      | 2-T21A7       | 0      | ELECTRICAL DISTRIBUT / WEST COMPONENT COOLING WATER PUMP PP-10W SUPPLY BREAKER                               | AUXILIARY | 609.00      | 4KV RM - AB 4KV SWGR AREA - IN THE SOUTHEAST REGION OF THE ROOM, IN 4KV SWITCHGEAR #2-T21A, NEAR THE FLOOR           | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 85   | 3      | 2-T21A8       | 0      | ELECTRICAL DISTRIBUT / WEST CENTRIFUGAL CHARGING PUMP PP-50W SUPPLY BREAKER                                  | AUXILIARY | 609.00      | 4KV RM - AB 4KV SWGR AREA - IN THE MIDDLE SOUTH REGION OF THE ROOM   | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 86   | 3      | 2-T21A9       | 0      | ELECTRICAL DISTRIBUT / 4KV BUS 2A TO BUS T21A TIE BREAKER  | AUXILIARY | 609.00      | 4KV RM - AB 4KV SWGR AREA - IN THE MIDDLE SOUTH REGION OF THE ROOM, IN THE 4KV SWITCHGEAR #2-T21A                    | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 87   | 3      | 2-T21B        | 0      | 4KV ELECTRICAL DISTR / 4KV BUS T21A SWITCHGEAR   | AUXILIARY | 609.00      | 4KV RM - AB 4KV SWGR AREA -  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 88   | 3      | 2-T21B1       | 0      | ELECTRICAL DISTRIBUT / 4KV BUS 2B TO 4KV BUS T21B TIE BREAKER  | AUXILIARY | 609.00      | 4KV RM - AB 4KV SWGR AREA - IN THE MIDDLE WEST REGION OF THE ROOM, ON 4KV SWITCHGEAR #2-T21B                         | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 89   | 3      | 2-T21B2       | 0      | ELECTRICAL DISTRIBUT / CIRCUIT BREAKER FROM 69KV BUS TO BUS T21B   | AUXILIARY | 609.00      | 4KV RM - AB 4KV SWGR AREA - IN THE MIDDLE WEST REGION OF THE ROOM, IN 4KV SWITCHGEAR #2-T21B, NEAR THE FLOOR         | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 90   | 3      | 2-T21B4       | 0      | ELECTRICAL DISTRIBUT / AB EMERGENCY DIESEL GENERATOR TO 4KV BUS T21B SUPPLY BREAKER                          | AUXILIARY | 609.00      | 4KV RM - AB 4KV SWGR AREA - IN THE MIDDLE WEST PART OF THE ROOM, IN 4KV SWITCHGEAR #2-T21B, IN THE LOWER COMPARTMENT | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 91   | 3      | 2-T21C        | 0      | 4KV ELECTRICAL DISTR / 4KV BUS T21C SWITCHGEAR   | AUXILIARY | 609.00      | 4KV RM - CD 4KV SWGR AREA -  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 92   | 3      | 2-T21C1       | 0      | ELECTRICAL DISTRIBUT / 4KV BUS 2C TO 4KV BUS T21C TIE BREAKER  | AUXILIARY | 609.00      | 4KV RM - CD 4KV SWGR AREA - IN THE NORTHEAST PART OF THE ROOM, ON 4KV SWITCHGEAR #2-T21C                             | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 93   | 3      | 2-T21C2       | 0      | ELECTRICAL DISTRIBUT / CIRCUIT BREAKER - 4KV FROM 69KV TO BUS T21C   | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHEAST REGION OF THE ROOM  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 94   | 3      | 2-T21C3       | 0      | ELECTRICAL DISTRIBUT / CD EMERGENCY DIESEL GENERATOR TO 4KV BUS T21C SUPPLY BREAKER                          | AUXILIARY | 609.00      | 4KV RM - CD 4KV SWGR AREA - IN THE NORTHEAST REGION OF THE ROOM, IN 4KV SWITCHGEAR #2-T21C                           | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 95   | 3      | 2-T21D        | 0      | 4KV ELECTRICAL DISTR / 4KV BUS T21D SWITCHGEAR   | AUXILIARY | 609.00      | 4KV RM - CD 4KV SWGR AREA -  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | No           | No        |
| 96   | 3      | 2-T21D1       | 0      | ELECTRICAL DISTRIBUT / 4KV EMERGENCY POWER BUS EP TO 4KV BUS T21D SUPPLY BREAKER                             | AUXILIARY | 609.00      | 4KV RM - CD 4KV SWGR AREA - IN THE SOUTHWEST REGION OF THE ROOM, IN 4KV SWITCHGEAR #2-T21D                           | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 97   | 3      | 2-T21D10      | 0      | ELECTRICAL DISTRIBUT / EAST ESSENTIAL SERVICE WATER PUMP PP-7E SUPPLY BREAKER                                | AUXILIARY | 609.00      | 4KV RM - CD 4KV SWGR AREA - IN THE SOUTHWEST REGION OF THE ROOM, IN 4KV SWITCHGEAR #2-T21D                           | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/16/95  
Date

T.R. Satyan Sharma  
Print or Type Name

*T.R. Satyan Sharma*  
Signature

12/20/95  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No.  | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|----------------|--------|--|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 98   | 3      | 2-T21D11       | 0      | ELECTRICAL DISTRIBUT / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP PP-3E SUPPLY BREAKER                       | AUXILIARY | 609.00      | 4KV RM - CD 4KV SWGR AREA - IN THE SOUTHWEST REGION OF THE ROOM, IN 4KV SWITCHGEAR #2-T21D  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 99   | 3      | 2-T21D12       | 0      | ELECTRICAL DISTRIBUT / 4KV BUS 2D TO 4KV BUS T21D TIE BREAKER  | AUXILIARY | 609.00      | 4KV RM - CD 4KV SWGR AREA - IN THE SOUTHWEST REGION OF THE ROOM, IN 4KV SWITCHGEAR #2-T21D  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 100  | 3      | 2-T21D2        | 0      | ELECTRICAL DISTRIBUT / 600V BUS T21D SUPPLY TRANSFORMER TR21D SUPPLY BREAKER                                 | AUXILIARY | 609.00      | 4KV RM - CD 4KV SWGR AREA - IN THE SOUTHWEST REGION OF THE ROOM, IN 4KV SWITCHGEAR #2-T21D, NEAR THE FLOOR  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 101  | 3      | 2-T21D3        | 0      | ELECTRICAL DISTRIBUT / EAST COMPONENT COOLING WATER PUMP PP-10E SUPPLY BREAKER                               | AUXILIARY | 609.00      | 4KV RM - CD 4KV SWGR AREA - IN THE SOUTHWEST REGION OF THE ROOM, IN 4KV SWITCHGEAR #2-T21D  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 102  | 3      | 2-T21D4        | 0      | ELECTRICAL DISTRIBUT / EAST CONTAINMENT SPRAY PUMP PP-9E SUPPLY BREAKER                                      | AUXILIARY | 609.00      | 4KV RM - CD 4KV SWGR AREA - IN THE SOUTHWEST REGION OF THE ROOM, IN 4KV SWITCHGEAR #2-T21D  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 103  | 3      | 2-T21D5        | 0      | ELECTRICAL DISTRIBUT / NORTH SAFETY INJECTION PUMP PP-26N SUPPLY BREAKER                                     | AUXILIARY | 609.00      | 4KV RM - CD 4KV SWGR AREA - IN THE SOUTHWEST REGION OF THE ROOM, IN 4KV SWITCHGEAR #2-T21D  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 104  | 3      | 2-T21D6        | 0      | ELECTRICAL DISTRIBUT / EAST RHR PUMP PP-35E SUPPLY BREAKER   | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN SOUTHWEST REGION OF THE ROOM, IN 4KV SWITCHGEAR #2-T21D, NEAR THE FLOOR  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 105  | 3      | 2-T21D7        | 0      | ELECTRICAL DISTRIBUT / EAST CENTRIFUGAL CHARGING PUMP PP-50E SUPPLY BREAKER                                  | AUXILIARY | 609.00      | 4KV RM - CD 4KV SWGR AREA - IN THE SOUTHWEST REGION OF THE ROOM, IN 4KV SWITCHGEAR #2-T21D  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 106  | 3      | 2-T21D8        | 0      | ELECTRICAL DISTRIBUT / CD EMERGENCY DIESEL GENERATOR TO 4KV BUS T21D SUPPLY BREAKER                          | AUXILIARY | 609.00      | 4KV RM - CD 4KV SWGR AREA - IN THE SOUTHWEST REGION OF THE ROOM, IN 4KV SWITCHGEAR #2-T21D  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 107  | 3      | 2-T21D9        | 0      | ELECTRICAL DISTRIBUT / 4KV BUS T21D TO 480V PRESSURIZER HEATER BUS SUPPLY TRANSFORMER TR21PHC SUPPLY BREAKER | AUXILIARY | 609.00      | 4KV RM - CD 4KV SWGR AREA - IN THE SOUTHWEST REGION OF THE ROOM, IN 4KV SWITCHGEAR #2-T21D  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 108  | 4      | 2-CRID-I-CVT   | 0      | 120V CONTROL ROOM IN / 10KVA TRANSFORMER - CONSTANT VOLTAGE  | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE MIDDLE EAST REGION OF THE ROOM, 7 FEET SOUTH OF 600VAC BUS 21B SUPPLY TRAIL  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 109  | 4      | 2-CRID-II-CVT  | 0      | 120VAC DISTRIBUTION / 120V AC CR INST DISTR CH-II ISOL CONT VOLT TRANSFORMER                                 | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA -   | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 110  | 4      | 2-CRID-III-CVT | 0      | 120V CONTROL ROOM IN / 10KVA ISOLIMETER - CONSTANT VOLTAGE - TRANSFORMER                                     | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA -   | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 111  | 4      | 2-CRID-IV-CVT  | 0      | 120V CONTROL ROOM IN / 10KVA ISOLIMETER - CONSTANT VOLTAGE - TRANSFORMER                                     | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA -   | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 112  | 4      | 2-DGAB-FFCKT   | 0      | DIESEL GENERATION, C / AB EMERGENCY DIESEL GENERATOR OME-150-AB FIELD FLASH CIRCUIT TRANSFORMER              | AUXILIARY | 587.00      | AB EMER DSL GEN RM - IN THE MIDDLE NORTH REGION OF THE ROOM, 5 FEET WEST OF ROOM'S DOORWAY, INSIDE N SIDE OF AB EDG CONTROL SUBPANEL 1-DGAB, 2' ABOVE FLOOR | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/16/95  
Date

T.R. Satyan Sharma  
Print or Type Name

*T.R. Satyan Sharma*  
Signature

12/20/95  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|---|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 113  | 4      | 2-DGCD-FFCKT  | 0      | DIESEL GENERATION, C / CD EMERGENCY DIESEL GENERATOR OME-150-CD FIELD FLASH CKT TRANSFORMER                                     | AUXILIARY | 587.00      | CD EMER DSL GEN RM - IN THE MIDDLE SOUTH REGION OF THE ROOM, 5 FEET EAST OF CD EMERGENCY DIESEL GENERATOR ROOM                      | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 114  | 4      | 2-TR-AFW      | 0      | 120V/220 CONTROL AND / AUXILIARY FEEDWATER 120/208VAC DISTRIBUTION PANEL AFW SUPPLY TRANSFORMER                                 | AUXILIARY | 587.00      | CD EMER DSL GEN RM - IN THE MIDDLE NE REGION OF ROOM, 10 FT NORTH OF CD EMERGENCY DIESEL GENERATOR #2-OME-150-CD, NEAR THE NORTH    | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 115  | 4      | 2-TR-ELSC     | 0      | 120V/220 CONTROL AND / 120/208VAC EMERGENCY LOCAL SHUTDOWN DISTRIBUTION TRANSFORMER   | AUXILIARY | 587.00      | AB EMER DSL GEN RM - IN THE NW CORNER OF THE ROOM, ON THE EAST WALL   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 116  | 4      | 2-TR21A       | 0      | ELECTRICAL DISTRIBUT / 600V BUS 21A SUPPLY TRANSFORMER  | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE SOUTHWEST REGION OF THE ROOM   | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 117  | 4      | 2-TR21B       | 0      | ELECTRICAL DISTRIBUT / 600V BUS 21B SUPPLY TRANSFORMER  | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE SOUTHEAST REGION OF THE ROOM   | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 118  | 4      | 2-TR21C       | 0      | ELECTRICAL DISTRIBUT / 600V BUS 21C SUPPLY TRANSFORMER  | AUXILIARY | 609.00      | 4KV RM - CD 4KV SWGR AREA - IN THE SOUTHWEST REGION OF THE ROOM, 15 FEET SOUTHWEST OF SOUTH PLANT LIGHTING TRANSFORMER #2-TR-LTG-9S | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 119  | 4      | 2-TR21D       | 0      | ELECTRICAL DISTRIBUT / 600V BUS 21D SUPPLY TRANSFORMER  | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE SOUTHEAST CORNER OF THE ROOM, NEAR THE EAST WALL   | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 120  | 16     | 2-8C-A        | 0      | 250VDC CONTROL AND INSTRUMENTATION / BATTERY CHARGER A FOR N-TRAIN BATTERY  | AUXILIARY | 633.00      | 633 HALLWAY - 2 FEET SOUTH OF THE 'N' TRAIN BATTERY ROOM, NEAR THE EAST WALL  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 121  | 16     | 2-8C-AB1      | 0      | 250VDC DISTRIBUTION / PLANT BATTERY BATT-AB BATTERY CHARGER #1  | AUXILIARY | 613.00      | 4KV ROOM - MEZZANINE AREA - IN THE NORTHWEST PART OF THE ROOM, 3 FEET SOUTH OF 600VAC MOTOR CONTROL CENTER #2-EZC-D                 | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 122  | 16     | 2-8C-AB2      | 0      | 250VDC DISTRIBUTION / PLANT BATTERY BATT-AB BATTERY CHARGER #2  | AUXILIARY | 613.00      | 4KV ROOM - MEZZANINE AREA - IN THE MIDDLE NORTH PART OF THE ROOM, 15 FEET SOUTH OF 600VAC MOTOR CONTROL CENTER #2-EZC-D             | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 123  | 16     | 2-8C-B        | 0      | 250VDC CONTROL AND INSTRUMENTATION / BATTERY CHARGER B FOR N-TRAIN BATTERY  | AUXILIARY | 633.00      | 633 HALLWAY - 10 FEET SOUTHWEST OF THE 'N' TRAIN BATTERY ROOM, NEAR THE EAST WALL   | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 124  | 16     | 2-8C-CD1      | 0      | 250VDC DISTRIBUTION / PLANT BATTERY BATT-CD BATTERY CHARGER #1  | AUXILIARY | 626.00      | CD BATTERY EQUIP AREA - IN SOUTH END OF ROOM, NEAR THE WEST WALL  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 125  | 16     | 2-8C-CD2      | 0      | 250VDC DISTRIBUTION / PLANT BATTERY BATT-CD BATTERY CHARGER #2  | AUXILIARY | 626.00      | CD BATTERY EQUIP AREA - IN SOUTH END OF ROOM, NEAR THE EAST WALL  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 126  | 16     | 2-CRID-I-INV  | 0      | 120VAC CONTROL ROOM INSTRUMENTATION DISTRIBUTION SYSTEM / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CHANNEL I INVERTER | AUXILIARY | 609.00      | INVERTER AREA - IN THE MIDDLE EAST REGION OF THE ROOM, 20 FEET NORTHEAST OF THE ROOM'S ENTRANCE                                     | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

Signature

Date

T.R. Satyan Sharma  
Print or Type Name

Signature

Date

*George G. Thomas* 12/16/95

*T.R. Satyan Sharma* 12/20/95

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No.  | Rev No | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|----------------|--------|---|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 127  | 16     | 2-CRID-II-INV  | 0      | 120V CONTROL ROOM INSTRUMENTATION DISTR / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CHANNEL II INVERTER  | AUXILIARY | 609.00      | INVERTER AREA - IN THE MIDDLE EAST REGION OF THE ROOM, 20 FEET NORTHEAST OF THE ROOM'S ENTRANCE   | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 128  | 16     | 2-CRID-III-INV | 0      | 120V CONTROL ROOM INSTRUMENTATION DISTR / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CHANNEL III INVERTER | AUXILIARY | 609.00      | INVERTER AREA - IN THE SOUTHWEST CORNER OF THE ROOM, 15 FEET NORTH OF THE ROOM'S ENTRANCE   | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 129  | 16     | 2-CRID-IV-INV  | 0      | 120V CONTROL ROOM INSTRUMENTATION DISTR / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CHANNEL IV INVERTER  | AUXILIARY | 609.00      | CONTROL ROOM - IN THE SOUTHEAST PART OF THE ROOM, ON THE WEST WALL  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 130  | 16     | 2-DGAB-INV     | 0      | DIESEL GENERATOR, CONTROL & INSTRUMENTATION / AB EMERGENCY DIESEL GENERATOR OME-150-AB INVERTER                   | AUXILIARY | 587.00      | AB EMER DSL GEN RM - IN THE NORTHEAST REGION OF THE ROOM, 10 FEET NORTHEAST OF AB EMERGENCY DIESEL GENERATOR #2-OME-150-AB              | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 131  | 16     | 2-DGCD-INV     | 0      | DIESEL GENERATION, CONTROL & INSTRUMENTATION / CD EMERGENCY DIESEL GENERATOR OME-150-CD INVERTER                  | AUXILIARY | 587.00      | CD EMER DSL GEN RM - IN THE MIDDLE SOUTH PART OF THE ROOM, 10 FEET SOUTHWEST OF CD EMERGENCY DIESEL GENERATOR EXCITER #2-OME-150-CD-EXC | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/16/95  
Date

T.R. Satyan Sharma  
Print or Type Name

*T.R. Satyan Sharma*  
Signature

12/20/95  
Date



DC CO UNIT 2  
SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description                                     | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|--|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 1    | 0      | 2-OME-39      | 0      | MAIN STEAM / AUXILIARY FEED PUMP TURBINE                         | TURBINE   | 591.00      | TB DRIVEN AUX FDWTR PMP - IN THE SW CORNER OF THE ROOM, 2 FT. WEST OF THE TDAFP 2-PP-4   | 591.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra                | Yes           | Yes         | Yes        | Yes          | Yes       |
| 2    | 5      | 12-PP-31S     | 0      | SPENT FUEL PIT COOL / SOUTH SPENT FUEL PIT PUMP                  | AUXILIARY | 609.00      | SPENT FUEL PIT HEAT XCHGR RM - IN THE SOUTHWEST REGION OF THE ROOM, 4 FEET SOUTH OF SOUTH SPENT FUEL PIT HEAT EXCHANGER #12-HE-16S, NEAR THE FLOOR | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | No          | No         | Yes          | No        |
| 3    | 5      | 2-PP-10E      | 0      | COMPONENT COOLING WA / EAST COMPONENT COOLING WATER PUMP         | AUXILIARY | 609.00      | 609 HALLWAY - IN THE MIDDLE SOUTH END OF THE HALLWAY, 30 FEET SOUTH OF EAST COMPONENT COOLING WATER HEAT EXCHANGER #2-HE-15E, NEAR                 | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 4    | 5      | 2-PP-10W      | 0      | COMPONENT COOLING WA / WEST COMPONENT COOLING WATER PUMP         | AUXILIARY | 609.00      | 609 HALLWAY - IN THE SOUTHWEST END OF THE HALLWAY, NEAR THE WEST WALL  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 5    | 5      | 2-PP-26N      | 0      | SAFETY INJECTION / NORTH SAFETY INJECTION PUMP                   | AUXILIARY | 587.00      | N SAFETY INJ PMP RM - IN THE CENTER OF THE ROOM  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 6    | 5      | 2-PP-26S      | 0      | SAFETY INJECTION / SOUTH SAFETY INJECTION PUMP                   | AUXILIARY | 587.00      | S SAFETY INJ PMP RM - IN THE MIDDLE OF THE ROOM  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 7    | 5      | 2-PP-3E       | 0      | AUXILIARY FEEDWATER / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP | TURBINE   | 591.00      | E MTR DRIV AUX FEEDWTR PMP - IN THE SOUTHWEST REGION OF THE ROOM   | 591.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 8    | 5      | 2-PP-3W       | 0      | AUXILIARY FEEDWATER / WEST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP | TURBINE   | 591.00      | W MTR DRIVEN AUX FDWTR PMP - IN THE SOUTH END OF THE ROOM  | 591.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 9    | 5      | 2-PP-4        | 0      | AUXILIARY FEEDWATER / TURBINE DRIVEN AUXILIARY FEED PUMP         | TURBINE   | 591.00      | TB DRIVEN AUX FDWTR PMP - IN THE CENTER OF THE ROOM  | 591.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 10   | 5      | 2-PP-46-3     | 0      | BORON MAKEUP (CVCS) / BORIC ACID STORAGE TANKS TRANSFER PUMP #3  | AUXILIARY | 587.00      | BORIC ACID STOR TANK AREA - IN THE MIDDLE EAST REGION OF THE ROOM, 15 FEET SOUTHEAST OF MIDDLE BORIC ACID STORAGE TANK #12-TK-12M, NEAR THE FLOOR  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 11   | 5      | 2-PP-46-4     | 0      | BORON MAKEUP (CVCS) / BORIC ACID STORAGE TANKS TRANSFER PUMP #4  | AUXILIARY | 587.00      | BORIC ACID STOR TANK AREA - IN THE MIDDLE EAST REGION OF THE ROOM, 15 FEET SOUTHEAST OF MIDDLE BORIC ACID STORAGE TANK #12-TK-12M, NEAR THE FLOOR  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 12   | 5      | 2-PP-49       | 0      | CHARGING (CVCS) / RECIPROCATING CHARGING PUMP                    | AUXILIARY | 587.00      | RECIPROCATING CHARG PMP RM - IN THE CENTER OF THE ROOM, 20 FEET SOUTHWEST OF THE ENTRANCE DOOR   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 13   | 5      | 2-PP-50E      | 0      | CHARGING (CVCS) / EAST CENTRIFUGAL CHARGING PUMP                 | AUXILIARY | 587.00      | E CENTRIFUGAL CHARG PMP ROOM - IN THE MIDDLE OF THE ROOM, 10 FEET SOUTH OF THE NORTH WALL  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 14   | 5      | 2-PP-50W      | 0      | CHARGING (CVCS) / WEST CENTRIFUGAL CHARGING PUMP                 | AUXILIARY | 587.00      | W CENTRIFUGAL CHARG PMP RM - IN THE NORTH CENTER OF THE ROOM   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

John D. Stevenson  
Print or Type Name

*John D. Stevenson*  
Signature

12/11/95  
Date

Paul R. Wilson  
Print or Type Name

*Paul R. Wilson*  
Signature

12/11/95  
Date



DC CON UNIT 2  
SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description   | Building    | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|--|-------------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 15   | 5      | 2-PP-82N      | 0      | CONTROL ROOM AIR CON /<br>CONTROL ROOM AIR<br>CONDITIONING NORTH CHILL<br>WATER CIRCULATION PUMP | AUXILIARY   | 650.00      | CTRL RM AIR CONDIT RM - 5 FEET NORTH OF<br>CONTROL ROOM VENTILATION NORTH A/C<br>UNIT #2-HV-ACRA-1, NEAR THE NORTH<br>WALL, 6 FEET EAST OF CONTROL  | 650.00     | N/A  | 1.5 x Bounding Spectrum vs.<br>Realistic Median Centered Floor<br>Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 16   | 5      | 2-PP-82S      | 0      | CONTROL ROOM AIR CON /<br>CONTROL ROOM AIR<br>CONDITIONING SOUTH CHILL<br>WATER CIRCULATION PUMP | AUXILIARY   | 650.00      | CTRL RM AIR CONDIT RM - 6 FEET EAST OF<br>CONTROL ROOM AIR CONDITIONING SOUTH<br>LIQUID CHILLER #2-HV-ACR-2, NEAR THE<br>SOUTH WALL, 5 FEET WEST OF | 650.00     | N/A  | 1.5 x Bounding Spectrum vs.<br>Realistic Median Centered Floor<br>Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 17   | 6      | 2-PP-35E      | 0      | RESIDUAL HEAT REMOVA / EAST<br>RESIDUAL HEAT REMOVAL PUMP  | AUXILIARY   | 573.00      | EAST RHR PUMP RM - IN THE CENTER OF THE<br>ROOM   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs.<br>Realistic Median Centered Floor<br>Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 18   | 6      | 2-PP-35W      | 0      | RESIDUAL HEAT REMOVA / WEST<br>RESIDUAL HEAT REMOVAL PUMP  | AUXILIARY   | 573.00      | WRHR PMP RM - IN THE CENTER OF THE<br>ROOM  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs.<br>Realistic Median Centered Floor<br>Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 19   | 6      | 2-PP-7E       | 0      | ESSENTIAL SERVICE WA / EAST<br>ESSENTIAL SERVICE WATER PUMP                                      | SCREENHOUSE | 591.00      | E SSNTL SERV WTR PMP RM - IN THE<br>CENTER OF THE ROOM, ON THE PLATFORM, 7<br>FEET ABOVE THE FLOOR  | 591.00     | N/A  | 1.5 x Bounding Spectrum vs.<br>Realistic Median Centered Floor<br>Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 20   | 6      | 2-PP-7W       | 0      | ESSENTIAL SERVICE WA / WEST<br>ESSENTIAL SERVICE WATER PUMP                                      | SCREENHOUSE | 591.00      | W SSNTL SERV WTR PMP RM - IN THE<br>SOUTHEAST PART OF THE ROOM  | 591.00     | N/A  | 1.5 x Bounding Spectrum vs.<br>Realistic Median Centered Floor<br>Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 21   | 6      | 2-PP-9E       | 0      | CONTAINMENT SPRAY / EAST<br>CONTAINMENT SPRAY PUMP   | AUXILIARY   | 573.00      | E CONT SPRAY PMP RM - IN THE SOUTHEAST<br>PART OF THE ROOM  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs.<br>Realistic Median Centered Floor<br>Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 22   | 6      | 2-PP-9W       | 0      | CONTAINMENT SPRAY / WEST<br>CONTAINMENT SPRAY PUMP   | AUXILIARY   | 573.00      | W CONT SPRAY PMP RM - IN THE CENTER OF<br>THE ROOM  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs.<br>Realistic Median Centered Floor<br>Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

John D. Stevenson  
Print or Type Name

*John D. Stevenson*  
Signature

12/11/95  
Date

Paul R. Wilson  
Print or Type Name

*Paul R. Wilson*  
Signature

12/11/95  
Date





120

120

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|--|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 1    | 7      | 2-DRV-407     | 0      | 1 MAIN STEAM LEADS CONDENSATION DRAIN TANK TK-200, OUTLET SHUTOFF VALVE  | AUXILIARY | 621.00      | W MAIN STEAM STOP ENCLOSURE, 4' SW OF SG STOP VALVE #1-MRV-230, NEAR THE FLR.  | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | No           | No        |
| 2    | 7      | 2-FRV-245     | 0      | AUXILIARY FEEDWATER / WEST MOTOR DRIVEN AUXILIARY FEED PUMP PP-3W2 AIR OPERATED TEST VALVE                     | TURBINE   | 591.00      | WMTR DRIVEN AUX FDWTR PMP - 20 FEET NORTHWEST OF THE ROLLUP DOOR ENTRANCE, NEAR THE WEST WALL, 4 FEET ABOVE THE FLOOR                              | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 3    | 7      | 2-FRV-247     | 0      | AUXILIARY FEEDWATER / WEST MOTOR DRIVEN AUXILIARY FEED PUMP PP-3W EMERGENCY 1 AIR OPERATED LEAKOFF GLOBE VALVE | TURBINE   | 591.00      | WMTR DRIVEN AUX FDWTR PMP - IN THE SOUTHWEST CORNER OF THE ROOM, 3 FEET SOUTHWEST OF THE ROOM'S ENTRANCE DOOR                                      | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 4    | 7      | 2-FRV-255     | 0      | AUXILIARY FEEDWATER / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP PP-3E 2 AIR OPERATED TEST VALVE               | TURBINE   | 591.00      | E MTR DRIV AUX FEEDWTR PMP - IN THE NORTHWEST CORNER OF THE ROOM, 6 FEET NORTHWEST OF EAST MOTOR DRIVEN AUXILIARY FEED PUMP #2-PP-3E, 2 FEET ABOVE | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 5    | 7      | 2-FRV-256     | 0      | AUXILIARY FEEDWATER / TURBINE DRIVEN AUXILIARY FEED PUMP PP-42 AIR OPERATED TEST VALVE                         | TURBINE   | 591.00      | TB DRIVEN AUX FDWTR PMP - IN THE NORTHWEST CORNER OF THE ROOM, 4 FEET NORTHWEST OF TURBINE DRIVEN AUXILIARY FEED PUMP #2-PP-4, NEAR THE FLOOR      | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 6    | 7      | 2-FRV-257     | 0      | AUXILIARY FEEDWATER / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP PP-3E EMERGENCY 1 AIR OPERATED LEAKOFF VALVE  | TURBINE   | 591.00      | E MTR DRIV AUX FEEDWTR PMP - IN THE NORTHWEST CORNER OF THE ROOM, 6 FEET NORTHWEST OF EAST MOTOR DRIVEN AUXILIARY FEED PUMP #2-PP-3E,              | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 7    | 7      | 2-FRV-258     | 0      | AUXILIARY FEEDWATER / TURBINE DRIVEN AUXILIARY FEED PUMP EMERGENCY 1 AIR OPERATED LEAKOFF GLOBE VALVE          | TURBINE   | 591.00      | TB DRIVEN AUX FDWTR PMP - IN THE NORTHWEST CORNER OF THE ROOM, NEAR THE WEST WALL, 6 FEET ABOVE THE FLOOR  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 8    | 7      | 2-MRV-221     | 0      | MAIN STEAM / STEAM GENERATOR #2 STOP VALVE MRV-220 STEAM CYLINDER TRAIN 'A' DUMP VALVE                         | AUXILIARY | 633.00      | WMN STM STOP ENCL - 5 FEET NORTH OF MAIN STEAM STOP VALVE #2-MRV-220, ON THE 639 ELEVATION PLATFORM  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 9    | 7      | 2-MRV-222     | 0      | MAIN STEAM / STEAM GENERATOR #2 STOP VALVE MRV-220 STEAM CYLINDER TRAIN 'B' DUMP VALVE                         | AUXILIARY | 633.00      | WMN STM STOP ENCL - 4 FEET NORTHEAST OF MAIN STEAM STOP VALVE #2-MRV-220, ON THE 639 ELEVATION PLATFORM  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 10   | 7      | 2-MRV-223     | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2 POWER OPERATED RELIEF VALVE   | AUXILIARY | 633.00      | WMN STM STOP ENCL - 6 FEET NORTHEAST OF STEAM GENERATOR STOP VALVE #2-MRV-220, ON THE 647 ELEVATION PLATFORM                                       | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 11   | 7      | 2-MRV-231     | 0      | MAIN STEAM / STEAM GENERATOR #3 STOP VALVE MRV-230 STEAM CYLINDER TRAIN 'A' DUMP VALVE                         | AUXILIARY | 633.00      | WMN STM STOP ENCL - 3 FEET SOUTH OF STEAM GENERATOR STOP VALVE #2-MRV-230, ON THE 639 ELEVATION PLATFORM   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 12   | 7      | 2-MRV-232     | 0      | MAIN STEAM / STEAM GENERATOR #3 STOP VALVE MRV-230 STEAM CYLINDER TRAIN 'B' DUMP VALVE                         | AUXILIARY | 633.00      | WMN STM STOP ENCL - 2 FEET SOUTH OF STEAM GENERATOR STOP VALVE #2-MRV-230, ON THE 639 ELEVATION PLATFORM   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 13   | 7      | 2-MRV-233     | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3 POWER OPERATED RELIEF VALVE   | AUXILIARY | 633.00      | WMN STM STOP ENCL - 5 FEET NORTHWEST OF STEAM GENERATOR STOP VALVE #2-MRV-230, ON THE 647 ELEVATION PLATFORM                                       | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Walter Djordjevic  
Print or Type Name

Signature

Date

Gunnar Harstead  
Print or Type Name

Signature

Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No. | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|---------|---|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 14   | 7      | 2-SV-140-1    | 0       | AUXILIARY FEEDWATER / TURBINE DRIVEN AUX FEED PUMP GOVERNOR OIL COOLER COOLING WATER INLET SAFETY VALVE     | TURBINE   | 591.00      | TB DRIVEN AUX FDWTR PMP - 2 FEET SOUTHEAST OF AUXILIARY FEED PUMP TURBINE #2-OME-39, NEAR THE SOUTH WALL, 4 FEET ABOVE THE FLOOR                    | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 15   | 7      | 2-SV-140-2    | 0       | AUXILIARY FEEDWATER / TURBINE DRIVEN AUX FEED PUMP OIL COOLER COOLING WATER INLET SAFETY VALVE              | TURBINE   | 591.00      | TB DRIVEN AUX FDWTR PMP - 2 FEET SOUTHEAST OF AUXILIARY FEED PUMP TURBINE #2-OME-39, NEAR THE SOUTH WALL, 4 FEET ABOVE THE FLOOR                    | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 16   | 7      | 2-SV-169E     | 0       | AUXILIARY FEEDWATER / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP PP-3E SUCTION SAFETY VALVE                 | TURBINE   | 591.00      | E MTR DRIV AUX FEEDWTR PMP - IN THE MIDDLE SOUTH PART OF THE ROOM, NEAR THE SOUTH WALL, 4 FEET SOUTH OF EAST MOTOR DRIVEN AUXILIARY FEED PUMP       | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 17   | 7      | 2-SV-169W     | 0       | AUXILIARY FEEDWATER / WEST MOTOR DRIVEN AUXILIARY FEED PUMP PP-3W SUCTION SAFETY VALVE                      | TURBINE   | 591.00      | WMTR DRIVEN AUX FDWTR PMP - NEAR THE CENTER OF THE EAST WALL, 1 FOOT EAST OF WEST MOTOR DRIVEN AUXILIARY FEED PUMP #2-PP-3W, 4 FEET ABOVE THE FLOOR | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 18   | 7      | 2-SV-1A-2     | 0       | MAIN STEAM / STEAM GENERATOR OME-3-2 SAFETY VALVE 1A  | AUXILIARY | 633.00      | WMN STM STOP ENCL - 6 FEET WEST OF THE EAST WALL, ON 639 ELEVATION PLATFORM   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 19   | 7      | 2-SV-1A-3     | 0       | MAIN STEAM / STEAM GENERATOR OME-3-3 SAFETY VALVE 1A  | AUXILIARY | 633.00      | WMN STM STOP ENCL - 4 FEET SOUTHEAST OF STEAM GENERATOR #3 STOP VALVE, ON 639 ELEVATION PLATFORM  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 20   | 7      | 2-SV-1B-2     | 0       | MAIN STEAM / STEAM GENERATOR OME-3-2 SAFETY VALVE 1B  | AUXILIARY | 633.00      | WMN STM STOP ENCL - NORTHEAST AREA OF THE ROOM, AT 639 ELEVATION PLATFORM   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 21   | 7      | 2-SV-1B-3     | 0       | MAIN STEAM / STEAM GENERATOR OME-3-3 SAFETY VALVE 1B  | AUXILIARY | 633.00      | WMN STM STOP ENCL - 6 FEET SOUTHEAST OF STEAM GENERATOR #3 STOP VALVE, ON 639 ELEVATION PLATFORM  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 22   | 7      | 2-SV-2A-2     | 0       | MAIN STEAM / STEAM GENERATOR OME-3-2 SAFETY VALVE 2A  | AUXILIARY | 633.00      | WMN STM STOP ENCL - 8 FEET SOUTH OF THE NORTH WALL, 639 ELEVATION PLATFORM  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 23   | 7      | 2-SV-2A-3     | 0       | MAIN STEAM / STEAM GENERATOR OME-3-3 SAFETY VALVE 2A  | AUXILIARY | 633.00      | WMN STM STOP ENCL - 5 FEET SOUTH OF STEAM GENERATOR #3 STOP VALVE, ON 639 ELEVATION PLATFORM  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 24   | 7      | 2-SV-2B-2     | 0       | MAIN STEAM / STEAM GENERATOR OME-3-2 SAFETY VALVE 2B  | AUXILIARY | 633.00      | WMN STM STOP ENCL - 8 FEET SOUTH OF THE NORTH WALL, 639 ELEVATION PLATFORM  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 25   | 7      | 2-SV-2B-3     | 0       | MAIN STEAM / STEAM GENERATOR OME-3-3 SAFETY VALVE 2B  | AUXILIARY | 633.00      | WMN STM STOP ENCL - 5 FEET SOUTH OF STEAM GENERATOR #3 STOP VALVE, ON 639 ELEVATION PLATFORM  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 26   | 7      | 2-SV-3-2      | 0       | MAIN STEAM / STEAM GENERATOR OME-3-2 SAFETY VALVE #3  | AUXILIARY | 633.00      | WMN STM STOP ENCL - 7 FEET NORTH OF THE SOUTH WALL, AT 639 ELEVATION PLATFORM   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 27   | 7      | 2-SV-3-3      | 0       | MAIN STEAM / STEAM GENERATOR OME-3-3 SAFETY VALVE #3  | AUXILIARY | 633.00      | WMN STM STOP ENCL - 6 FEET SOUTHWEST OF STEAM GENERATOR #3 STOP VALVE, ON 639 ELEVATION PLATFORM  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 28   | 7      | 2-WRV-711     | 0       | ESSENTIAL SERVICE WATER / ESW TO CONTROL ROOM AIR CONDITIONING NORTH LIQUID CHILLER CONDENSER CONTROL VALVE | AUXILIARY | 650.00      | CTRL RM AIR CONDIT RM - IN THE NORTHWEST CORNER OF THE ROOM, 1 FOOT EAST OF THE ROOM'S ENTRANCE GATE, NEAR THE NORTH WALL, 5 FEET ABOVE THE         | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 29   | 7      | 2-WRV-712     | 0       | ESSENTIAL SERVICE WATER / ESW TO CONTROL ROOM AIR CONDITIONING SOUTH LIQUID CHILLER CONDENSER CONTROL VALVE | AUXILIARY | 650.00      | CTRL RM AIR CONDIT RM - IN THE SOUTHWEST PART OF THE ROOM, ON THE EAST END OF CONTROL ROOM AIR CONDITIONING SOUTH LIQUID CHILLER                    | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Walter Djordjevic  
Print or Type Name

Signature

Date

Gunnar Harstead  
Print or Type Name

Signature

Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description   | Building    | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|--|-------------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 30   | 7      | 2-WRV-763     | 0      | ESSENTIAL SERVICE WATER / EAST ESSENTIAL SERVICE WATER PUMP PP-7E DISCHARGE STRAINER WEST BASKET BACKWASH OUTLET SHUTOFF VALVE | SCREENHOUSE | 591.00      | E SSNTL SERV WTR PMP RM - NORTH OF EAST ESSENTIAL SERVICE WATER PUMP #2-PP-7E   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 31   | 7      | 2-WRV-764     | 0      | ESSENTIAL SERVICE WATER / WEST ESSENTIAL SERVICE WATER PUMP PP-7W DISCHARGE STRAINER WEST BASKET BACKWASH OUTLET SHUTOFF       | SCREENHOUSE | 591.00      | W ESSNTL SERV WTR PMP RM - NORTH OF THE WEST ESSENTIAL SERVICE WATER PUMP #2-PP-7W  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 32   | 7      | 2-WRV-768     | 0      | ESSENTIAL SERVICE WATER / EAST ESSENTIAL SERVICE WATER PUMP PP-7E DISCHARGE STRAINER WEST BASKET BACKWASH INLET SHUTOFF VALVE  | SCREENHOUSE | 591.00      | E SSNTL SERV WTR PMP RM - 3 FEET FROM THE NORTHWEST CORNER OF EAST ESSENTIAL SERVICE WATER PUMP DISCHARGE STRAINER #2-OME-34E             | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 33   | 7      | 2-WRV-769     | 0      | ESSENTIAL SERVICE WATER / WEST ESSENTIAL SERVICE WATER PUMP PP-7W DISCHARGE STRAINER WEST BASKET BACKWASH INLET SHUTOFF VALVE  | SCREENHOUSE | 591.00      | W ESSNTL SERV WTR PMP RM - 3 FEET NORTHWEST OF WEST ESSENTIAL SERVICE WATER PUMP DISCHARGE STRAINER #2-OME-34W                            | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 34   | 7      | 2-WRV-773     | 0      | ESSENTIAL SERVICE WATER / EAST ESSENTIAL SERVICE WATER PUMP PP-7E DISCHARGE STRAINER EAST BASKET BACKWASH OUTLET SHUTOFF VALVE | SCREENHOUSE | 591.00      | E SSNTL SERV WTR PMP RM - 3 FEET NORTH OF EAST ESSENTIAL SERVICE WATER PUMP DISCHARGE STRAINER #2-OME-34E, EVEN WITH THE GRATING          | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 35   | 7      | 2-WRV-774     | 0      | ESSENTIAL SERVICE WATER / WEST ESSENTIAL SERVICE WATER PUMP PP-7W DISCHARGE STRAINER EAST BASKET BACKWASH OUTLET SHUTOFF VALVE | SCREENHOUSE | 591.00      | W ESSNTL SERV WTR PMP RM - IN THE NORTHEAST PART OF THE ROOM, NORTH OF WEST ESSENTIAL SERVICE WATER PUMP #2-PP-7W                         | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 36   | 7      | 2-WRV-778     | 0      | ESSENTIAL SERVICE WATER / EAST ESSENTIAL SERVICE WATER PUMP PP-7E DISCHARGE STRAINER EAST BASKET BACKWASH INLET SHUTOFF VALVE  | SCREENHOUSE | 591.00      | E SSNTL SERV WTR PMP RM - NORTH OF EAST ESSENTIAL SERVICE WATER PUMP #2-PP-7E, 3 FEET NORTH OF THE DUPLEX STRAINER                        | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 37   | 7      | 2-WRV-779     | 0      | ESSENTIAL SERVICE WATER / WEST ESSENTIAL SERVICE WATER PUMP PP-7W DISCHARGE STRAINER EAST BASKET BACKWASH INLET SHUTOFF VALVE  | SCREENHOUSE | 591.00      | W ESSNTL SERV WTR PMP RM - IN THE NORTHEAST PART OF THE ROOM, NORTH OF WEST ESSENTIAL SERVICE WATER PUMP #2-PP-7W                         | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 38   | 8      | 2-IMO-210     | 0      | CONTAINMENT SPRAY / EAST CONTAINMENT SPRAY PUMP PP-9E 10 MOTOR OPERATED DISCHARGE SHUTOFF VALVE                                | AUXILIARY   | 573.00      | E CONT SPRAY PMP RM - IN THE NORTHWEST PART OF THE ROOM, 6 FEET NORTHWEST OF EAST CONTAINMENT SPRAY PUMP #2-PP-9E, 6 FEET ABOVE THE FLOOR | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 39   | 8      | 2-IMO-211     | 0      | CONTAINMENT SPRAY / EAST CONTAINMENT SPRAY PUMP PP-9E 10 MOTOR OPERATED DISCHARGE SHUTOFF VALVE                                | AUXILIARY   | 573.00      | E CONT SPRAY PMP RM - IN THE NORTH END OF THE ROOM, 10 FEET NORTHWEST OF EAST CONTAINMENT SPRAY PUMP #2-PP-9E, 6 FEET ABOVE THE FLOOR     | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Walter Djordjevic  
Print or Type Name

Signature

Date

Gunnar Harstead  
Print or Type Name

Signature

Date

12/13/95

Gunnar Harstead 12/12/95

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Ct | Equip.ID No. | Rev No | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Cavests OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|--------------|--------|---|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 1    | 7      | 2-IRV-310    | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17E 8 AIR OPERATED OUTLET FLOW CONTROL VALVE | AUXILIARY | 609.00      | E RHR HEAT XCHGR RM - IN THE NORTHEAST CORNER OF THE ROOM, 5 FEET FROM EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER #2-HE-17E, 2 FEET ABOVE    | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 2    | 7      | 2-IRV-311    | 0      | RESIDUAL HEAT REMOVAL / RESIDUAL HEAT REMOVAL HEAT EXCHANGERS BYPASS FLOW 8 AIR OPERATED CONTROL VALVE            | AUXILIARY | 609.00      | E RHR HEAT XCHGR RM - IN THE NORTHWEST CORNER OF THE ROOM, 5 FEET NORTHWEST OF EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER #2-HE-17E, 5 FEET  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 3    | 7      | 2-IRV-320    | 0      | RESIDUAL HEAT REMOVAL / WEST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17W 8 AIR OPERATED OUTLET FLOW CONTROL VALVE | AUXILIARY | 609.00      | W RHR HEAT XCHGR RM - IN THE NORTHEAST REGION OF THE ROOM, 8 FEET NORTHEAST OF WEST RESIDUAL HEAT REMOVAL HEAT EXCHANGER #2-HE-17W, NEAR    | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 4    | 7      | 2-MRV-211    | 0      | MAIN STEAM / STEAM GENERATOR #1 STOP VALVE MRV-210 STEAM CYLINDER TRAIN 'A' DUMP VALVE                            | AUXILIARY | 633.00      | E MAIN STM STOP ENCL - 3 FEET NORTH OF STEAM GENERATOR STOP VALVE #2-MRV-210, ON THE 639 ELEVATION PLATFORM                                 | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 5    | 7      | 2-MRV-212    | 0      | MAIN STEAM / STEAM GENERATOR #1 STOP VALVE MRV-210 STEAM CYLINDER TRAIN 'B' DUMP VALVE                            | AUXILIARY | 633.00      | E MAIN STM STOP ENCL - 3 FEET NORTHWEST OF STEAM GENERATOR STOP VALVE #2-MRV-210, ON THE 640 ELEVATION PLATFORM                             | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 6    | 7      | 2-MRV-213    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 POWER OPERATED RELIEF VALVE  | AUXILIARY | 633.00      | E MAIN STM STOP ENCL - IN THE NORTHWEST REGION OF THE ROOM, 3 FEET SOUTHWEST OF STEAM GENERATOR STOP VALVE #2-MRV-210, ON THE 640 ELEVATION | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 7    | 7      | 2-MRV-241    | 0      | MAIN STEAM / STEAM GENERATOR #4 STOP VALVE MRV-240 STEAM CYLINDER TRAIN 'A' DUMP VALVE                            | AUXILIARY | 633.00      | E MAIN STM STOP ENCL - IN THE SOUTHWEST PART OF THE ROOM, 3 FEET SOUTH OF STEAM GENERATOR STOP VALVE #2-MRV-240, AT THE 640 ELEVATION       | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 8    | 7      | 2-MRV-242    | 0      | MAIN STEAM / STEAM GENERATOR #4 STOP VALVE MRV-240 STEAM CYLINDER TRAIN 'B' DUMP VALVE                            | AUXILIARY | 633.00      | E MAIN STM STOP ENCL - IN THE SOUTHWEST PART OF THE ROOM, 2 FEET SOUTH OF STEAM GENERATOR STOP VALVE #2-MRV-240, AT THE 640 ELEVATION       | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 9    | 7      | 2-MRV-243    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 POWER OPERATED RELIEF VALVE  | AUXILIARY | 633.00      | E MAIN STM STOP ENCL - IN THE SOUTHWEST REGION OF THE ROOM, 2 FEET WEST OF STEAM GENERATOR STOP VALVE #2-MRV-240, AT THE 640 ELEVATION      | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 10   | 7      | 2-QRV-400    | 0      | BORON MAKEUP (CVCS) / SOUTH BORIC ACID BLENDER QP-21 2 AIR OPERATED TO CVCS CHARGING PUMPS SUCTION SHUTOFF VALVE  | AUXILIARY | 609.00      | VOL CTRL TANK E HALLWAY - IN THE MIDDLE WEST REGION OF THE HALLWAY, NEAR THE WEST WALL, 3 FEET ABOVE THE FLOOR                              | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 11   | 7      | 2-QRV-451    | 0      | BORON MAKEUP (CVCS) / SOUTH BORIC ACID BLENDER QP-21 TO REACTOR COOLANT LETDOWN VOLUME CONTROL TANK SHUTOFF VALVE | AUXILIARY | 609.00      | VOL CTRL TANK E HALLWAY - ON THE 618 ELEVATION PLATFORM, 20 FEET NORTH OF THE ACCESS LADDER, ON THE WEST WALL                               | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 12   | 7      | 2-SV-104E    | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17E OUTLET SAFETY VALVE                      | AUXILIARY | 609.00      | E RHR HEAT XCHGR RM - IN SOUTHEAST CORNER, 1 FOOT ABOVE DECK GRATING  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Paul R. Wilson  
Print or Type Name

*Paul R. Wilson*  
Signature

12/16/95  
Date

T.R. Satyan Sharma  
Print or Type Name

*T.R. Satyan Sharma*  
Signature

12/19/95  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No. | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|---------|---|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 13   | 7      | 2-SV-104W     | 0       | RESIDUAL HEAT REMOVAL / WEST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17W OUTLET SAFETY VALVE        | AUXILIARY | 609.00      | WRHR HEAT XCHGR RM - IN THE SOUTHEAST REGION OF THE ROOM, 3 FEET SOUTH OF WEST RHR HTX #2-HE-17W              | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 14   | 7      | 2-SV-14E      | 0       | ESSENTIAL SERVICE WATER / EAST CONTAINMENT SPRAY HEAT EXCHANGER HE-18E SHELL SIDE SAFETY VALVE      | AUXILIARY | 609.00      | E CONT SPRAY HEAT XCHGR RM - AT THE TOP OF THE EAST CONTAINMENT SPRAY HEAT EXCHANGER, ON THE EAST WALL        | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 15   | 7      | 2-SV-14W      | 0       | ESSENTIAL SERVICE WATER / WEST CONTAINMENT SPRAY HEAT EXCHANGER HE-18W SHELL SIDE SAFETY VALVE      | AUXILIARY | 609.00      | W CONT SPRAY HEAT XCHGR RM - WEST SIDE OF THE WEST CONTAINMENT SPRAY HEAT EXCHANGER, 2 FEET BELOW THE CEILING | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 16   | 7      | 2-SV-15E      | 0       | ESSENTIAL SERVICE WATER / EAST COMPONENT COOLING WATER HEAT EXCHANGER HE-15E TUBE SIDE SAFETY VALVE | AUXILIARY | 609.00      | 609 HALLWAY - ON THE SOUTHEAST END OF UNIT 2 EAST CCW HEAT EXCHANGER  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 17   | 7      | 2-SV-15W      | 0       | ESSENTIAL SERVICE WATER / WEST COMPONENT COOLING WATER HEAT EXCHANGER HE-15W TUBE SIDE SAFETY VALVE | AUXILIARY | 609.00      | 609 HALLWAY - AT THE SOUTH END OF UNIT 2 WEST CCW HEAT EXCHANGER  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 18   | 7      | 2-SV-1A-1     | 0       | MAIN STEAM / STEAM GENERATOR OME-3-1 SAFETY VALVE 1A  | AUXILIARY | 633.00      | E MAIN STM STOP ENCL - 4 FEET NORTHWEST OF STEAM GENERATOR #1 STOP VALVE, ON 639 ELEVATION PLATFORM           | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 19   | 7      | 2-SV-1A-4     | 0       | MAIN STEAM / STEAM GENERATOR OME-3-4 SAFETY VALVE #1A   | AUXILIARY | 633.00      | E MAIN STM STOP ENCL - SOUTHWEST PART OF THE ROOM, AT 639 ELEVATION PLATFORM                                  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 20   | 7      | 2-SV-1B-1     | 0       | MAIN STEAM / STEAM GENERATOR OME-3-1 SAFETY VALVE 1B  | AUXILIARY | 633.00      | E MAIN STM STOP ENCL - 5 FEET NORTH OF STEAM GENERATOR #1 STOP VALVE, ON 639 ELEVATION PLATFORM               | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 21   | 7      | 2-SV-1B-4     | 0       | MAIN STEAM / STEAM GENERATOR OME-3-4 SAFETY VALVE 1B  | AUXILIARY | 633.00      | E MAIN STM STOP ENCL - SOUTHWEST PART OF THE ROOM, AT 639 ELEVATION PLATFORM                                  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 22   | 7      | 2-SV-2A-1     | 0       | MAIN STEAM / STEAM GENERATOR OME-3-1 SAFETY VALVE 2A  | AUXILIARY | 633.00      | E MAIN STM STOP ENCL - 5 FEET NORTH OF STEAM GENERATOR #1 STOP VALVE, ON 639 ELEVATION PLATFORM               | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 23   | 7      | 2-SV-2A-4     | 0       | MAIN STEAM / STEAM GENERATOR OME-3-4 SAFETY VALVE 2A  | AUXILIARY | 633.00      | E MAIN STM STOP ENCL - MIDDLE WEST PART OF THE ROOM, AT 639 ELEVATION PLATFORM                                | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 24   | 7      | 2-SV-2B-1     | 0       | MAIN STEAM / STEAM GENERATOR OME-3-1 SAFETY VALVE 2B  | AUXILIARY | 633.00      | E MAIN STM STOP ENCL - 5 FEET NORTHEAST OF STEAM GENERATOR #1 STOP VALVE, ON 639 ELEVATION PLATFORM           | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 25   | 7      | 2-SV-2B-4     | 0       | MAIN STEAM / STEAM GENERATOR OME-3-4 SAFETY VALVE 2B  | AUXILIARY | 633.00      | E MAIN STM STOP ENCL - MIDDLE WEST PART OF THE ROOM, AT 639 ELEVATION PLATFORM                                | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 26   | 7      | 2-SV-3-1      | 0       | MAIN STEAM / STEAM GENERATOR OME-3-1 SAFETY VALVE #3  | AUXILIARY | 633.00      | E MAIN STM STOP ENCL - 6 FEET NORTHEAST OF STEAM GENERATOR #1 STOP VALVE, ON 639 ELEVATION PLATFORM           | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 27   | 7      | 2-SV-3-4      | 0       | MAIN STEAM / STEAM GENERATOR OME-3-4 SAFETY VALVE #3  | AUXILIARY | 633.00      | E MAIN STM STOP ENCL - MIDDLE WEST PART OF THE ROOM, AT 639 ELEVATION PLATFORM                                | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Paul R. Wilson  
Print or Type Name

*Paul R. Wilson*  
Signature

12/16/95  
Date

T.R. Satyan Sharma  
Print or Type Name

*T.R. Satyan Sharma*  
Signature

12/19/95  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|---|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 28   | 7      | 2-SV-54       | 0      | REACTOR COOLANT PUMP SEAL WATER INJ/LEAKOFF / REACTOR COOLANT PUMP SEAL WATER HEAT EXCHANGER HE-11 SAFETY VALVE           | AUXILIARY | 609.00      | SEAL WTR HEAT XCHGR RM - NORTHEAST AREA OF THE ROOM  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 29   | 7      | 2-SV-68-15    | 0      | CCW / RCP SEAL WATER HEAT EXCHANGER HE-11 CCW OUTLET SAFETY VALVE   | AUXILIARY | 609.00      | 609 HALLWAY - ON THE SOUTHEAST WALL, SOUTH OF VOLUME CONTROL TANK REMOVABLE WALL, 7 FEET ABOVE THE FLOOR   | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 30   | 7      | 2-SV-71       | 0      | CCW / SOUTH SPENT FUEL PIT HEAT EXCHANGER 12-HE-16S CCW OUTLET SAFETY VALVE   | AUXILIARY | 609.00      | SPENT FUEL PIT HEAT XCHGR RM - IN THE SOUTHERN REGION OF THE ROOM, NEAR THE EAST END OF THE SOUTH SPENT FUEL PIT HEAT EXCHANGER, 12 FEET ABOVE THE FLOOR | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 31   | 7      | 2-SV-72E      | 0      | COMPONENT COOLING WATER / EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17E COMPONENT COOLING WATER OUTLET SAFETY VALVE    | AUXILIARY | 609.00      | 609 HALLWAY - 25 FEET EAST OF THE PASSENGER ELEVATOR DOORWAY, 18 FEET ABOVE THE FLOOR  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 32   | 7      | 2-SV-97       | 0      | BORON INJECTION / BORON INJECTION TANK TK-11 OUTLET SAFETY VALVE  | AUXILIARY | 612.00      | BORON INJ TANK RM - EAST OF THE TANK, ON THE WALL  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 33   | 8      | 2-CMO-410     | 0      | COMPONENT COOLING WATER / EAST COMPONENT COOLING WATER HEAT EXCHANGER HE-15E COMPONENT COOLING WATER OUTLET SHUTOFF VALVE | AUXILIARY | 609.00      | 609 HALLWAY - 10 FEET SOUTH OF THE NORTH END OF EAST COMPONENT COOLING WATER HEAT EXCHANGER #2-HE-15E, ON THE EAST SIDE,                                 | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 34   | 8      | 2-CMO-411     | 0      | COMPONENT COOLING WATER / COMPONENT COOLING WATER PUMPS SUCTION CROSSTIE TRAIN 'A' SHUTOFF VALVE                          | AUXILIARY | 609.00      | 609 HALLWAY - 8 FEET SOUTHWEST OF EAST CCW PUMP #2-PP-10E, 8 FEET ABOVE THE FLOOR, ON THE 614 ELEVATION PLATFORM   | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 35   | 8      | 2-CMO-412     | 0      | COMPONENT COOLING WATER / COMPONENT COOLING WATER PUMPS DISCHARGE CROSSTIE TRAIN 'A' SHUTOFF VALVE                        | AUXILIARY | 609.00      | 609 HALLWAY - 10 FEET SOUTHWEST OF CVCS MONITOR TANK #12-TK-14-4, 5 FEET NORTH OF THE SOUTH WALL, 2 FEET ABOVE THE FLOOR                                 | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 36   | 8      | 2-CMO-413     | 0      | COMPONENT COOLING WATER / COMPONENT COOLING WATER PUMPS SUCTION CROSSTIE TRAIN 'B' SHUTOFF VALVE                          | AUXILIARY | 609.00      | 609 HALLWAY - 4 FEET SOUTH OF WEST CCW PUMP #2-PP-10W, 8 FEET ABOVE THE FLOOR, ON A PLATFORM   | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 37   | 8      | 2-CMO-414     | 0      | COMPONENT COOLING WATER / COMPONENT COOLING WATER PUMPS DISCHARGE CROSSTIE TRAIN 'B' SHUTOFF VALVE                        | AUXILIARY | 609.00      | 609 HALLWAY - 8 FEET SOUTHWEST OF CVCS MONITOR TANK #12-TK-14-4, 5 FEET NORTH OF THE SOUTH WALL, 2 FEET ABOVE THE FLOOR                                  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 38   | 8      | 2-CMO-415     | 0      | COMPONENT COOLING WATER / COMPONENT COOLING WATER TO MISCELLANEOUS SERVICE TRAIN 'A' SHUTOFF VALVE                        | AUXILIARY | 609.00      | 609 HALLWAY - 2 FEET WEST OF EAST COMPONENT COOLING WATER HEAT EXCHANGER #2-HE-15E, 3 FEET ABOVE THE FLOOR   | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 39   | 8      | 2-CMO-416     | 0      | COMPONENT COOLING WATER / CCW TO MISCELLANEOUS SERVICE HEADER 'B' 16 MOTOR OPERATED SHUTOFF VALVE                         | AUXILIARY | 609.00      | 609 HALLWAY - 15 FEET SOUTH OF NORTH END OF EAST CCW HEAT EXCHANGER #2-HE-15E, ON WEST SIDE  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Paul R. Wilson  
Print or Type Name

*Paul R. Wilson*  
Signature

12/16/95  
Date

T.R. Satyan Sharma  
Print or Type Name

*T.R. Satyan Sharma*  
Signature

12/19/95  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip.ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|--------------|--------|--|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 40   | 8      | 2-CMO-419    | 0      | COMPONENT COOLING WATER / EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17E COMPONENT COOLING WATER OUTLET SHUTOFF VALVE                | AUXILIARY | 609.00      | 609 HALLWAY - 30 FEET EAST OF THE PASSENGER ELEVATOR DOORWAY, NEAR THE SOUTH WALL, 25 FEET ABOVE THE FLOOR                  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 41   | 8      | 2-CMO-420    | 0      | COMPONENT COOLING WATER / WEST COMPONENT COOLING WATER HEAT EXCHANGER COMPONENT COOLING WATER OUTLET SHUTOFF VALVE                     | AUXILIARY | 609.00      | 609 HALLWAY - 3 FEET EAST OF WEST CCW HEAT EXCHANGER #2-HE-15W, 4 FEET ABOVE THE FLOOR                                      | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 42   | 8      | 2-FMO-211    | 0      | AUXILIARY FEEDWATER / TURBINE DRIVEN AUXILIARY FEED PUMP PP-4 DISCHARGE TO STEAM GENERATOR OME-3-1 4 MOTOR OPERATED CONTROL VALVE      | AUXILIARY | 612.00      | E MAIN STM STOP ENCL - IN THE MIDDLE OF THE NORTH REGION OF THE ROOM, NEAR A CEMENT COLUMN, NEAR THE FLOOR                  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 43   | 8      | 2-FMO-212    | 0      | AUXILIARY FEEDWATER / WEST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP SUPPLY TO STEAM GENERATOR OME-3-1 4 MOTOR OPERATED CONTROL VALVE      | AUXILIARY | 612.00      | E MAIN STM STOP ENCL - IN THE MIDDLE OF THE NORTH END OF THE ROOM, NEAR A CEMENT COLUMN, NEAR THE FLOOR                     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 44   | 8      | 2-FMO-241    | 0      | AUXILIARY FEEDWATER / TURBINE DRIVEN AUXILIARY FEED PUMP SUPPLY TO STEAM GENERATOR OME-3-4 4 MOTOR OPERATED CONTROL VALVE              | AUXILIARY | 612.00      | E MAIN STM STOP ENCL  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 45   | 8      | 2-FMO-242    | 0      | AUXILIARY FEEDWATER / WEST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP SUPPLY TO STEAM GENERATOR OME-3-4 4 INCH MOTOR OPERATED CONTROL VALVE | AUXILIARY | 612.00      | E MAIN STM STOP ENCL - IN THE SOUTH CENTRAL REGION OF THE ROOM, NEAR A CEMENT COLUMN, NEAR THE FLOOR                        | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 46   | 8      | 2-ICM-250    | 0      | BORON INJECTION / BORON INJECTION TANK TRAIN 'A' OUTLET CONTAINMENT ISOLATION VALVE  | AUXILIARY | 612.00      | BORON INJ TANK OUTLET VLV RM - IN THE NORTHEAST PART OF THE ROOM, 4 FEET ABOVE THE FLOOR                                    | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 47   | 8      | 2-ICM-251    | 0      | BORON INJECTION / BORON INJECTION TANK TRAIN 'B' OUTLET CONTAINMENT ISOLATION VALVE  | AUXILIARY | 612.00      | BORON INJ TANK OUTLET VLV RM - IN THE MIDDLE EAST PART OF THE ROOM, 4 FEET ABOVE THE FLOOR                                  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 48   | 8      | 2-ICM-311    | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL TO RC LOOPS #1 AND #4 COLD LEGS CONTAINMENT ISOLATION VALVE                         | AUXILIARY | 609.00      | E RHR HEAT XCHGR RM - 5 FEET SOUTH OF EAST RHR HEAT EXCHANGER #2-HE-17E, ON THE SOUTH WALL                                  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 49   | 8      | 2-ICM-321    | 0      | RESIDUAL HEAT REMOVAL / WEST RHR TO REACTOR COOLANT LOOPS #2 AND #3 COLD LEGS CONTAINMENT ISOLATION VALVE                              | AUXILIARY | 609.00      | W RHR HEAT XCHGR RM - IN THE SOUTH REGION OF THE ROOM, 6 FEET SOUTH OF WEST RHR HEAT EXCHANGER #2-HE-17W, ON THE SOUTH WALL | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 50   | 8      | 2-IMO-255    | 0      | BORON INJECTION / BORON INJECTION TANK TRAIN 'A' INLET SHUTOFF VALVE   | AUXILIARY | 612.00      | BORON INJ TANK RM - 2 FEET NORTH OF BORON INJECTION TANK #2-TK-11, NEAR THE NORTH WALL, 4 FEET ABOVE THE FLOOR              | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 51   | 8      | 2-IMO-256    | 0      | BORON INJECTION / BORON INJECTION TANK TRAIN 'B' INLET SHUTOFF VALVE   | AUXILIARY | 612.00      | BORON INJ TANK RM - 2 FEET NORTH OF BORON INJECTION TANK #2-TK-11, NEAR THE NORTH WALL                                      | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Paul R. Wilson  
Print or Type Name

*Paul R. Wilson*  
Signature

12/16/95  
Date

T.R. Satyan Sharma  
Print or Type Name

*T.R. Satyan Sharma*  
Signature

12/19/95  
Date



## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|--|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 52   | 8      | 2-IMO-312     | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER #2-HE-17E OUTLET MINI-FLOW LINE SHUTOFF VALVE                    | AUXILIARY | 609.00      | E RHR HEAT XCHGR RM - 5 FEET NORTHEAST OF EAST RHR HEAT EXCHANGER #2-HE-17E, NEAR THE EAST WALL  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 53   | 8      | 2-IMO-314     | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL PUMP PP-35E DISCHARGE CROSSTIE SHUTOFF VALVE                                    | AUXILIARY | 609.00      | E RHR HEAT XCHGR RM - 5 FEET NORTH OF EAST RHR HEAT EXCHANGER #2-HE-17E, AGAINST THE NORTH WALL, AT THE 615 ELEVATION PLATFORM GRATING | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 54   | 8      | 2-IMO-322     | 0      | RESIDUAL HEAT REMOVAL / WEST RESIDUAL HEAT REMOVAL HEAT EXCHANGER #2-HE-17W OUTLET MINI-FLOW LINE SHUTOFF VALVE                    | AUXILIARY | 609.00      | W RHR HEAT XCHGR RM - IN THE EAST CORNER OF THE ROOM, AGAINST THE WALL, 5 FEET EAST OF WEST RHR HEAT EXCHANGER #2-HE-17W               | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 55   | 8      | 2-IMO-324     | 0      | RESIDUAL HEAT REMOVAL / WEST RESIDUAL HEAT REMOVAL PUMP PP-35W DISCHARGE CROSSTIE SHUTOFF VALVE                                    | AUXILIARY | 609.00      | W RHR HEAT XCHGR RM - 6 FEET NORTH OF WEST RHR HEAT EXCHANGER #2-HE-17W, AGAINST THE NORTH WALL, AT THE 615 PLATFORM GRATING           | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 56   | 8      | 2-IMO-330     | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL TO UPPER CONTAINMENT SPRAY SHUTOFF VALVE  | AUXILIARY | 609.00      | E RHR HEAT XCHGR RM - IN THE SOUTHEAST CORNER OF THE ROOM, 5 FEET SOUTHEAST OF EAST RHR HEAT EXCHANGER #2-HE-17E                       | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 57   | 8      | 2-IMO-331     | 0      | RESIDUAL HEAT REMOVAL / WEST RHR TO UPPER CONTAINMENT SPRAY SHUTOFF VALVE  | AUXILIARY | 609.00      | W RHR HEAT XCHGR RM - IN THE SOUTHEAST CORNER OF THE ROOM, 6 FEET SOUTHEAST OF WEST RHR HEAT EXCHANGER #2-HE-17W, NEAR THE EAST WALL   | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 58   | 8      | 2-IMO-340     | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER TO CHARGING PUMPS SUCTION SHUTOFF VALVE                          | AUXILIARY | 609.00      | E RHR HEAT XCHGR RM - 6 FEET NORTH OF EAST HEAT EXCHANGER #2-HE-17E, AT THE PLATFORM GRATING   | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 59   | 8      | 2-IMO-350     | 0      | RESIDUAL HEAT REMOVAL / WEST RHR HEAT EXCHANGER OUTLET TO SAFETY INJECTION PUMP SUCTION SHUTOFF VALVE                              | AUXILIARY | 609.00      | W RHR HEAT XCHGR RM - IN THE SOUTHWEST CORNER OF THE ROOM, 5 FEET SOUTHWEST OF WEST RHR HEAT EXCHANGER #2-HE-17W, NEAR THE WEST WALL   | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 60   | 8      | 2-MMO-210     | 0      | MAIN STEAM / STEAM STOP VALVE MRV-210 STEAM CYLINDER DUMP 4 MOTOR OPERATED VALVES SELECTOR VALVE                                   | AUXILIARY | 633.00      | E MAIN STM STOP ENCL - 3 FEET NORTH OF STEAM STOP VALVE #2-MRV-210, ON 639 ELEVATION PLATFORM  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 61   | 8      | 2-MMO-240     | 0      | MAIN STEAM / STEAM STOP VALVE MRV-240 STEAM CYLINDER DUMP VALVE 4 MOTOR OPERATED SELECTOR VALVE                                    | AUXILIARY | 633.00      | E MAIN STM STOP ENCL - IN THE MIDDLE SOUTH PART OF THE ROOM, AT THE 640 ELEVATION PLATFORM, 1 FOOT ABOVE THE GRATING                   | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 62   | 8      | 2-QMO-451     | 0      | LETDOWN (CVCS) / REACTOR COOLANT LETDOWN VOLUME CONTROL TANK TK-10 TO CVCS CHARGING PUMPS TRAIN 'A' SHUTOFF 4 MOTOR OPERATED VALVE | AUXILIARY | 609.00      | VOL CTRL TANK E HALLWAY - ON THE WEST WALL, AT THE NORTH END OF THE HALLWAY, NORTHEAST OF VOLUME CONTROL TANK #2-TK-10                 | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 63   | 8      | 2-QMO-452     | 0      | LETDOWN (CVCS) / REACTOR COOLANT LETDOWN VOLUME CONTROL TANK TK-10 TO CVCS CHARGING PUMPS TRAIN 'B' SHUTOFF 4 MOTOR OPERATED VALVE | AUXILIARY | 609.00      | VOL CTRL TANK E HALLWAY - 6 FEET EAST OF VOLUME CONTROL TANK #2-TK-10, NEAR THE WEST WALL, 4 FEET ABOVE THE FLOOR                      | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Paul R. Wilson  
Print or Type Name

*Paul R. Wilson*  
Signature

12/16/95  
Date

T.R. Satyan Sharma  
Print or Type Name

*T.R. Satyan Sharma*  
Signature

12/19/95  
Date



## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip.ID No. | Rev No | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|--------------|--------|---|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 64   | 8      | 2-WMO-714    | 0      | ESSENTIAL SERVICE WATER / EAST CONTAINMENT SPRAY HEAT EXCHANGER HE-18E ESSENTIAL SERVICE WATER OUTLET SHUTOFF VALVE       | AUXILIARY | 609.00      | 609 HALLWAY - 3 FEET EAST OF UNIT 2 EAST AND WEST CONTAINMENT SPRAY HEAT EXCHANGER ROOM DOORWAY, ON THE SOUTHEAST CORNER OF THE | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 65   | 8      | 2-WMO-718    | 0      | ESSENTIAL SERVICE WATER / WEST CONTAINMENT SPRAY HEAT EXCHANGER ESSENTIAL SERVICE WATER OUTLET SHUTOFF VALVE              | AUXILIARY | 609.00      | 609 HALLWAY - 30 FEET EAST OF THE PASSENGER ELEVATOR, ON THE 621 ELEVATION PLATFORM, NEAR THE SOUTH WALL                        | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 66   | 8      | 2-WMO-732    | 0      | ESSENTIAL SERVICE WATER / EAST COMPONENT COOLING WATER HEAT EXCHANGER HE-15E ESSENTIAL SERVICE WATER INLET SHUTOFF VALVE  | AUXILIARY | 609.00      | 609 HALLWAY - AT THE NORTH END OF EAST CCW HEAT EXCHANGER #2-HE-15E, 10 FEET ABOVE THE FLOOR                                    | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 67   | 8      | 2-WMO-734    | 0      | ESSENTIAL SERVICE WATER / EAST COMPONENT COOLING WATER HEAT EXCHANGER HE-15E ESSENTIAL SERVICE WATER OUTLET SHUTOFF VALVE | AUXILIARY | 609.00      | 609 HALLWAY - AT THE NORTH END OF 2 EAST CCW HEAT EXCHANGER #2-HE-15E, 8 FEET ABOVE THE FLOOR                                   | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 68   | 8      | 2-WMO-736    | 0      | ESSENTIAL SERVICE WATER / WEST COMPONENT COOLING WATER HEAT EXCHANGER ESSENTIAL SERVICE WATER INLET SHUTOFF VALVE         | AUXILIARY | 609.00      | 609 HALLWAY - ABOVE THE NORTH END OF WEST CCW HEAT EXCHANGER #2-HE-15W, 7 FEET ABOVE THE FLOOR                                  | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 69   | 8      | 2-WMO-738    | 0      | ESSENTIAL SERVICE WATER / WEST COMPONENT COOLING WATER HEAT EXCHANGER ESSENTIAL SERVICE WATER OUTLET SHUTOFF VALVE        | AUXILIARY | 609.00      | 609 HALLWAY - 1 FOOT ABOVE THE NORTH END OF WEST CCW HEAT EXCHANGER #2-HE-15W, 6 FEET ABOVE THE FLOOR                           | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Paul R. Wilson  
Print or Type Name

*Paul R. Wilson*  
Signature

12/16/95  
Date

T.R. Satyan Sharma  
Print or Type Name

*T.R. Satyan Sharma*  
Signature

12/19/95  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|--|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 40   | 8      | 2-IMO-212     | 0      | CONTAINMENT SPRAY / EAST CONTAINMENT SPRAY PUMP PP-9E 2 MOTOR OPERATED DISCHARGE TO CONTAINMENT SPRAY ADDITIVE EDUCTOR SHUTOFF VALVE | AUXILIARY | 573.00      | E CONT SPRAY PMP RM - IN THE MIDDLE WEST PART OF THE ROOM, 4 FEET NORTHWEST OF EAST CONTAINMENT SPRAY PUMP #2-PP-9E, 5 FEET ABOVE THE     | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 41   | 8      | 2-IMO-215     | 0      | CONTAINMENT SPRAY / REFUELING WATER STORAGE TANK TO EAST CONTAINMENT SPRAY PUMP PP-9E SUCTION 12 MOTOR OPERATED SHUTOFF VALVE        | AUXILIARY | 573.00      | E CONT SPRAY PMP RM - IN THE SOUTH PART OF THE ROOM, ON THE SOUTH SIDE OF THE DIVIDER WALL, ON THE 577 ELEVATION PLATFORM                 | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 42   | 8      | 2-IMO-220     | 0      | CONTAINMENT SPRAY / WEST CONTAINMENT SPRAY PUMP PP-9W 10 MOTOR OPERATED DISCHARGE SHUTOFF VALVE                                      | AUXILIARY | 573.00      | W CONT SPRAY PMP RM - 5 FEET NORTHEAST OF WEST CONTAINMENT SPRAY PUMP #2-PP-9W, IN THE MIDDLE OF THE ROOM, 6 FEET ABOVE THE FLOOR         | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 43   | 8      | 2-IMO-221     | 0      | CONTAINMENT SPRAY / WEST CONTAINMENT SPRAY PUMP PP-9W DISCHARGE SHUTOFF 10 MOTOR OPERATED VALVE                                      | AUXILIARY | 573.00      | W CONT SPRAY PMP RM - IN THE NORTH PART OF THE ROOM, 6 FEET NORTHEAST OF WEST CONTAINMENT SPRAY PUMP #2-PP-9W, 5 FEET ABOVE THE FLOOR     | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 44   | 8      | 2-IMO-222     | 0      | CONTAINMENT SPRAY / WEST CONTAINMENT SPRAY PUMP PP-9W DISCHARGE TO CONTAINMENT SPRAY ADDITIVE EDUCTOR SHUTOFF 2 MOTOR OPERATED VALVE | AUXILIARY | 573.00      | W CONT SPRAY PMP RM - IN THE NORTHEAST PART OF THE ROOM, 3 FEET NORTHEAST OF WEST CONTAINMENT SPRAY PUMP #2-PP-9W, 4 FEET ABOVE THE FLOOR | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 45   | 8      | 2-IMO-225     | 0      | CONTAINMENT SPRAY / REFUELING WATER STORAGE TANK TO WEST CONTAINMENT SPRAY PUMP PP-9W SUCTION 12 MOTOR OPERATED SHUTOFF VALVE        | AUXILIARY | 573.00      | W CONT SPRAY PMP RM - IN THE SOUTH PART OF THE ROOM, ON THE SOUTH SIDE OF THE DIVIDER WALL, 2 FEET ABOVE THE GRATING                      | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 46   | 8      | 2-IMO-310     | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL PUMP PP-35E SUCTION SHUTOFF VALVE   | AUXILIARY | 573.00      | EAST RHR PMP RM - IN THE SOUTHWEST PART OF THE ROOM, ON THE 577 ELEVATION PLATFORM, ON THE SOUTH SIDE OF THE DIVIDER WALL                 | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 47   | 8      | 2-IMO-320     | 0      | RESIDUAL HEAT REMOVAL / WEST RESIDUAL HEAT REMOVAL PUMP PP-35W SUCTION SHUTOFF VALVE   | AUXILIARY | 573.00      | W RHR PMP RM - 8 FEET SOUTH OF WEST RESIDUAL HEAT REMOVAL PUMP #2-PP-35W, 3 FEET SOUTH OF THE DIVIDER WALL, IN THE SOUTHEAST CORNER OF    | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 48   | 8      | 2-MCM-221     | 0      | MAIN STEAM / MAIN STEAM LEAD #2 TO AUXILIARY FEED PUMP TURBINE 4 MOTOR OPERATED SHUTOFF VALVE  | AUXILIARY | 633.00      | WMN STM STOP ENCL - 6 FEET WEST OF THE EAST WALL, ON THE 639 ELEVATION PLATFORM   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 49   | 8      | 2-MCM-231     | 0      | MAIN STEAM / MAIN STEAM LEAD #3 TO AUXILIARY FEED PUMP TURBINE 4 MOTOR OPERATED SHUTOFF VALVE  | AUXILIARY | 633.00      | WMN STM STOP ENCL - 3 FEET EAST OF STEAM GENERATOR #3 STOP VALVE ON THE 639 ELEVATION PLATFORM  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 50   | 8      | 2-MMO-220     | 0      | MAIN STEAM / STEAM STOP VALVE MRV-220 STEAM CYLINDER DUMP 4 MOTOR OPERATED VALVES SELECTOR VALVE                                     | AUXILIARY | 633.00      | WMN STM STOP ENCL - 10 FEET SOUTH OF THE NORTH WALL, IN THE CENTER OF THE ROOM  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Walter Djordjevic  
Print or Type Name

Signature

Date

Gunnar Harstead  
Print or Type Name

Signature

Date



22

23

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description  | Building    | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis                             | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|---|-------------|-------------|--|------------|------|---|---------------|-------------|------------|--------------|-----------|
| 51   | 8      | 2-WMO-230     | 0      | MAIN STEAM / STEAM STOP VALVE<br>MRV-230 STEAM CYLINDER DUMP<br>VALVES 4 MOTOR OPERATED<br>SELECTOR VALVE                             | AUXILIARY   | 633.00      | WMN STM STOP ENCL - 2 FEET SOUTHWEST<br>OF STEAM STOP VALVE #2-MTR-230, ON<br>639 ELEVATION PLATFORM   | 633.00     | Yes  | Bounding Spectrum vs. SSE<br>Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 52   | 8      | 2-QT-506      | 0      | MAIN STEAM / TURBINE DRIVEN<br>AUX FEED PUMP PP-4 TRIP AND<br>THROTTLE VALVE  | TURBINE     | 591.00      | TB DRIVEN AUX FDWTR PMP - 3 FT. NW OF<br>THE AUX FEED PUMP TURBINE 2-OME-39, 6 FT<br>ABOVE THE FLOOR   | 591.00     | Yes  | Bounding Spectrum vs. SSE<br>Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 53   | 8      | 2-WMO-703     | 0      | ESSENTIAL SERVICE WATER / EAST<br>ESSENTIAL SERVICE WATER PUMP<br>PP-7E DISCHARGE SHUTOFF<br>VALVE                                    | SCREENHOUSE | 591.00      | E SSNTL SERV WTR PMP RM - 20 FEET<br>NORTHEAST OF EAST ESSENTIAL SERVICE<br>WATER PUMP #2-PP-7E  | 591.00     | Yes  | Bounding Spectrum vs. SSE<br>Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 54   | 8      | 2-WMO-704     | 0      | ESSENTIAL SERVICE WATER /<br>WEST ESSENTIAL SERVICE WATER<br>PUMP PP-7W DISCHARGE<br>SHUTOFF VALVE                                    | SCREENHOUSE | 591.00      | WESSNTL SERV WTR PMP RM - IN THE<br>MIDDLE NORTH PART OF THE ROOM, 5 FEET<br>NORTHWEST OF WEST ESSENTIAL SERVICE<br>WATER PUMP #2-PP-7W                    | 591.00     | Yes  | Bounding Spectrum vs. SSE<br>Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 55   | 8      | 2-WMO-706     | 0      | ESSENTIAL SERVICE WATER /<br>WEST ESSENTIAL SERVICE WATER<br>SUPPLY HEADER CROSSTIE TO<br>UNIT 1 SHUTOFF VALVE                        | TURBINE     | 569.00      | ESSNTL SERV WTR PIPE TUNN - 35 FEET<br>SOUTHEAST OF THE MIDDLE WATERTIGHT<br>DOORWAY   | 633.00     | Yes  | Bounding Spectrum vs. SSE<br>Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 56   | 8      | 2-WMO-708     | 0      | ESSENTIAL SERVICE WATER / EAST<br>ESSENTIAL SERVICE WATER<br>SUPPLY HEADER CROSSTIE TO<br>UNIT 1 SHUTOFF VALVE                        | TURBINE     | 569.00      | ESSNTL SERV WTR PIPE TUNN - 35 FEET<br>SOUTH OF THE MIDDLE WATERTIGHT DOOR, 5<br>FEET ABOVE THE FLOOR  | 633.00     | Yes  | Bounding Spectrum vs. SSE<br>Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 57   | 8      | 2-WMO-722-AB  | 0      | ESSENTIAL SERVICE WATER /<br>WEST ESSENTIAL SERVICE WATER<br>SUPPLY HEADER TO AB<br>EMERGENCY DIESEL HEAT<br>EXCHANGERS SHUTOFF VALVE | AUXILIARY   | 587.00      | 2CD DSL RM N PIPE TUNNEL - IN THE<br>SOUTHWEST PART OF THE ROOM, 20 FEET<br>EAST OF THE CD EMERGENCY DIESEL<br>GENERATOR DOORWAY, NEAR THE SOUTH<br>WALL   | 587.00     | Yes  | Bounding Spectrum vs. SSE<br>Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 58   | 8      | 2-WMO-724-AB  | 0      | ESSENTIAL SERVICE WATER / EAST<br>ESSENTIAL SERVICE WATER<br>SUPPLY HEADER TO AB<br>EMERGENCY DIESEL HEAT<br>EXCHANGERS SHUTOFF VALVE | AUXILIARY   | 587.00      | 2CD DSL RM N PIPE TUNNEL - IN THE<br>NORTHWEST REGION OF THE ROOM, 25 FEET<br>EAST OF THE CD EMERGENCY DIESEL<br>GENERATOR ROOM NORTH DOORWAY, NEAR<br>THE | 587.00     | Yes  | Bounding Spectrum vs. SSE<br>Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 59   | 8      | 2-WMO-726-CD  | 0      | ESSENTIAL SERVICE WATER / EAST<br>ESSENTIAL SERVICE WATER<br>SUPPLY HEADER TO CD<br>EMERGENCY DIESEL HEAT<br>EXCHANGERS SHUTOFF VALVE | AUXILIARY   | 587.00      | 2CD DSL RM N PIPE TUNNEL - IN THE<br>SOUTHWEST PART OF THE TUNNEL, 10 FEET<br>EAST OF CD EMERGENCY DIESEL<br>GENERATOR DOORWAY, NEAR THE SOUTH<br>WALL     | 587.00     | Yes  | Bounding Spectrum vs. SSE<br>Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 60   | 8      | 2-WMO-728-CD  | 0      | ESSENTIAL SERVICE WATER /<br>WEST ESSENTIAL SERVICE WATER<br>SUPPLY HEADER TO CD<br>EMERGENCY DIESEL HEAT<br>EXCHANGERS SHUTOFF VALVE | AUXILIARY   | 587.00      | 2CD DSL RM N PIPE TUNNEL - IN THE<br>SOUTHWEST PART OF THE ROOM, 15 FEET<br>WEST OF THE CD EMERGENCY DIESEL<br>GENERATOR ROOM DOORWAY, NEAR THE<br>SOUTH   | 587.00     | Yes  | Bounding Spectrum vs. SSE<br>Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 61   | 8      | 2-WMO-744     | 0      | AUXILIARY FEED WATER / ESW TO<br>WEST MOTOR DRN AUX FEED<br>PUMP PP-3W SHUTOFF 4 MOTOR<br>OPERATED VALVE                              | TURBINE     | 591.00      | WMTR DRIVEN AUX FDWTR PMP - IN THE<br>NORTHWEST CORNER OF THE ROOM, 3 FEET<br>NORTHWEST OF WEST MOTOR DRIVEN<br>AUXILIARY FEED PUMP #2-PP-3W               | 591.00     | Yes  | Bounding Spectrum vs. SSE<br>Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 62   | 8      | 2-WMO-753     | 0      | AUXILIARY FEED WATER / ESW TO<br>TURB DRIVEN AUX FEED PUMP PP-<br>4 SHUTOFF 6 MOTOR OPERATED<br>VALVE                                 | TURBINE     | 591.00      | TB DRIVEN AUX FDWTR PMP - IN THE MIDDLE<br>NORTH REGION OF THE ROOM, 6 FEET<br>NORTHEAST OF AUXILIARY FEED PUMP<br>TURBINE #2-OME-39, 5 FEET ABOVE THE     | 591.00     | Yes  | Bounding Spectrum vs. SSE<br>Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Walter Djordjevic  
Print or Type Name

Signature

Date

Gunnar Harstead  
Print or Type Name

Signature

Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description  | Building | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|---|----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 63   | 8      | 2-WMO-754     | 0      | ESSENTIAL SERVICE WATER / ESSENTIAL SERVICE WATER TO EAST MOTOR DRIVEN AUXILIARY FEED PUMP PP-3E SHUTOFF 4 MOTOR OPERATED VALVE | TURBINE  | 591.00      | E MTR DRIV AUX FEEDWTR PMP - IN THE MIDDLE OF THE NORTH PART OF THE ROOM, 5 FEET NORTH OF EAST MOTOR DRIVEN AUXILIARY FEED PUMP #2-PP-3E, 4 FEET ABOVE | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Walter Djordjevic  
Print or Type Name

Signature

Date

Gunnar Harstead  
Print or Type Name

Signature

Date

| Rem | Eq. Cl | Equip.ID No.  | Rev No | System/Equipment Description   | Building    | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|-----|--------|---------------|--------|--|-------------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 1   | 7      | 2-HV-SGR-MD-1 | 0      | AUXILIARY BUILDING V / CONTROL ROD DRIVE EQUIPMENT ROOM AND INVERTER AREA VENTILATION RECIRCULATING AIR INLET DAMPER | AUXILIARY   | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHWEST PART OF THE ROOM, 4 FEET ABOVE 600V SWITCHGEAR #2-21A, 10 FEET ABOVE THE FLOOR  | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 2   | 7      | 2-HV-SGR-MD-2 | 0      | AUXILIARY BUILDING V / CONTROL ROD DRIVE EQUIPMENT ROOM AND INVERTER AREA VENTILATION OUTSIDE AIR INLET DAMPER       | AUXILIARY   | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHWEST PART OF THE ROOM, 4 FEET ABOVE 600V SWITCHGEAR #2-21A, IN THE CEILING   | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 3   | 7      | 2-SV-94N      | 0      | CONTROL ROOM AIR CON / CONTROL ROOM AIR CONDITIONING NORTH CHILL WATER EXPANSION TANK TK-76N SAFETY VALVE            | AUXILIARY   | 650.00      | CTRL RM AIR CONDIT RM - 3 FEET EAST OF THE ROOM'S ENTRANCE GATE, ON THE NORTH WALL, 7 FEET ABOVE THE FLOOR   | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 4   | 7      | 2-SV-94S      | 0      | CONTROL ROOM AIR CON / CONTROL ROOM AIR CONDITIONING SOUTH CHILL WATER EXPANSION TANK TK-76S SAFETY VALVE            | AUXILIARY   | 650.00      | CTRL RM AIR CONDIT RM - IN THE SOUTHWEST AREA OF THE ROOM, NEAR THE SOUTH WALL, 8 FEET ABOVE THE FLOOR   | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 5   | 7      | 2-VRV-315     | 0      | CONTROL ROOM AIR CON / CONTROL ROOM VENTILATION UNIT HV-ACRA-1 CHILL WATER INLET/BYPASS VALVE                        | AUXILIARY   | 650.00      | CTRL RM AIR CONDIT RM - IN THE NORTH PART OF THE ROOM, 4 FEET WEST OF CONTROL ROOM AIR HANDLING SUBPANEL #2-ACRA-1, 3 FEET ABOVE THE FLOOR                           | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 6   | 7      | 2-VRV-325     | 0      | CONTROL ROOM AIR CON / CONTROL ROOM VENTILATION UNIT HV-ACRA-2 CHILL WATER INLET/BYPASS VALVE                        | AUXILIARY   | 650.00      | CTRL RM AIR CONDIT RM - IN THE SOUTHEAST PART OF THE ROOM, 3 FEET WEST OF CONTROL ROOM AIR HANDLING SUBPANEL #2-ACRA-2, ON THE SOUTH WALL                            | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 7   | 8      | 2-HV-DGS-DCD  | 0      | DIESEL ROOM VENTILAT / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN HV-DGS-2 OUTSIDE AIR SHUTOFF DAMPER | AUXILIARY   | 586.00      | REACTOR CABLE TUNN, QUAD 3 - IN THE NORTHWEST REGION OF THE ROOM, 7 FEET NORTH OF REACTOR CABLE TUNNEL QUAD #3 MIDDLE/NORTH SECTION FIRE DOOR #2-DR-AUX326, 7 FT. UP | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 8   | 8      | 2-HV-SGR-MD-4 | 0      | AUXILIARY BUILDING V / 4KV ROOM 600V SWITCHGEAR TRANSFORMERS AREA VENTILATION SUPPLY FAN HV-SGRS-7 SUCTION DAMPER    | AUXILIARY   | 609.00      | 4KV RM - 600V SWGR AREA - IN THE MIDDLE EAST REGION OF THE ROOM, 12 FEET SOUTHEAST OF 600V TRANSFORMER #2-TR21D, 11 FEET ABOVE THE FLOOR                             | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 9   | 8      | 2-HV-SGR-MD-5 | 0      | AUXILIARY BUILDING V / 600VAC MOTOR CONTROL CENTER MEZZANINE AREA VENTILATION SUPPLY FAN HV-SGRS-9 VENT DAMPER       | AUXILIARY   | 613.00      | 4KV ROOM - MEZZANINE AREA -  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 10  | 9      | 12-HV-ESW-1   | 0      | SCREENHOUSE VENTILAT / UNIT 2 EAST ESSENTIAL SERVICE WATER PUMP ROOM SUPPLY VENTILATION FAN                          | SCREENHOUSE | 591.00      | E SSNTL SERV WTR PMP RM - IN THE NORTHEAST CORNER OF THE ROOM, 15 FEET NORTHEAST OF EAST ESSENTIAL SERVICE WATER PUMP #2-PP-7E, 13 FEET ABOVE                        | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 11  | 9      | 12-HV-ESW-2   | 0      | SCREENHOUSE VENTILAT / UNIT 2 EAST ESSENTIAL SERVICE WATER PUMP ROOM SUPPLY VENTILATION FAN                          | SCREENHOUSE | 591.00      | E SSNTL SERV WTR PMP RM - IN THE NORTHWEST CORNER OF THE ROOM, 15 FEET NORTHEAST OF EAST ESSENTIAL SERVICE WATER PUMP #2-PP-7E, 13 FEET ABOVE                        | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/11/95  
Date

Gunnar Harstead  
Print or Type Name

*Gunnar Harstead*  
Signature

12/12/95  
Date





33

34

35

36

| Item | Eq. Cl | Equip ID No.   | Rev No | System/Equipment Description   | Building    | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|----------------|--------|--|-------------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 12   | 9      | 12-HV-ESW-3    | 0      | SCREENHOUSE VENTILAT / UNIT 2 WEST ESSENTIAL SERVICE WATER PUMP ROOM SUPPLY VENTILATION FAN    | SCREENHOUSE | 591.00      | WESSNTL SERV WTR PMP RM - IN THE NORTHEAST CORNER OF THE ROOM, 15 FEET NORTHWEST OF WEST ESSENTIAL SERVICE WATER PUMP #2-PP-7W, 13 FEET ABOVE            | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 13   | 9      | 12-HV-ESW-4    | 0      | SCREENHOUSE VENTILAT / UNIT 2 WEST ESSENTIAL SERVICE WATER PUMP ROOM SUPPLY VENTILATION FAN    | SCREENHOUSE | 591.00      | WESSNTL SERV WTR PMP RM - IN THE NORTHWEST CORNER OF THE ROOM, 15 FEET NORTHWEST OF WEST ESSENTIAL SERVICE WATER PUMP #2-PP-7W, 13 FEET ABOVE            | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 14   | 9      | 2-HV-AES-1     | 0      | AUXILIARY BUILDING V / AUXILIARY BUILDING VENTILATION ENGINEERED SAFETY FEATURE EXHAUST UNIT 1 | AUXILIARY   | 633.00      | NORM BLOWDOWN FLASHTANK RM - IN THE NORTHWEST REGION OF THE ROOM, 20 FEET NORTHEAST OF STEAM GENERATOR NORMAL BLOWDOWN FLASH TANK 2-TK-99                | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | No          | No         | Yes          | No        |
| 15   | 9      | 2-HV-AES-2     | 0      | AUXILIARY BUILDING V / AUXILIARY BUILDING VENTILATION ENGINEERED SAFETY FEATURE EXHAUST UNIT   | AUXILIARY   | 633.00      | NORM BLOWDOWN FLASHTANK RM - IN THE NORTHWEST REGION OF THE ROOM, 20 FEET NORTHWEST OF SGBD FLASHTANK 2-TK-99  | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | No          | No         | Yes          | No        |
| 16   | 9      | 2-HV-AFP-BRE-1 | 0      | AUXILIARY BUILDING V / TRAIN 'N' BATTERY ROOM EAST EXHAUST FAN                                 | AUXILIARY   | 633.00      | NORM BLOWDOWN FLASHTANK RM - IN THE SOUTHEAST REGION OF THE ROOM, ON THE SOUTH WALL OF THE N-TRAIN BATTERY ROOM, NEAR THE EAST WALL, 6 FEET ABOVE        | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 17   | 9      | 2-HV-AFP-BRE-2 | 0      | AUXILIARY BUILDING V / TRAIN 'N' BATTERY ROOM WEST EXHAUST FAN                                 | AUXILIARY   | 633.00      | NORM BLOWDOWN FLASHTANK RM - IN THE SOUTHEAST REGION OF THE ROOM, ON THE SOUTH WALL OF THE N-TRAIN BATTERY ROOM, 6 FEET ABOVE THE FLOOR                  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 18   | 9      | 2-HV-AFP-M1    | 0      | TURBINE BUILDING VEN / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP ROOM EXHAUST FAN             | TURBINE     | 591.00      | E MTR DRIV AUX FEEDWTR PMP - IN THE NORTHWEST CORNER OF THE ROOM, ON THE WEST WALL, 12 FEET ABOVE THE FLOOR  | 591.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 19   | 9      | 2-HV-AFP-M2    | 0      | TURBINE BUILDING VEN / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP ROOM SUPPLY FAN              | TURBINE     | 591.00      | E MTR DRIV AUX FEEDWTR PMP - IN THE SOUTHEAST CORNER OF THE ROOM, ON THE SOUTH WALL, 12 FEET ABOVE THE FLOOR   | 591.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 20   | 9      | 2-HV-AFP-T1    | 0      | TURBINE BUILDING VEN / TURBINE DRIVEN AUXILIARY FEED PUMP ROOM NORTH EXHAUST FAN               | TURBINE     | 591.00      | TB DRIVEN AUX FDWTR PMP - IN THE NORTHWEST CORNER OF THE ROOM, ON THE WEST WALL, 12 FEET ABOVE THE FLOOR   | 591.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 21   | 9      | 2-HV-AFP-T2    | 0      | TURBINE BUILDING VEN / TURBINE DRIVEN AUXILIARY FEED PUMP ROOM SOUTH EXHAUST FAN               | TURBINE     | 591.00      | TB DRIVEN AUX FDWTR PMP - IN THE SOUTHWEST CORNER OF THE ROOM, 4 FEET WEST OF AUX FEED PUMP TURBINE #2-OME-39, ON THE WEST WALL, 12 FEET ABOVE THE FLOOR | 591.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 22   | 9      | 2-HV-AFP-X1    | 0      | TURBINE BUILDING VEN / WEST MOTOR DRIVEN AUXILIARY FEED PUMP ROOM EAST EXHAUST FAN             | TURBINE     | 591.00      | WMTR DRIVEN AUX FDWTR PMP - IN THE NORTHEAST REGION OF THE ROOM, ON THE NORTH WALL, 8 FEET NORTH OF WEST MOTOR DRIVEN AUX FEEDWATER PUMP #2-PP-3W,       | 591.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 23   | 9      | 2-HV-AFP-X2    | 0      | TURBINE BUILDING VEN / WEST MOTOR DRIVEN AUXILIARY FEED PUMP ROOM WEST EXHAUST FAN             | TURBINE     | 591.00      | WB 591 ELEV BASMNT - ON THE NORTH WALL OF THE WEST MOTOR DRIVEN AUXILIARY FEED PUMP ROOM, 4 FEET SOUTHEAST OF THE EAST UNIT DIVIDING                     | 591.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/11/95  
Date

Gunnar Harstead  
Print or Type Name

*Gunnar Harstead*  
Signature

12/12/95  
Date

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|--|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 24   | 9      | 2-HV-SGRS-1A  | 0      | AUXILIARY BUILDING V / CONTROL ROD DRIVE EQUIPMENT ROOM AND INVERTER AREA VENTILATION NORTH SUPPLY FAN       | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHWEST PART OF THE ROOM, 5 FEET WEST OF 600V SWITCHGEAR #2-21A, 13 FEET ABOVE THE FLOOR              | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 25   | 9      | 2-HV-SGRS-2   | 0      | AUXILIARY BUILDING V / 4KV ROOM AB 4KV SWITCHGEAR AREA VENTILATION SUPPLY FAN                                | AUXILIARY | 609.00      | 4KV RM - AB 4KV SWGR AREA - IN THE NORTHWEST CORNER OF THE ROOM, 7 FEET SOUTH OF THE ROOM'S ENTRANCE, 12 FEET ABOVE THE FLOOR            | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 26   | 9      | 2-HV-SGRS-3   | 0      | AUXILIARY BUILDING V / 4KV ROOM CD 4KV SWITCHGEAR AREA VENTILATION SUPPLY FAN                                | AUXILIARY | 609.00      | 4KV RM - CD 4KV SWGR AREA - IN THE NORTHEAST CORNER OF THE ROOM, ON THE NORTH WALL, 12 FEET ABOVE THE FLOOR                              | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 27   | 9      | 2-HV-SGRS-4A  | 0      | AUXILIARY BUILDING V / CONTROL ROD DRIVE EQUIPMENT ROOM AND INVERTER AREA VENTILATION SOUTH SUPPLY FAN       | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHWEST PART OF THE ROOM, 3 FEET SOUTH OF 600V SWITCHGEAR #2-21A, 14 FEET ABOVE THE FLOOR             | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 28   | 9      | 2-HV-SGRS-7   | 0      | AUXILIARY BUILDING V / 4KV ROOM 600 VOLT SWITCHGEAR TRANSFORMERS TR21B AND TR21D AREA VENTILATION SUPPLY FAN | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE MIDDLE EAST PART OF THE ROOM, 10 FEET NORTH OF 600V TRANSFORMER #2-TR21D, 14 FEET ABOVE THE FLOOR       | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 29   | 9      | 2-HV-SGRS-8   | 0      | AUXILIARY BUILDING V / 4KV ROOM 600 VOLT SWITCHGEAR TRANSFORMERS TR21A AND TR21C AREA VENTILATION SUPPLY FAN | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE MIDDLE WEST PART OF THE ROOM, 5 FEET NORTH OF 600V SUPPLY TRANSFORMER #2-TR21A, 14 FEET ABOVE THE FLOOR | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 30   | 9      | 2-HV-SGRS-9   | 0      | AUXILIARY BUILDING V / 600VAC MOTOR CONTROL CENTER MEZZANINE AREA VENTILATION SUPPLY FAN                     | AUXILIARY | 613.00      | 4KV ROOM - MEZZANINE AREA - IN THE MIDDLE NORTH REGION AREA, 1 FOOT WEST OF PLANT BATTERY CONTROL PANEL #2-8C-AB, 9 FEET ABOVE THE FLOOR | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 31   | 9      | 2-HV-SGRX-2   | 0      | AUXILIARY BUILDING V / 4KV ROOM AB 4KV SWITCHGEAR AREA VENTILATION EXHAUST FAN                               | AUXILIARY | 609.00      | 4KV RM - AB 4KV SWGR AREA - IN THE SOUTHEAST CORNER OF THE ROOM, 2 FEET SOUTH OF 4KV SWITCHGEAR #2-T21A, 10 FEET ABOVE THE FLOOR         | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 32   | 9      | 2-HV-SGRX-3   | 0      | AUXILIARY BUILDING V / 4KV ROOM CD 4KV SWITCHGEAR AREA VENTILATION EXHAUST FAN                               | AUXILIARY | 609.00      | 4KV RM - CD 4KV SWGR AREA - IN THE SOUTHWEST CORNER OF THE ROOM, CEILING MOUNTED, 14 FEET ABOVE THE FLOOR                                | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 33   | 9      | 2-HV-SGRX-5   | 0      | AUXILIARY BUILDING V / AB BATTERY EQUIPMENT AREA BATTERY ROOM VENTILATION EXHAUST FAN                        | AUXILIARY | 609.00      | AB BATTERY EQUIP AREA - IN THE MIDDLE SOUTH REGION OF THE ROOM, NEAR THE CEILING   | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 34   | 9      | 2-HV-SGRX-6   | 0      | AUXILIARY BUILDING V / CD BATTERY EQUIPMENT AREA BATTERY ROOM VENTILATION EXHAUST FAN                        | AUXILIARY | 626.00      | CD BATTERY EQUIP AREA - IN THE SOUTHWEST CORNER OF THE ROOM, NEAR THE CEILING  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 35   | 10     | 2-HV-ACRA-1   | 0      | CONTROL ROOM VENTILA / CONTROL ROOM VENTILATION NORTH AIR CONDITIONING UNIT                                  | AUXILIARY | 650.00      | CTRL RM AIR CONDIT RM - IN THE NORTHWEST PART OF THE ROOM, 10 FEET SOUTHEAST OF THE UNIT 2 CONTROL ROOM AIR CONDITIONING ROOM DOORWAY    | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 36   | 10     | 2-HV-ACRA-2   | 0      | CONTROL ROOM VENTILA / CONTROL ROOM VENTILATION SOUTH AIR CONDITIONING UNIT                                  | AUXILIARY | 650.00      | CTRL RM AIR CONDIT RM - IN THE MIDDLE SOUTH REGION OF THE ROOM   | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

  
Signature

12/11/95  
Date

Gunnar Harstead  
Print or Type Name

  
Signature

12/12/95  
Date

| Item | Eq. Cl | Equip. ID No.    | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|------------------|--------|--|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 37   | 10     | 2-HV-AES-1 (FLT) | 0      | AUXILIARY BUILDING V / AUXILIARY BUILDING VENTILATION ENGINEERED SAFETY FEATURE EXHAUST AIR FILTER                     | AUXILIARY | 633.00      | NORM BLOWDOWN FLASHTANK RM -  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 38   | 10     | 2-HV-AES-2 (FLT) | 0      | AUXILIARY BUILDING V / AUXILIARY BUILDING VENTILATION ENGINEERED SAFETY FEATURE EXHAUST AIR FILTER                     | AUXILIARY | 633.00      | NORM BLOWDOWN FLASHTANK RM -  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 39   | 11     | 2-HV-ACR-1       | 0      | CONTROL ROOM AIR CON / CONTROL ROOM AIR CONDITIONING NORTH LIQUID CHILLER  | AUXILIARY | 650.00      | CTRL RM AIR CONDIT RM - IN THE NORTHWEST PART OF THE ROOM, ON THE NORTH WALL, 4 FEET NORTHWEST OF CONTROL ROOM VENTILATION NORTH AIR CONDITIONING | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | No          | No         | Yes          | No        |
| 40   | 11     | 2-HV-ACR-2       | 0      | CONTROL ROOM AIR CON / CONTROL ROOM AIR CONDITIONING SOUTH LIQUID CHILLER  | AUXILIARY | 650.00      | CTRL RM AIR CONDIT RM - IN THE SOUTHWEST REGION OF THE ROOM, ON THE SOUTH WALL, 5 FEET SOUTHWEST OF CONTROL ROOM VENTILATION SOUTH AIR            | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | No          | No         | Yes          | No        |
| 41   | 11     | 2-HE-63N         | 0      | CONTROL ROOM AIR CONDITIONING CHILL WATER / CONTROL ROOM AIR CONDITIONING NORTH LIQUID CHILLER HV-ACR-1 EVAPORATOR     | AUXILIARY | 650.00      | CONTROL RM, A/C RM  | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 42   | 11     | 2-HE-63S         | 0      | CONTROL ROOM AIR CONDITIONING CHILL WATER / CONTROL ROOM AIR CONDITIONING SOUTH LIQUID CHILLER HV-ACR-2 EVAPORATOR     | AUXILIARY | 650.00      | CONTROL RM, A/C RM  | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 43   | 11     | 2-HE-64N         | 0      | CONTROL ROOM AIR CONDITIONING CHILL WATER / CONTROL ROOM AIR CONDITIONING NORTH LIQUID CHILLER HV-ACR-1 CONDENSER      | AUXILIARY | 650.00      | CONTROL RM, A/C RM  | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 44   | 11     | 2-HE-64S         | 0      | CONTROL ROOM AIR CONDITIONING CHILL WATER / CONTROL ROOM AIR CONDITIONING SOUTH LIQUID CHILLER HV-ACR-2 CONDENSER      | AUXILIARY | 650.00      | CONTROL RM, A/C RM  | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 45   | 8      | 2-HV-SGR-MD-3    | 0      | AUXILIARY BUILDING V / 4KV RM 600 VOLT SWITCHGEAR XFORMERS TR21A & TR21C AREA VENT SUPPLY FAN HV-SGRS-8 SUCTION DAMPER | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE SOUTHWEST REGION OF THE ROOM, ON 600V SWITCHGEAR TRANSFORMERS AREA   | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

Signature

Date

Gunnar Harstead  
Print or Type Name

Signature

Date

12/14/95

12-12-95

## SCREENING VERIFICATION DATA SHEET (SVDS)

| SCREENING VERIFICATION DATA SHEET (SVDS) |            |           |                              |  |             |                    |  |        |                           |  |             |            |              |           |     |
|--|------------|-----------|------------------------------|--|-------------|--------------------|--|--------|---------------------------|--|-------------|------------|--------------|-----------|-----|
| Eq. Cl                                   | Eq. ID No. | Rev No    | System/Equipment Description | Building   | Floor Elev. | Room or Row/Column | Base Elev.   | <40'   | Capacity vs. Demand Basis | Cap > Demand?  | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |     |
| 1  | 18         | 2-CLI-113 | 0                            | CONDENSATE STORAGE T / CONDENSATE STORAGE TANK TK-32 LEVEL INDICATOR TRANSMITTER                                     | AUXILIARY   | 588.00             | STORAGE TANK PIPE TUNNEL - IN THE SOUTHEAST AREA OF THE PIPE TUNNEL, 2 FEET SOUTH OF THE CONDENSATE STORAGE TANK ACCESS LADDER, 5 FEET ABOVE THE | 587.00 | Yes                       | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes        | Yes          | Yes       | Yes |
| 2  | 18         | 2-CLI-114 | 0                            | CONDENSATE STORAGE T / CONDENSATE STORAGE TANK TK-32 LEVEL INDICATOR TRANSMITTER                                     | AUXILIARY   | 586.00             | STORAGE TANK PIPE TUNNEL - IN THE SOUTHEAST AREA OF THE PIPE TUNNEL, 5 FEET SOUTH OF THE CONDENSATE STORAGE TANK ACCESS LADDER, 5 FEET ABOVE THE | 587.00 | Yes                       | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes        | Yes          | Yes       | Yes |
| 3  | 18         | 2-CPS-410 | 0                            | COMPONENT COOLING WA / EAST COMPONENT COOLING WATER PUMP PP-10E DISCHARGE PRESSURE SWITCH                            | AUXILIARY   | 609.00             | 609 HALLWAY - 4 FEET EAST OF EAST CCW PUMP #2-PP-10E   | 609.00 | Yes                       | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes        | Yes          | Yes       | Yes |
| 4  | 18         | 2-CPS-420 | 0                            | COMPONENT COOLING WA / WEST COMPONENT COOLING WATER PUMP PP-10W DISCHARGE PRESSURE SWITCH                            | AUXILIARY   | 609.00             | 609 HALLWAY - 4 FEET EAST OF WEST COMPONENT COOLING WATER PUMP #2-PP-10W   | 609.00 | Yes                       | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes        | Yes          | Yes       | Yes |
| 5  | 18         | 2-FFI-210 | 0                            | AUXILIARY FEEDWATER / AUXILIARY FEEDWATER TO STEAM GENERATOR OME-3-1 FLOW INDICATOR TRANSMITTER                      | AUXILIARY   | 621.00             | E MAIN STM STOP ENCL - ON THE NORTHWEST CORNER OF THE ROOM, 4 FEET ABOVE THE FLOOR   | 633.00 | Yes                       | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes        | Yes          | Yes       | Yes |
| 6  | 18         | 2-FFI-220 | 0                            | AUXILIARY FEEDWATER / AUXILIARY FEEDWATER TO STEAM GENERATOR OME-3-2 FLOW INDICATOR TRANSMITTER                      | AUXILIARY   | 621.00             | WMN STM STOP ENCL - 14 FEET SOUTHEAST OF THE STAIRWAY, 4 FEET ABOVE THE FLOOR  | 633.00 | Yes                       | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes        | Yes          | Yes       | Yes |
| 7  | 18         | 2-FFI-230 | 0                            | AUXILIARY FEEDWATER / AUXILIARY FEEDWATER TO STEAM GENERATOR OME-3-3 FLOW INDICATOR TRANSMITTER                      | AUXILIARY   | 621.00             | WMN STM STOP ENCL - 5 FEET SOUTH OF THE BOTTOM OF STEAM STOP VALVE #3  | 650.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 8  | 18         | 2-FFI-240 | 0                            | FEEDWATER / AUXILIARY FEEDWATER TO STEAM GENERATOR OME-3-4 FLOW INDICATOR TRANSMITTER                                | AUXILIARY   | 621.00             | E MAIN STM STOP ENCL - ON THE SOUTH WALL, 15 FEET SOUTHWEST OF THE STAIRWAY, 5 FEET ABOVE THE FLOOR  | 650.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 9  | 18         | 2-4FI-310 | 0                            | RESIDUAL HEAT REMOVA / EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17E OUTLET LOW RANGE FLOW INDICATOR TRANSMITTER  | AUXILIARY   | 609.00             | 609 HALLWAY - 7 FEET EAST OF THE CONTAINMENT SPRAY HEAT EXCHANGER ROOM DOORWAY, ON THE SOUTH WALL, 5 FEET ABOVE THE FLOOR                        | 609.00 | Yes                       | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes        | Yes          | Yes       | Yes |
| 10                                       | 18         | 2-4FI-311 | 0                            | RESIDUAL HEAT REMOVA / EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17E OUTLET HIGH RANGE FLOW INDICATOR TRANSMITTER | AUXILIARY   | 609.00             | 609 HALLWAY - 2 FEET EAST OF THE RESIDUAL HEAT REMOVAL HEAT EXCHANGER ROOM DOORWAY, ON THE SOUTH WALL, 4 FEET ABOVE THE FLOOR                    | 609.00 | Yes                       | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes        | Yes          | Yes       | Yes |
| 11                                       | 18         | 2-4FI-320 | 0                            | RESIDUAL HEAT REMOVA / WEST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17W OUTLET LOW RANGE FLOW INDICATOR TRANSMITTER  | AUXILIARY   | 609.00             | 609 HALLWAY - 8 FEET WEST OF THE RESIDUAL HEAT REMOVAL HEAT EXCHANGER ROOM DOORWAY, NEAR THE SOUTH WALL, 5 FEET ABOVE THE FLOOR                  | 609.00 | Yes                       | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes        | Yes          | Yes       | Yes |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

T.R. Satyan Sharma  
Print or Type Name

Signature

Date

Paul R. Wilson  
Print or Type Name

Signature

Date



## SCREENING VERIFICATION DATA SHEET (SVDS)

| SCREENING VERIFICATION DATA SHEET (SVDS) |              |           |                              |  |             |                    |  |        |                           |  |             |            |              |           |     |
|--|--------------|-----------|------------------------------|--|-------------|--------------------|--|--------|---------------------------|--|-------------|------------|--------------|-----------|-----|
| Eq. Cl                                   | Equip.ID No. | Rev No    | System/Equipment Description | Building   | Floor Elev. | Room or Row/Column | Base Elev.   | <40'   | Capacity vs. Demand Basis | Cap > Demand?  | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |     |
| 12                                       | 18           | 2-IFI-321 | 0                            | RESIDUAL HEAT REMOVA / WEST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17W OUTLET HIGH RANGE FLOW INDICATOR TRANSMITTER | AUXILIARY   | 609.00             | 609 HALLWAY - 2 FEET EAST OF THE PASSENGER ELEVATOR, NEAR THE SOUTH WALL, 4 FEET ABOVE THE FLOOR   | 609.00 | Yes                       | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes        | Yes          | Yes       | Yes |
| 13                                       | 18           | 2-IFI-335 | 0                            | RESIDUAL HEAT REMOVA / RESIDUAL HEAT REMOVAL TO REACTOR COOLANT LOOPS #2 AND #3 COLD LEGS FLOW INDICATOR TRANSMITTER | AUXILIARY   | 591.00             | VESTIBULE - 3 FEET NORTH OF VESTIBULE DOORWAY  | 609.00 | Yes                       | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes        | Yes          | Yes       | Yes |
| 14                                       | 18           | 2-ILS-950 | 0                            | REFUELING WATER STOR / REFUELING WATER STORAGE TANK TK-33 EXTREME LOW LEVEL TRANSMITTER                              | AUXILIARY   | 586.00             | STORAGE TANK PIPE TUNNEL - IN THE SOUTHEAST AREA OF THE PIPE TUNNEL, 9 FEET EAST OF THE REFUELING WATER STORAGE TANK ACCESS LADDER, 7 FEET ABOVE THE | 587.00 | Yes                       | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes        | Yes          | Yes       | Yes |
| 15                                       | 18           | 2-ILS-951 | 0                            | REFUELING WATER STOR / REFUELING WATER STORAGE TANK TK-33 LEVEL TRANSMITTER  | AUXILIARY   | 588.00             | STORAGE TANK PIPE TUNNEL - IN THE SOUTHEAST AREA OF THE PIPE TUNNEL, 5 FEET EAST OF THE REFUELING WATER STORAGE TANK ACCESS LADDER, 7 FEET ABOVE THE | 587.00 | Yes                       | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes        | Yes          | Yes       | Yes |
| 16                                       | 18           | 2-MPP-210 | 0                            | MAIN STEAM / STEAM GENERATOR OME-3-1 CHANNEL I STEAM PRESSURE TRANSMITTER  | AUXILIARY   | 633.00             | E MAIN STM STOP ENCL - 4 FEET SOUTHWEST OF STEAM GENERATOR STOP VALVE #2-MRV-210, ON THE WEST WALL, AT THE 647 ELEVATION PLATFORM, ENCASED IN        | 650.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 17                                       | 18           | 2-MPP-212 | 0                            | MAIN STEAM / STEAM GENERATOR OME-3-1 CHANNEL IV REACTOR PROTECTION INPUT STEAM PRESSURE TRANSMITTER                  | AUXILIARY   | 633.00             | E MAIN STM STOP ENCL - IN THE NORTHWEST PART OF THE ROOM, 15 FEET NORTHWEST OF STEAM GENERATOR STOP VALVE #2-MRV-210, ON THE 647 ELEVATION           | 650.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 18                                       | 18           | 2-MPP-220 | 0                            | MAIN STEAM / STEAM GENERATOR OME-3-2 CHANNEL I STEAM PRESSURE TRANSMITTER  | AUXILIARY   | 633.00             | WMN STM STOP ENCL - 12 FEET EAST OF STEAM GENERATOR STOP VALVE #2-MRV-220, ON THE CONTAINMENT WALL, ON THE 653 ELEVATION PLATFORM                    | 650.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 19                                       | 18           | 2-MPP-222 | 0                            | MAIN STEAM / STEAM GENERATOR OME-3-2 CHANNEL III REACTOR PROTECTION INPUT STEAM PRESSURE TRANSMITTER                 | AUXILIARY   | 633.00             | WMN STM STOP ENCL - 14 FEET NORTHEAST OF STEAM GENERATOR STOP VALVE #2-MRV-220, AT THE CONTAINMENT WALL, 1 FOOT ABOVE THE 653 ELEVATION              | 650.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 20                                       | 18           | 2-MPP-230 | 0                            | MAIN STEAM / STEAM GENERATOR OME-3-3 CHANNEL I STEAMPRESSURE TRANSMITTER   | AUXILIARY   | 633.00             | WMN STM STOP ENCL - 6 FEET NORTHWEST OF STEAM GENERATOR STOP VALVE #2-MRV-230, ON THE 653 ELEVATION PLATFORM   | 650.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 21                                       | 18           | 2-MPP-232 | 0                            | MAIN STEAM / STEAM GENERATOR OME-3-3 CHANNEL III REACTOR PROTECTION INPUT STEAM PRESSURE TRANSMITTER                 | AUXILIARY   | 633.00             | WMN STM STOP ENCL - 10 FEET SOUTHWEST OF STEAM GENERATOR STOP VALVE #2-MRV-230, ON THE 653 ELEVATION PLATFORM  | 650.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 22                                       | 18           | 2-MPP-240 | 0                            | MAIN STEAM / STEAM GENERATOR OME-3-4 CHANNEL I STEAMPRESSURE TRANSMITTER   | AUXILIARY   | 633.00             | E MAIN STM STOP ENCL - IN THE NORTHWEST PART OF THE ROOM, 3 FEET NORTHWEST OF STEAM GENERATOR STOP VALVE #2-MRV-240, AT THE 647 ELEVATION            | 650.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 23                                       | 18           | 2-MPP-242 | 0                            | MAIN STEAM / STEAM GENERATOR OME-3-4 CHANNEL IV REACTOR PROTECTION INPUT STEAM PRESSURE TRANSMITTER                  | AUXILIARY   | 633.00             | E MAIN STM STOP ENCL - IN THE SOUTHWEST PART OF THE ROOM, 15 FEET SOUTHWEST OF STEAM GENERATOR STOP VALVE #2-MRV-240, AT THE 647 ELEVATION           | 650.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

T.R. Satyan Sharma  
Print or Type Name

Signature

Date

Paul R. Wilson  
Print or Type Name

Signature

Date



24

25



## SCREENING VERIFICATION DATA SHEET (SVDS)

| SCREENING VERIFICATION DATA SHEET (SVDS) |               |           |                              |   |             |                    |  |        |                           |  |             |            |              |           |     |
|--|---------------|-----------|------------------------------|---|-------------|--------------------|--|--------|---------------------------|--|-------------|------------|--------------|-----------|-----|
| Eq. CI                                   | Equip. ID No. | Rev No    | System/Equipment Description | Building.   | Floor Elev. | Room or Row/Column | Base Elev.   | <40'   | Capacity vs. Demand Basis | Cap > Demand?  | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |     |
| 24                                       | 18            | 2-PPP-301 | 0                            | CONTAINMENT VENTILAT / LOWER CONTAINMENT CHANNEL III PRESSURE TRANSMITTER   | AUXILIARY   | 612.00             | 612 AIRLOCK AREA - 10 FT. SE OF THE 612 AIRLOCK, NEAR THE CONTAINMENT WALL, 6 FT. ABOVE THE FLOOR  | 650.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 25                                       | 18            | 2-PPP-302 | 0                            | CONTAINMENT VENTILAT / LOWER CONTAINMENT CHANNEL II PRESSURE PROTECTION TRANSMITTER   | AUXILIARY   | 612.00             | 612 AIRLOCK AREA - IN THE SOUTHEAST REGION OF THE ROOM, NEAR THE CONTAINMENT WALL, 10 FEET EAST OF THE 612 AIRLOCK DOORWAY, 3 FEET ABOVE | 650.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 26                                       | 18            | 2-PPP-303 | 0                            | CONTAINMENT VENTILAT / LOWER CONT CHANNEL I PRESSURE PROTECTION TRANSMITTER   | AUXILIARY   | 612.00             | 612 AIRLOCK AREA - IN THE SOUTHEAST REGION OF THE ROOM, 1 FOOT SOUTH OF CPN-96   | 650.00 | N/A                       | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes         | Yes        | Yes          | Yes       | Yes |
| 27                                       | 18            | 2-QFA-210 | 0                            | REACTOR COOLANT PUMP / RCP SEAL WATER INJECTION TO REACTOR COOLANT PUMP PP-45-1 LOW FLOW ALARM TRANSMITTER                  | AUXILIARY   | 587.00             | 587 HALLWAY - IN THE SOUTH END OF THE HALLWAY, 12 FEET EAST OF THE DOORWAY TO THE STARTUP BLOWDOWN FLASHTANK ROOM, ON THE SOUTH WALL     | 587.00 | Yes                       | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes        | Yes          | Yes       | Yes |
| 28                                       | 18            | 2-QFA-220 | 0                            | REACTOR COOLANT PUMP / RCP SEAL WATER INJECTION TO REACTOR COOLANT PUMP PP-45-2 LOW FLOW ALARM TRANSMITTER                  | AUXILIARY   | 587.00             | 587 HALLWAY - IN THE SOUTH END OF THE HALLWAY, 15 FEET EAST OF THE DOORWAY TO THE STARTUP BLOWDOWN FLASHTANK ROOM, ON THE SOUTH WALL     | 587.00 | Yes                       | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes        | Yes          | Yes       | Yes |
| 29                                       | 18            | 2-QFA-230 | 0                            | REACTOR COOLANT PUMP / RCP SEAL WATER INJECTION TO REACTOR COOLANT PUMP PP-45-3 LOW FLOW ALARM TRANSMITTER                  | AUXILIARY   | 587.00             | 587 HALLWAY - IN THE SOUTH END OF THE HALLWAY, 17 FEET EAST OF THE DOORWAY TO THE STARTUP BLOWDOWN FLASHTANK ROOM, ON THE SOUTH WALL     | 587.00 | Yes                       | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes        | Yes          | Yes       | Yes |
| 30                                       | 18            | 2-QFA-240 | 0                            | REACTOR COOLANT PUMP / RCP SEAL WATER INJECTION TO REACTOR COOLANT PUMP PP-45-4 LOW FLOW ALARM TRANSMITTER                  | AUXILIARY   | 587.00             | 587 HALLWAY - IN THE SOUTH END OF THE HALLWAY, 10 FEET EAST OF THE DOORWAY TO THE STARTUP BLOWDOWN FLASHTANK ROOM, ON THE SOUTH WALL     | 587.00 | Yes                       | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes        | Yes          | Yes       | Yes |
| 31                                       | 18            | 2-QFI-200 | 0                            | CHARGING (CVCS) / CVCS CHARGING PUMPS DISCHARGE FLOW INDICATOR TRANSMITTER  | AUXILIARY   | 587.00             | 587 HALLWAY - IN THE MIDDLE EAST REGION OF THE HALLWAY, 2 FEET WEST OF THE RECIPROCATING CHARGING PUMP ROOM REMOVABLE WALL, ON THE       | 587.00 | Yes                       | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes        | Yes          | Yes       | Yes |
| 32                                       | 18            | 2-QLC-451 | 0                            | LETDOWN (CVCS) / REACTOR COOLANT LETDOWN VOLUME CONTROL TANK TK-10 EXTREME HIGH LEVEL CONTROL TRANSMITTER                   | AUXILIARY   | 609.00             | 609 HALLWAY - 15 FEET EAST OF THE SOUTH END OF UNIT 1 EAST COMPONENT COOLING WATER HEAT EXCHANGER #1-HE-15E, ON THE EAST WALL, 5         | 609.00 | Yes                       | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes        | Yes          | Yes       | Yes |
| 33                                       | 18            | 2-QLC-452 | 0                            | LETDOWN (CVCS) / REACTOR COOLANT LETDOWN VOLUME CONTROL TANK TK-10 HIGH LEVEL CONTROL TRANSMITTER                           | AUXILIARY   | 609.00             | 609 HALLWAY - 15 FEET EAST OF THE SOUTH END OF UNIT 1 EAST COMPONENT COOLING WATER HEAT EXCHANGER #1-HE-15E, ON A NORTH WALL, 6          | 609.00 | Yes                       | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes        | Yes          | Yes       | Yes |
| 34                                       | 18            | 2-WDS-703 | 0                            | ESSENTIAL SERVICE WA / EAST ESSENTIAL SERVICE WATER PUMP PP-7E DISCHARGE STRAINER OME-34E HIGH DIFFERENTIAL PRESSURE SWITCH | SCREENHOUSE | 591.00             | E SSNTL SERV WTR PMP RM - IN THE NORTHWEST REGION OF ROOM, ON THE WEST WALL  | 591.00 | Yes                       | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes        | Yes          | Yes       | Yes |
| 35                                       | 18            | 2-WDS-704 | 0                            | ESSENTIAL SERVICE WA / WEST ESSENTIAL SERVICE WATER PUMP 99-7W DISCHARGE STRAINER OME-34W HIGH DIFFERENTIAL PRESSURE SWITCH | SCREENHOUSE | 591.00             | W ESSNTL SERV WTR PMP RM - ON THE EAST WALL, IN THE NORTH END OF THE ROOM  | 591.00 | Yes                       | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes         | Yes        | Yes          | Yes       | Yes |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

T.R. Satyan Sharma  
Print or Type Name

Signature

Date

Paul R. Wilson  
Print or Type Name

Signature

Date



25

26

## SCREENING VERIFICATION DATA SHEET (SVDS)

|    | Eq. Cl | Equip.ID No. | Rev No | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|----|--------|--------------|--------|---|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 36 | 18     | 2-WPS-702    | 0      | ESSENTIAL SERVICE WA / EAST ESSENTIAL SERVICE WATER SUPPLY HEADER PRESSURE SWITCH   | TURBINE   | 569.00      | ESSNTL SERV WTR PIPE TUNN - IN THE MIDDLE REGION OF THE ROOM, ON THE EAST WALL  | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 37 | 18     | 2-WPS-706    | 0      | ESSENTIAL SERVICE WA / WEST ESSENTIAL SERVICE WATER SUPPLY HEADER PRESSURE SWITCH   | TURBINE   | 569.00      | ESSNTL SERV WTR PIPE TUNN - IN THE MIDDLE REGION OF THE ROOM, ON THE EAST WALL  | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 38 | 19     | 2-CTR-415    | 0      | COMPONENT COOLING WA / EAST COMPONENT COOLING WATER HEAT EXCHANGER HE-15E CCW OUTLET TEMPERATURE RECORDER THERMAL SENSOR    | AUXILIARY | 609.00      | 609 HALLWAY - 1 FOOT EAST OF THE NORTH END OF EAST COMPONENT COOLING WATER HEAT EXCHANGER #2-HE-15E, 7 FEET ABOVE THE FLOOR                         | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 39 | 19     | 2-CTR-425    | 0      | COMPONENT COOLING WA / WEST COMPONENT COOLING WATER HEAT EXCHANGER CCW OUTLET TEMPERATURE RECORDER THERMAL SENSOR           | AUXILIARY | 609.00      | 609 HALLWAY - 1 FOOT EAST OF THE NORTH END OF WEST COMPONENT COOLING WATER HEAT EXCHANGER #2-HE-15W, 7 FEET ABOVE THE FLOOR                         | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 40 | 19     | 2-TR-335     | 0      | RESIDUAL HEAT REMOVA / RESIDUAL HEAT REMOVAL TO REACTOR COOLANT LOOPS #2 & #3 COLD LEGS TEMPERATURE RECORDER THERMAL SENSOR | AUXILIARY | 609.00      | E RHR HEAT XCHGR RM - 3 FEET FROM THE SOUTH END OF THE ROOM, UNDER THE GRATING, 3 FEET ABOVE THE FLOOR  | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 41 | 19     | 2-VTS-201    | 0      | TURBINE BUILDING VEN / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP ROOM EXHAUST FAN HV-AFP-M1                                | TURBINE   | 591.00      | E MTR DRIV AUX FEEDWTR PMP - 8 FEET SOUTHWEST OF EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP 2-PP-3E, ON WEST WALL                                   | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 42 | 19     | 2-VTS-203    | 0      | TURBINE BUILDING VEN / TURBINE DRIVEN AUXILIARY FEED PUMP ROOM NORTH EXHAUST FAN HV-AFP-T1                                  | TURBINE   | 591.00      | TB DRIVEN AUX FDWTR PMP - IN SOUTHEAST REGION OF ROOM, 6 FEET SOUTH OF TURBINE DRIVEN AUXILIARY FEED PUMP 2-PP-4                                    | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 43 | 19     | 2-VTS-204    | 0      | TURBINE BUILDING VEN / TURBINE DRIVEN AUXILIARY FEED PUMP ROOM SOUTH EXHAUST FAN HV-AFP-T2                                  | TURBINE   | 591.00      | TB DRIVEN AUX FDWTR PMP - IN NORTHEAST REGION OF ROOM, 8 FEET NORTH OF TURBINE DRIVEN AUXILIARY FEED PUMP 2-PP-4                                    | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 44 | 19     | 2-VTS-206    | 0      | TURBINE BUILDING VEN / WEST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP ROOM WEST EXHAUST FAN HV-AFP-X2                           | TURBINE   | 591.00      | WMTR DRIVEN AUX FDWTR PMP - IN NORTHWEST CORNER OF ROOM, ON SOUTH WALL, 5 FEET ABOVE THE FLOOR  | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 45 | 19     | 2-VTS-340    | 0      | DIESEL ROOM VENTILAT / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN HV-DGS-2 OUTSIDE AIR THERMOSTAT            | GROUPS    | 609.00      | REFUEL WTR STOR TANK AREA - 50 FEET NORTHWEST OF REFUELING WATER STORAGE TANK #2-TK-33, ACCESSIBLE FROM A MANHOLE NEAR THE 609 ELEVATION AIR INTAKE | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 46 | 19     | 2-VTS-345    | 0      | DIESEL ROOM VENTILAT / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN HV-DGS-1 OUTSIDE AIR THERMOSTAT            | AUXILIARY | 596.00      | RCTR CABLE TUNN, QUAD 3 - IN THE MIDDLE WEST REGION OF THE ROOM, 5 FEET NORTH OF REACTOR CABLE TUNNEL QUAD #3 MIDDLE/NORTH SECTION FIRE DOOR        | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

T.R. Satyan Sharma  
Print or Type Name

Signature

Date

Paul R. Wilson  
Print or Type Name

Signature

Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

|    | Eq. Cl | Equip.ID No. | Rev No | System/Equipment Description  | Building    | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|----|--------|--------------|--------|---|-------------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 47 | 19     | 2-VTS-350    | 0      | AUXILIARY BUILDING V / CONTROL ROD DRIVE EQUIP ROOM AND INV AREA VENT NORTH SUPPLY FAN HV-SGRS-1A TEMPERATURE SWITCH        | AUXILIARY   | 609.00      | INVERTER AREA - IN THE SOUTHEAST REGION OF THE ROOM, 12 FEET NORTHEAST OF THE ROOM'S ACCESS DOOR, ON THE EAST WALL, 4 FEET ABOVE THE             | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 48 | 19     | 2-VTS-351    | 0      | AUXILIARY BUILDING V / CONTROL ROD DRIVE EQUIP ROOM AND INV AREA VENT NORTH SUPPLY FAN HV-SGRS-1A TEMPERATURE SWITCH        | AUXILIARY   | 609.00      | CRD EQUIP RM - IN THE SOUTHWEST CORNER OF THE ROOM, ON THE WEST WALL, 5 FEET ABOVE THE FLOOR   | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 49 | 19     | 2-VTS-352    | 0      | AUXILIARY BUILDING V / 4KV ROOM 600 VOLT SWITCHGEAR XFRMS TR21B AND TR21D AREA VENT SUPPLY FAN HV-SGRS-7 TEMPERATURE SWITCH | AUXILIARY   | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHWEST REGION OF THE ROOM, 20 FEET NORTHWEST OF 600VAC SUPPLY TRANSFORMER #2-TR21A, ON THE WEST WALL, 5 FEET | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 50 | 19     | 2-VTS-353    | 0      | AUXILIARY BUILDING V / 600VAC MOTOR CONTROL CENTER MEZZANINE AREA VENT SUPPLY FAN HV-SGRS-9 TEMPERATURE SWITCH              | AUXILIARY   | 613.00      | 4KV ROOM - MEZZANINE AREA - IN THE MIDDLE WEST REGION OF THE ROOM, 20 FEET NORTH OF THE SOUTH ACCESS STAIRS, ON THE WEST WALL, 5 FEET ABOVE THE  | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 51 | 19     | 2-VTS-354    | 0      | AUXILIARY BUILDING V / CTRL ROD DRV EQUIP ROOM AND INV AREA VENT OUTSIDE AIR INLET DAMPER HV-SGR-MD-2 TEMPERATURE SWITCH    | AUXILIARY   | 609.00      | INVERTER AREA - IN THE SOUTHWEST REGION OF THE ROOM, 8 FEET NORTHWEST OF THE ROOM'S ENTRANCE DOOR, ON THE WEST WALL, 4 FEET ABOVE THE            | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 52 | 19     | 2-VTS-355    | 0      | AUXILIARY BUILDING V / CTRL ROD DRIVE EQUIP ROOM AND INV AREA VENT RECIRC AIR INLET DAMPER HV-SGR-MD-1 TEMPERATURE SWITCH   | AUXILIARY   | 609.00      | INVERTER AREA - IN THE SOUTHEAST REGION OF THE ROOM, 12 FEET NORTHEAST OF THE ROOM'S ACCESS DOOR, ON THE EAST WALL, 4 FEET ABOVE THE             | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 53 | 19     | 2-VTS-356    | 0      | AUXILIARY BUILDING V / CRD EQUIPMENT ROOM AND INVERTER AREA VENTILATION NORTH SUPPLY FAN HV-SGRS-4A TEMP SWITCH             | AUXILIARY   | 609.00      | INVERTER AREA - IN SOUTHWEST REGION OF ROOM, 8 FEET NORTHWEST OF THE ENTRANCE DOOR, ON WEST WALL, 5 FEET ABOVE                                   | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 54 | 19     | 2-VTS-357    | 0      | AUXILIARY BUILDING V / CTRL ROD DRIVE EQUIP ROOM AND INV AREA VENTILATION SOUTH SUPPLY FAN HV-SGRS-4A TEMPERATURE SWITCH    | AUXILIARY   | 609.00      | CRD EQUIP RM - IN THE SOUTHEAST REGION OF THE ROOM, 10 FEET EAST OF THE ROOM'S ENTRANCE DOOR, ON THE SOUTH WALL, 4 FEET ABOVE THE                | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 55 | 19     | 2-VTS-702    | 0      | SCREENHOUSE VENTILAT / UNIT 2 EAST ESW PUMP ROOM TEMPERATURE SWITCH   | SCREENHOUSE | 591.00      | E ESSNTL SERV WTR PMP RM - ON EAST WALL, 9 FEET NORTHEAST OF EAST ESSENTIAL SERVICE WATER PUMP 1-PP-7E, 8 FEET ABOVE FLOOR                       | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 56 | 19     | 2-VTS-704    | 0      | SCREENHOUSE VENTILAT / UNIT 2 WEST ESW PUMP ROOM TEMPERATURE SWITCH   | SCREENHOUSE | 591.00      | W ESSNTL SERV WTR PMP RM - 3 FEET SOUTH OF WEST ESW PUMP 2-PP-7W, ON THE SOUTH WALL, 6 FEET ABOVE THE FLOOR                                      | 591.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 57 | 19     | 2-VTS-802    | 0      | AUXILIARY BUILDING V / 4KV ROOM AB 4KV SWITCHGEAR AREA VENTILATION SUPPLY FAN HV-SGRS-2 THERMAL SENSOR                      | AUXILIARY   | 609.00      | 4KV RM - AB 4KV SWGR AREA -  | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

T.R. Satyan Sharma  
Print or Type Name

Signature

Date

Paul R. Wilson  
Print or Type Name

Signature

Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

|    | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|----|--------|---------------|--------|---|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 58 | 19     | 2-VTS-803     | 0      | AUXILIARY BUILDING V / 4KV ROOM CD 4KV SWITCHGEAR AREA VENTILATION SUPPLY FAN HV-SGRS-3 THERMAL SENSOR                    | AUXILIARY | 609.00      | 4KV RM - CD 4KV SWGR AREA -   | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 59 | 19     | 2-VTS-805     | 0      | AUXILIARY BUILDING V / 4KV ROOM 600V SWGR XFMRs TR21B AND TR21D AREA VENT SUPPLY FAN HV-SGRS-7 TEMP SWITCH THERMAL SENSOR | AUXILIARY | 613.00      | 4KV ROOM - MEZZANINE AREA - IN THE MIDDLE WEST REGION OF THE ROOM, 25 FEET NORTH OF THE ENTRANCE STAIRS, ON THE WEST WALL, 5 FEET ABOVE THE FLOOR | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 60 | 19     | 2-VTS-808     | 0      | AUXILIARY BUILDING V / 4KV ROOM 600V SWGR XFMRs TR21A AND TR21C AREA VENT SUPPLY FAN HV-SGRS-8 TEMP SWITCH TEMP SWITCH    | AUXILIARY | 609.00      | 4KV RM - 600V SWGR AREA - IN THE NORTHWEST REGION OF THE ROOM, 20 FEET NORTHWEST OF 600V BUS SUPPLY TRANSFORMER #2-TR21A, ON THE WEST WALL        | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

T.R. Satyan Shama  
Print or Type Name

Signature

12/20/95  
Date

Paul R. Wilson  
Print or Type Name

Signature

12/16/95  
Date

DC CO. UNIT 2  
SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip.ID No.   | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|----------------|--------|--|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 1    | 20     | 2-A11          | 0      | EQUIPMENT CONTROL AN / AUXILIARY RELAY PANEL A11   | AUXILIARY | 633.00      | CONTROL ROOM - IN THE NORTHEAST CORNER OF THE ROOM   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 2    | 20     | 2-A13          | 0      | EQUIPMENT CONTROL AN / AUXILIARY RELAY PANEL A13   | AUXILIARY | 633.00      | CONTROL ROOM - IN THE SOUTHEAST CORNER OF THE ROOM   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 3    | 20     | 2-ARA-2        | 0      | 120V/220 CONTROL AND / REACTOR PROTECTION TRIN 'A' AUXILIARY RELAY CABINET #2              | AUXILIARY | 633.00      | CONTROL ROOM - IN THE SOUTHWEST REGION OF THE ROOM, ON THE REAR SIDE OF MAIN FEED PUMPS CONTROL PANEL #2-FP                            | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 4    | 20     | 2-ARB-2        | 0      | 120V/220 CONTROL AND / REACTOR PROTECTION TRIN 'B' AUXILIARY RELAY CABINET #2              | AUXILIARY | 633.00      | CONTROL ROOM - IN THE MIDDLE NORTH REGION OF THE ROOM, INSIDE RADIATION MONITORING SYSTEM RACK I PANEL #2-RMS-I                        | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 5    | 20     | 2-BA           | 0      | BORON MAKEUP (CVCS) / BORIC ACID CHARGING AND LETDOWN CONTROL PANEL                        | AUXILIARY | 633.00      | CONTROL ROOM - IN THE SOUTHEAST AREA OF THE ROOM, 15 FEET SOUTHEAST OF THE UNIT SUPERVISOR'S DESK                                      | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | No          | Yes        | Yes          | No        |
| 6    | 20     | 2-CI-26        | 0      | EQUIPMENT CONTROL AN / REACTOR PROTECTION CONTROL INPUT CABINET #26                        | AUXILIARY | 633.00      | CONTROL ROOM - IN THE MIDDLE NORTH REGION OF THE ROOM, NEAR THE NORTH WALL, 5 FEET EAST OF UNIT 1 HOT SHUTDOWN PANEL #1-HSD1 ENCLOSURE | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 7    | 20     | 2-CI-27        | 0      | EQUIPMENT CONTROL AN / REACTOR PROTECTION CONTROL INPUT CABINET #27                        | AUXILIARY | 633.00      | CONTROL ROOM - IN THE MIDDLE NORTH REGION OF THE ROOM, NEAR THE NORTH WALL, 8 FEET EAST OF UNIT 1 HOT SHUTDOWN PANEL #1-HSD1 ENCLOSURE | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 8    | 20     | 2-CP           | 0      | CONDENSATE / CONDENSATE PUMP CONTROL PANEL   | AUXILIARY | 633.00      | CONTROL ROOM - IN THE SOUTHWEST AREA OF THE ROOM, 15 FEET SOUTHWEST OF THE UNIT SUPERVISOR'S DESK                                      | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 9    | 20     | 2-DTU          | 0      | TURBINE INSTRUMENTAT / DELTA 'T' AND UNIT CONTROL PANEL                                    | AUXILIARY | 633.00      | CONTROL ROOM - IN THE SOUTH AREA OF THE ROOM, 15 FEET SOUTH OF THE UNIT SUPERVISOR'S DESK  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 10   | 20     | 2-HSD2         | 0      | SAFETY INJECTION / UNIT 2 HOT SHUTDOWN PANEL   | AUXILIARY | 633.00      | CONTROL ROOM - IN THE SOUTHWEST CORNER OF THE ROOM   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 11   | 20     | 2-NIS-I        | 0      | EQUIPMENT CONTROL AN / NUCLEAR INSTRUMENTATION SYSTEM PROTECTION CHANNEL I CONTROL PANEL   | AUXILIARY | 633.00      | CONTROL ROOM - IN THE MIDDLE EAST PART OF THE ROOM, 25 FEET NORTHEAST OF THE UNIT SUPERVISOR'S DESK                                    | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 12   | 20     | 2-NIS-III      | 0      | EQUIPMENT CONTROL AN / NUCLEAR INSTRUMENTATION SYSTEM PROTECTION CHANNEL III CONTROL PANEL | AUXILIARY | 633.00      | CONTROL ROOM - IN THE MIDDLE EAST PART OF THE ROOM, 22 FEET NORTHEAST OF THE UNIT SUPERVISOR'S DESK                                    | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 13   | 20     | 2-NRI-21-PRCSR | 0      | NUCLEAR INSTRUMENTAT / NUCLEAR INSTRUMENTATION WIDE RANGE SIGNAL PROCESSOR CABINET         | AUXILIARY | 633.00      | CONTROL ROOM - ON MIDDLE EAST WALL, NEAR REAR OF ESW CONTROL PANEL #2-ESW, ON N-21 IN  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 14   | 20     | 2-PRZ          | 0      | PRESSURIZER / PRESSURIZER CONTROL PANEL  | AUXILIARY | 633.00      | CONTROL ROOM - IN THE SOUTHEAST PART OF THE ROOM, 15 FEET SOUTHEAST OF THE UNIT SUPERVISOR'S DESK                                      | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 15   | 20     | 2-RC           | 0      | ROD CONTROL AND INST / REACTOR CONTROL RODS CONTROL PANEL                                  | AUXILIARY | 633.00      | CONTROL ROOM - IN THE SOUTH PART OF THE ROOM, 15 FEET SOUTH OF THE UNIT SUPERVISOR'S DESK  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Stephen Anagnostis

Print or Type Name

Signature

12/14/95

Date

T.R. Satyan Sharma

Print or Type Name

Signature

12/20/95

Date

DC CODE UNIT 2  
SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|---|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 16   | 20     | 2-RCP         | 0      | REACTOR COOLANT / REACTOR COOLANT PUMP CONTROL PANEL                                      | AUXILIARY | 633.00      | CONTROL ROOM - IN THE SOUTHEAST PART OF THE ROOM, 15 FEET SOUTHEAST OF THE UNIT SUPERVISOR'S DESK                   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 17   | 20     | 2-RPS-A       | 0      | REACTOR PROTECTION / REACTOR PROTECTION AND SAFEGUARD ACTUATION TRAIN 'A' CABINET         | AUXILIARY | 633.00      | CONTROL ROOM - IN THE SOUTHWEST REGION OF THE ROOM, IN FRONT OF THE CONTROL ROOM SOUTHWEST REAR RACK                | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | No           | No        |
| 18   | 20     | 2-RPS-B       | 0      | REACTOR PROTECTION / REACTOR PROTECTION AND SAFEGUARD ACTUATION TRAIN 'B' CABINET         | AUXILIARY | 633.00      | CONTROL ROOM - IN THE NORTHEAST REGION OF THE ROOM, ON THE REAR SIDE OF MOVABLE INCORE INSTRUMENTATION PANEL #2-MFX | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 19   | 20     | 2-RPSX-A      | 0      | REACTOR PROTECTION / REACTOR PROTECTION AND SAFEGUARD ACTUATION TRAIN A AUXILIARY CABINET | AUXILIARY | 633.00      | CONTROL ROOM - IN THE SOUTHWEST CORNER OF THE ROOM, ON THE REAR SIDE OF CONDENSATE PUMP CONTROL                     | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | No          | Yes        | No           | No        |
| 20   | 20     | 2-RPSX-B      | 0      | REACTOR PROTECTION / REACTOR PROTECTION AND SAFEGUARD ACTUATION TRAIN B AUXILIARY CABINET | AUXILIARY | 633.00      | CONTROL ROOM - IN THE MIDDLE SOUTHWEST REGION OF THE ROOM, ON THE REAR SIDE OF MOVABLE INCORE                       | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | No          | Yes        | No           | No        |
| 21   | 20     | 2-SA          | 0      | ELECTRICAL DISTRIBUTION / STATION AUXILIARIES CONTROL PANEL                               | AUXILIARY | 633.00      | CONTROL ROOM - IN THE NORTHWEST PART OF THE ROOM, 22 FEET NORTHWEST OF THE UNIT SUPERVISOR'S DESK                   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 22   | 20     | 2-SG          | 0      | STEAM GENERATION / STEAM GENERATOR AND AUXILIARY FEED PUMP CONTROL PANEL                  | AUXILIARY | 633.00      | CONTROL ROOM - IN THE SOUTHWEST PART OF THE ROOM, 15 FEET SOUTHWEST OF THE UNIT SUPERVISOR'S DESK                   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | No          | Yes        | Yes          | No        |
| 23   | 20     | 2-CCW         | 0      | COMPONENT COOLING WATER / COMPONENT COOLING WATER CONTROL PANEL                           | AUXILIARY | 633.00      | CONTROL ROOM  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 24   | 20     | 2-ESW         | 0      | ESSENTIAL SERVICE WATER / ESSENTIAL SERVICE WATER CONTROL PANEL                           | AUXILIARY | 633.00      | CONTROL PANEL   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 25   | 20     | 2-FLX         | 0      | NUCLEAR INSTRUMENTATION / FLUX CONTROL PANEL  | AUXILIARY | 633.00      | CONTROL ROOM  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Stephen Anagnostis  
Print or Type Name

Signature

12/14/95  
Date

T.R. Satyan Sharma  
Print or Type Name

Signature

Date

12/15/95

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip.ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demanded Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|--------------|--------|--|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 1    | 20     | 2-ACRA-1     | 0      | EQUIPMENT CONTROL AN / CONTROL ROOM AIR HANDLING SUBPANEL #1   | AUXILIARY | 650.00      | CTRL RM AIR CONDIT RM - AT THE CENTER OF THE NORTH WALL, 4 FEET NORTH OF CONTROL ROOM VENTILATION NORTH AIR CONDITIONING UNIT #2-HV-ACRA-1                     | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 2    | 20     | 2-ACRA-2     | 0      | EQUIPMENT CONTROL AN / CONTROL ROOM AIR HANDLING SUBPANEL #2   | AUXILIARY | 650.00      | CTRL RM AIR CONDIT RM - AT THE CENTER OF THE SOUTH WALL, 4 FEET SOUTH OF CONTROL ROOM VENTILATION SOUTH AIR CONDITIONING UNIT #2-HV-ACRA-2                     | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 3    | 20     | 2-CAS        | 0      | CONTAINMENT VENTILAT / CONTAINMENT AUXILIARIES SUBPANEL (VENTILATION)  | AUXILIARY | 633.00      | 633 HALLWAY - IN THE SOUTH END OF THE HALLWAY, 10 FEET NORTHWEST OF THE AUX BUILDING VENTILATION   | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 4    | 20     | 2-LSI-1      | 0      | STEAM GENERATING / STEAM GENERATORS #1 AND #4 LOCAL SHUTDOWN STATION   | AUXILIARY | 612.00      | E MAIN STM STOP ENCL - IN THE NORTHEAST CORNER OF THE ROOM, 8 FEET WEST OF THE DOUBLE DOORS  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 5    | 20     | 2-LSI-2      | 0      | STEAM GENERATING / STEAM GENERATORS #2 AND #3 LOCAL SHUTDOWN STATION   | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM - IN THE SOUTHWEST CORNER OF THE ROOM, 5' SOUTHEAST OF THE STORAGE TANK PIPE TUNNEL, NEAR THE SOUTH WALL, 5 FEET ABOVE THE FLOOR | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 6    | 20     | 2-LSI-3      | 0      | PRESSURIZER / REACTOR COOLANT SYSTEM CHARGING AND LETDOWN LOCAL SHUTDOWN STATION                                     | AUXILIARY | 587.00      | 587 HALLWAY - IN MIDDLE E REGION OF THE HALLWAY, 10' SOUTH OF 15GPM RADIOACTIVE WASTE EVAP. SUBPANEL #12-RWE-15, ON THE S WALL, 3' ABOVE THE FLOOR             | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | No           | No        |
| 7    | 20     | 2-LSI-4      | 0      | EQUIPMENT CONTROL AN / REACTOR COOLANT SYSTEM TEMPERATURES AND STEAM GENERATORS LOCAL SHUTDOWN STATION               | AUXILIARY | 587.00      | 587 HALLWAY - IN THE MIDDLE EAST REGION OF THE HALLWAY, 2 FEET SOUTH OF 15 GPM RADIOACTIVE RAD WASTE EVAP SUBPANEL #12-RWE-15, ON THE WEST WALL                | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 8    | 20     | 2-LSI-5      | 0      | EQUIPMENT CONTROL AN / REACTOR COOLANT LOOPS #1 AND #4 TEMPERATURES, SG'S #1 AND #4 PRESSURES LOCAL SHUTDOWN STATION | AUXILIARY | 612.00      | E MAIN STM STOP ENCL - IN THE NORTHEAST CORNER OF THE ROOM, 10 FEET WEST OF THE DOUBLE DOORS   | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 9    | 20     | 2-LSI-5XX    | 0      | EQUIPMENT CONTROL AN / LOCAL SHUTDOWN STATION 5XX  | AUXILIARY | 598.00      | RCTR CABLE TUNN, QUAD 1 - IN THE SOUTHWEST REGION OF THE ROOM, NEAR THE CONTAINMENT WALL, 8 FEET WEST OF DOOR #2-DR-AUX334 ON THE SOUTH WALL, 4 FEET UP        | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 10   | 20     | 2-LSI-6      | 0      | EQUIPMENT CONTROL AN / REACTOR COOLANT LOOPS #2 AND #3 TEMPERATURES, SG'S #2 AND #3 PRESSURES LOCAL SHUTDOWN STATION | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM - IN THE SOUTHWEST CORNER OF THE ROOM, 1 FOOT WEST OF LOCAL SHUTDOWN STATION #2-LSI-2, NEAR THE SOUTH WALL, 5 FEET ABOVE         | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 11   | 20     | 2-LSI-6XX    | 0      | EQUIPMENT CONTROL AN / LOCAL SHUTDOWN STATION 6XX  | AUXILIARY | 596.00      | RCTR CABLE TUNN, QUAD 3 - IN THE MIDDLE OF THE ROOM, ON THE SOUTH WALL   | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 12   | 20     | 2-NRI-21-AMP | 0      | NUCLEAR INSTRUMENTAT / NUCLEAR INSTRUMENTATION WIDE RANGE RADIATION AMPLIFIER CABINET                                | AUXILIARY | 596.00      | RCTR CABLE TUNN, QUAD 1 - 20 FEET SOUTHWEST OF REACTOR CABLE TUNNEL QUADRANT #1, NORTH OF FIREDOOR 1-DR-AUX333   | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

Signature

Date

T.R. Satyan Sharma  
Print or Type Name

Signature

Date





## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip.ID No.   | Rev No | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|----------------|--------|---|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 13   | 20     | 2-NRI-23-AMP   | 0      | NUCLEAR INSTRUMENTAT / NUCLEAR INSTRUMENTATION SOURCE RANGE RADIATION DETECTOR NRI-23 AMPLIFIER CABINET | AUXILIARY | 596.00      | RCTR CABLE TUNN, QUAD 1 - IN THE SOUTHEAST REGION OF THE ROOM, 25 FEET EAST SOUTHEAST OF THE ROOM'S ENTRANCE DOOR, NEAR THE CONTAINMENT WALL, 3 | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 14   | 20     | 2-NRI-23-ISOL  | 0      | NUCLEAR INSTRUMENTAT / NUCLEAR INSTRUMENTATION SOURCE RANGE SIGNAL ISOLATOR CABINET                     | AUXILIARY | 596.00      | RCTR CABLE TUNN, QUAD 1 - IN THE SOUTHEAST REGION OF THE ROOM, 25 FEET EAST SOUTHEAST OF THE ROOM'S ENTRANCE DOOR, NEAR THE CONTAINMENT WALL    | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 15   | 20     | 2-NRI-23-PRCSR | 0      | NUCLEAR INSTRUMENTAT / NUCLEAR INSTRUMENTATION SOURCE RANGE SIGNAL PROCESSOR CABINET                    | AUXILIARY | 596.00      | RCTR CABLE TUNN, QUAD 1 - IN THE SOUTHEAST REGION OF THE ROOM, 25 FEET EAST SOUTHEAST OF THE ROOM'S ENTRANCE DOOR, NEAR THE CONTAINMENT WALL    | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 16   | 20     | 2-SCP          | 0      | NUCLEAR SAMPLING / NUCLEAR SAMPLING SYSTEM CONTROL PANEL  | AUXILIARY | 587.00      | NUCLEAR SAMPLING RM - IN THE MIDDLE OF THE ROOM, 10 FEET SOUTHEAST OF THE NUCLEAR SAMPLE SINK #12-QC-32   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 17   | 20     | 2-TFP          | 0      | EQUIPMENT CONTROL AN / TURBINE DRIVEN AUX FEED PUMP SUBPANEL  | TURBINE   | 591.00      | TB DRIVEN AUX FDWTR PMP - 3 FEET NORTHEAST OF TDAFP #2-PP-4, ON THE EAST WALL, 1 FOOT NORTH OF THE ROOM'S ENTRANCE DOOR                         | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | No          | No         | No           | No        |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/16/95  
Date

T.R. Satyan Sharma  
Print or Type Name

*T.R. Satyan Sharma*  
Signature

12/20/95  
Date

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis                                     | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|--|-----------|-------------|---|------------|------|---|---------------|-------------|------------|--------------|-----------|
| 1    | 0      | 2-QT-101-AB   | 0      | DIESEL COMBUSTION AIR / AB EMERGENCY DIESEL AIR INTAKE SILENCER      | AUXILIARY | 587.00      | AB EMER DSL GEN RM - IN THE MIDDLE EAST REGION OF THE ROOM, 5 FEET EAST OF AB EMERGENCY DIESEL GENERATOR #2-OME-150-AB, 12 FEET ABOVE THE | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 2    | 0      | 2-QT-101-CD   | 0      | DIESEL COMBUSTION AIR / CD EMERGENCY DIESEL AIR INTAKE SILENCER      | AUXILIARY | 587.00      | CD EMER DSL GEN RM - IN THE NORTHEAST PART OF THE ROOM, 10 FEET EAST OF CD EMERGENCY DIESEL GENERATOR #2-OME-150-CD, 15 FEET ABOVE        | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 3    | 0      | 2-QT-112-AB   | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL FULL FLOW LUBE OIL FILTER      | AUXILIARY | 579.00      | AB EMER DSL LUBE OIL PIT - IN THE NORTHEAST PART OF THE PIT, 6 FEET NORTHEAST OF AB EMERGENCY DIESEL LUBE OIL SUMP TANK #2-QT-115-AB.     | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 4    | 0      | 2-QT-112-CD   | 0      | DIESEL LUBE OIL / CD EMERGENCY DIESEL FULL FLOW LUBE OIL FILTER      | AUXILIARY | 579.00      | CD EMER DSL LUBE OIL PIT - 5 FEET NORTHEAST OF CD EMERGENCY DIESEL LUBE OIL SUMP TANK #2-QT-115-CD, NEAR THE FLOOR                        | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 5    | 0      | 2-QT-113-AB1  | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL FULL FLOW LUBE OIL STRAINER #1 | AUXILIARY | 579.00      | AB EMER DSL LUBE OIL PIT - IN THE SOUTHEAST PART OF THE PIT, 5 FEET EAST OF AB EMERGENCY DIESEL LUBE OIL SUMP TANK #2-QT-115-AB.          | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 6    | 0      | 2-QT-113-AB2  | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL FULL FLOW LUBE OIL STRAINER #2 | AUXILIARY | 579.00      | AB EMER DSL LUBE OIL PIT - IN THE SOUTHEAST PART OF THE PIT, 5 FEET EAST OF AB EMERGENCY DIESEL LUBE OIL SUMP TANK #2-QT-115-AB.          | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 7    | 0      | 2-QT-113-CD1  | 0      | DIESEL LUBE OIL / CD EMERGENCY DIESEL FULL FLOW LUBE OIL STRAINER #1 | AUXILIARY | 579.00      | CD EMER DSL LUBE OIL PIT - IN THE SOUTHEAST PART OF THE PIT, 5 FEET EAST OF CD EMERGENCY DIESEL CD LUBE OIL SUMP TANK #2-QT-115-CD.       | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 8    | 0      | 2-QT-113-CD2  | 0      | DIESEL LUBE OIL / CD EMERGENCY DIESEL FULL FLOW LUBE OIL STRAINER #2 | AUXILIARY | 579.00      | CD EMER DSL LUBE OIL PIT - IN THE SOUTHEAST PART OF THE PIT, 5 FEET EAST OF CD EMERGENCY DIESEL LUBE OIL SUMP TANK #2-QT-115-CD, NEAR THE | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 9    | 0      | 2-QT-116-AB   | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL LUBE OIL HEATER TANK           | AUXILIARY | 579.00      | AB EMER DSL LUBE OIL PIT - 2 FEET NORTHEAST OF AB EMERGENCY DIESEL LUBE OIL SUMP TANK #2-QT-115-AB, NEAR THE FLOOR                        | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 10   | 0      | 2-QT-116-CD   | 0      | DIESEL LUBE OIL / CD EMERGENCY DIESEL LUBE OIL HEATER TANK           | AUXILIARY | 579.00      | CD EMER DSL LUBE OIL PIT - IN THE NORTHEAST PART OF THE PIT, 3 FEET NORTHEAST OF CD EMERGENCY DIESEL LUBE OIL SUMP TANK #2-QT-115-CD.     | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 11   | 0      | 2-QT-116-AB   | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL BYPASS LUBE OIL FILTER         | AUXILIARY | 579.00      | AB EMER DSL LUBE OIL PIT - MID-SOUTH REGION OF PIT, 2 FEET SOUTHEAST OF AB EMERGENCY DIESEL LUBE OIL SUMP TANK #2-QT-115-AB               | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 12   | 0      | 2-QT-116-CD   | 0      | DIESEL LUBE OIL / CD EMERGENCY DIESEL BYPASS LUBE OIL FILTER         | AUXILIARY | 579.00      | CD EMER DSL LUBE OIL PIT - 3 FEET SOUTHEAST OF CD EMERGENCY DIESEL LUBE OIL SUMP TANK #2-QT-115-CD, NEAR THE FLOOR                        | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Walter Djordjevic  
Print or Type Name

Signature

12/13/95  
Date

T.R. Satyan Sharma  
Print or Type Name

Signature

12/24/95  
Date

| Item | Eq. Cl | Equip ID No. | Rev No | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|--------------|--------|---|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 13   | 0      | 2-QT-143-AB1 | 0      | DIESEL CONTROL AIR / AB EMERGENCY DIESEL CONTROL AIR DRYER #1                                   | AUXILIARY | 587.00      | AB EMER DSL GEN RM - 2 FEET SOUTHWEST OF AB EMERGENCY DIESEL GENERATOR ROOM DOORWAY, 2 FEET SOUTH OF THE NORTH WALL, 3 FEET ABOVE THE FLOOR                 | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra                | Yes           | Yes         | Yes        | Yes          | Yes       |
| 14   | 0      | 2-QT-143-AB2 | 0      | DIESEL CONTROL AIR / AB EMERGENCY DIESEL CONTROL AIR DRYER #2                                   | AUXILIARY | 587.00      | AB EMER DSL GEN RM - 3 FEET SOUTHWEST OF AB EMERGENCY DIESEL GENERATOR ROOM DOORWAY, 1 FOOT SOUTH OF THE NORTH WALL, 3 FEET ABOVE THE FLOOR                 | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra                | Yes           | Yes         | Yes        | Yes          | Yes       |
| 15   | 0      | 2-QT-143-CD1 | 0      | DIESEL CONTROL AIR / CD EMERGENCY DIESEL CONTROL AIR DRYER #1                                   | AUXILIARY | 587.00      | CD EMER DSL GEN RM - IN THE MIDDLE SOUTH PART OF THE ROOM, 4 FEET WEST OF THE CD EMERGENCY DIESEL GENERATOR ROOM DOORWAY, 2 FEET ABOVE                      | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra                | Yes           | Yes         | Yes        | Yes          | Yes       |
| 16   | 0      | 2-QT-143-CD2 | 0      | DIESEL CONTROL AIR / CD EMERGENCY DIESEL CONTROL AIR DRYER #2                                   | AUXILIARY | 587.00      | CD EMER DSL GEN RM - IN THE MIDDLE SOUTH PART OF THE ROOM, 4 FEET WEST OF THE CD EMERGENCY DIESEL GENERATOR ROOM DOORWAY, 2 FEET ABOVE                      | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra                | Yes           | Yes         | Yes        | Yes          | Yes       |
| 17   | 0      | 2-QT-144-AB  | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL TRANSFER FILTER                                  | AUXILIARY | 587.00      | AB EMER DSL GEN RM - IN THE SOUTHWEST PART OF THE ROOM, 4 FEET EAST OF AB EMERGENCY DIESEL STARTING AIR RECEIVER #2-QT-141-AB2                              | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra                | Yes           | Yes         | Yes        | Yes          | Yes       |
| 18   | 0      | 2-QT-144-CD  | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL FUEL OIL TRANSFER FILTER                                  | AUXILIARY | 587.00      | CD EMER DSL GEN RM - IN THE NORTHWEST PART OF THE ROOM, 2 FEET EAST OF THE CD EMERGENCY DIESEL STARTING AIR RECEIVER #2-QT-141-CD2                          | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra                | Yes           | Yes         | Yes        | Yes          | Yes       |
| 19   | 0      | 2-TT-DGAB    | 0      | STARTING AIR / 2AB DIESEL GENERATOR TUBE TRACK  | AUXILIARY | 587.00      | AB EMER DSL GEN RM -  | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra                | Yes           | Yes         | Yes        | Yes          | Yes       |
| 20   | 0      | 2-TT-DGCD    | 0      | STARTING AIR / 2CD DIESEL GENERATOR TUBE TRACK  | AUXILIARY | 587.00      | CD EMER DSL GEN RM -  | 587.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra                | Yes           | Yes         | Yes        | Yes          | Yes       |
| 21   | 4      | 2-DGAB-FFCKT | 0      | DIESEL GENERATION, C / AB EMERGENCY DIESEL GENERATOR OME-150-AB FIELD FLASH CIRCUIT TRANSFORMER | AUXILIARY | 587.00      | AB EMER DSL GEN RM - IN THE MIDDLE NORTH REGION OF THE ROOM, 5 FEET WEST OF ROOM'S DOORWAY, INSIDE N SIDE OF AB EDG CONTROL SUBPANEL 1-DGAB, 2' ABOVE FLOOR | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 22   | 4      | 2-DGCD-FFCKT | 0      | DIESEL GENERATION, C / CD EMERGENCY DIESEL GENERATOR OME-150-CD FIELD FLASH CKT TRANSFORMER     | AUXILIARY | 587.00      | CD EMER DSL GEN RM - IN THE MIDDLE SOUTH REGION OF THE ROOM, 5 FEET EAST OF CD EMERGENCY DIESEL GENERATOR ROOM  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 23   | 5      | 2-QT-106-AB1 | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL TRANSFER PUMP #1                                 | AUXILIARY | 587.00      | AB EMER DSL FUEL OIL XFER PMP - IN THE MIDDLE SOUTHEAST REGION OF THE ROOM, 25 FEET SOUTH OF THE ROOM'S ENTRANCE DOOR, NEAR THE EAST WALL, NEAR THE FLOOR   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | No           | No        |
| 24   | 5      | 2-QT-106-AB2 | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL TRANSFER PUMP #2                                 | AUXILIARY | 587.00      | AB EMER DSL FUEL OIL XFER PMP - IN THE MIDDLE SOUTHEAST REGION OF THE ROOM, 27 FEET SOUTH OF THE ROOM'S ENTRANCE DOOR, NEAR THE EAST WALL, NEAR THE FLOOR   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | No           | No        |
| 25   | 5      | 2-QT-106-CD1 | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL FUEL OIL TRANSFER PUMP #1                                 | AUXILIARY | 587.00      | CD EMER DSL FUEL OIL XFER PMP - IN THE NORTHEAST REGION OF THE ROOM, 4 FEET WEST OF THE EAST WALL, 1 FOOT ABOVE THE FLOOR                                   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Walter Djordjevic  
Print or Type Name

Signature

Date

T.R. Satyan Sharma  
Print or Type Name

Signature

Date

12/13/95

12/21/95



| Item | Eq. Cl | Equip ID No. | Rev No | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|--------------|--------|---|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 26   | 5      | 2-QT-106-CD2 | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL FUEL OIL TRANSFER PUMP #2             | AUXILIARY | 587.00      | CD EMER DSL FUEL OIL XFER PMP - IN THE NORTHEAST REGION OF THE ROOM, 4 FEET EAST OF THE MIDDLE OF THE EAST WALL, 1 FOOT ABOVE THE FLOOR      | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 27   | 5      | 2-QT-111-AB  | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL LUBE OIL BEFORE AND AFTER PUMP        | AUXILIARY | 579.00      | AB EMER DSL LUBE OIL PIT - IN THE MIDDLE EAST PART OF THE PIT, 3 FEET EAST OF AB EMERGENCY DIESEL AB LUBE OIL SUMP TANK #2-QT-115-AB.        | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 28   | 5      | 2-QT-111-CD  | 0      | DIESEL LUBE OIL / CD EMERGENCY DIESEL LUBE OIL BEFORE AND AFTER PUMP        | AUXILIARY | 579.00      | CD EMER DSL LUBE OIL PIT - 2 FEET EAST OF CD EMERGENCY DIESEL LUBE OIL SUMP TANK #2-QT-115-CD, NEAR THE FLOOR                                | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 29   | 5      | 2-QT-117-AB  | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL LUBE OIL HEATER QT-116-AB PUMP        | AUXILIARY | 579.00      | AB EMER DSL LUBE OIL PIT - IN THE NORTHWEST CORNER OF THE PIT, 2 FEET NORTH OF AB EMERGENCY DIESEL LUBE OIL SUMP TANK #2-QT-115-AB, NEAR THE | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 30   | 5      | 2-QT-117-CD  | 0      | DIESEL LUBE OIL / CD EMERGENCY DIESEL LUBE OIL HEATER QT-116-CD PUMP        | AUXILIARY | 579.00      | CD EMER DSL LUBE OIL PIT - IN THE NORTHWEST CORNER OF THE PIT, 2 FEET NORTH OF CD EMERGENCY DIESEL LUBE OIL SUMP TANK #2-QT-115-CD           | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 31   | 5      | 2-QT-119-AB  | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL BYPASS LUBE OIL FILTER QT-118-AB PUMP | AUXILIARY | 579.00      | AB EMER DSL LUBE OIL PIT - IN THE SOUTHWEST CORNER OF THE PIT, NEAR THE FLOOR  | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 32   | 5      | 2-QT-119-CD  | 0      | DIESEL LUBE OIL / CD EMERGENCY DIESEL BYPASS LUBE OIL FILTER QT-118-CD PUMP | AUXILIARY | 579.00      | CD EMER DSL LUBE OIL PIT - IN THE SOUTHWEST PART OF THE PIT, 3 FEET SOUTH OF CD EMERGENCY DIESEL LUBE OIL SUMP TANK #2-QT-115-CD, NEAR THE   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 33   | 5      | 2-QT-130-AB1 | 0      | DIESEL JACKET WATER / AB EMERGENCY DIESEL JACKET WATER PUMP #1              | AUXILIARY | 587.00      | AB EMER DSL GEN RM - IN THE SOUTHEAST REGION OF THE ROOM, 20 FEET EAST OF AB EMERGENCY DIESEL GENERATOR #2-OME-150-AB                        | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 34   | 5      | 2-QT-130-AB2 | 0      | DIESEL JACKET WATER / AB EMERGENCY DIESEL JACKET WATER PUMP #2              | AUXILIARY | 587.00      | AB EMER DSL GEN RM - IN THE MIDDLE EAST REGION OF THE ROOM, 20 FEET EAST OF AB EMERGENCY DIESEL GENERATOR #2-OME-150-AB, NEAR THE EAST       | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 35   | 5      | 2-QT-130-CD1 | 0      | DIESEL JACKET WATER / CD EMERGENCY DIESEL JACKET WATER PUMP 1               | AUXILIARY | 587.00      | CD EMER DSL GEN RM - IN THE SOUTHEAST REGION OF THE ROOM, 20 FEET EAST OF CD EMERGENCY DIESEL GENERATOR #2-OME-150-CD                        | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 36   | 5      | 2-QT-130-CD2 | 0      | DIESEL JACKET WATER / CD EMERGENCY DIESEL JACKET WATER PUMP 2               | AUXILIARY | 587.00      | CD EMER DSL GEN RM - IN THE SOUTHEAST REGION OF THE ROOM, 20 FEET EAST OF CD EMERGENCY DIESEL GENERATOR #2-OME-150-CD                        | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 37   | 5      | 2-QT-135-AB  | 0      | DIESEL JACKET WATER / AB EMERGENCY DIESEL AUXILIARY JACKET WATER PUMP       | AUXILIARY | 587.00      | AB EMER DSL GEN RM - IN THE NORTHEAST REGION OF THE ROOM, 2 FEET SOUTHWEST OF AB EMERGENCY DIESEL AUXILIARY JACKET WATER HEATER              | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 38   | 5      | 2-QT-135-CD  | 0      | DIESEL JACKET WATER / CD EMERGENCY DIESEL AUXILIARY JACKET WATER PUMP       | AUXILIARY | 587.00      | CD EMER DSL GEN RM - IN THE EAST PART OF THE ROOM, NEAR THE EAST WALL, 5 FEET SOUTH OF CD EMERGENCY DIESEL JACKET WATER PUMP #2-QT-130-CD2   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Walter Diordjevic  
Print or Type Name

Signature

Date

T.R. Satyan Sharma  
Print or Type Name

Signature

Date

DC COORDINATE 2  
SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip.ID No. | Rev No | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|--------------|--------|---|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 39   | 7      | 2-SV-120-AB  | 0      | DIESEL STARTING AIR / 2-XTC-301 & 2-XTC-302 CONTROL AIR SAFETY VALVE  | AUXILIARY | 587.00      | AB EMER DSL GEN RM - 3 FEET WEST OF AB EMERGENCY DIESEL GENERATOR ROOM DOORWAY, 4 FEET SOUTH OF THE NORTH WALL                                    | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 40   | 7      | 2-SV-120-CD  | 0      | DIESEL STARTING AIR / 2-XTC-306 AND 2-XTC-307 CONTROL AIR SAFETY VALVE  | AUXILIARY | 587.00      | CD EMER DSL GEN RM - 4 FEET WEST OF THE CD EMERGENCY DIESEL GENERATOR ROOM DOORWAY, ON THE SOUTH WALL   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 41   | 7      | 2-SV-139-AB  | 0      | DIESEL STARTING AIR / AB EMERGENCY DIESEL STARTING AIR TO TURBOCHARGER SAFETY VALVE                                     | AUXILIARY | 587.00      | AB EMER DSL GEN RM - 10 FEET SOUTHEAST OF THE AB EMERGENCY DIESEL GENERATOR ROOM DOORWAY, 10 FEET ABOVE THE FLOOR                                 | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 42   | 7      | 2-SV-139-CD  | 0      | DIESEL STARTING AIR / CD EMERGENCY DIESEL STARTING AIR TO TURBOCHARGER SAFETY VALVE                                     | AUXILIARY | 587.00      | CD EMER DSL GEN RM - AT THE NORTHEAST END OF THE CD EMERGENCY DIESEL, 11 FEET ABOVE THE FLOOR   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 43   | 7      | 2-SV-16-AB   | 0      | ESSENTIAL SERVICE WATER / AB EMERGENCY DIESEL JACKET WATER COOLER QT-131-AB ESSENTIAL SERVICE WATER OUTLET SAFETY VALVE | AUXILIARY | 587.00      | AB EMER DSL GEN RM - 5 FEET EAST OF THE AB EMERGENCY DIESEL GENERATOR DOORWAY, NEAR THE NORTH WALL, 8 FEET ABOVE THE FLOOR                        | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 44   | 7      | 2-SV-16-CD   | 0      | ESSENTIAL SERVICE WATER / CD EMERGENCY DIESEL JACKET WATER COOLER QT-131-CD ESSENTIAL SERVICE WATER OUTLET SAFETY VALVE | AUXILIARY | 587.00      | CD EMER DSL GEN RM - ON THE WEST END OF THE CD EMERGENCY JACKET DIESEL WATER COOLER, IN THE SOUTHEAST CORNER OF THE ROOM, 10 FEET ABOVE THE FLOOR | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 45   | 7      | 2-SV-200-AB  | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL MANIFOLDS TO FUEL OIL DAY TANK SAFETY VALVE                              | AUXILIARY | 587.00      | AB EMER DSL GEN RM - SOUTHWEST PART OF THE ROOM, INSIDE FUEL OIL DAY TANK ENCLOSURE   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 46   | 7      | 2-SV-200-CD  | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL FUEL OIL MANIFOLDS TO FUEL OIL DAY TANK SAFETY VALVE                              | AUXILIARY | 587.00      | CD EMER DSL GEN RM - 15 FEET NORTHWEST OF DIESEL GENERATOR, INSIDE FUEL OIL DAY TANK ENCLOSURE  | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 47   | 7      | 2-SV-201-AB1 | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FRONT BANK FUEL OIL MANIFOLD SAFETY VALVE   | AUXILIARY | 587.00      | AB EMER DSL GEN RM - SOUTHEAST OF THE AB EMERGENCY DIESEL   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 48   | 7      | 2-SV-201-AB2 | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL REAR BANK FUEL OIL MANIFOLD SAFETY VALVE  | AUXILIARY | 587.00      | AB EMER DSL GEN RM - NORTHEAST OF AB EMERGENCY DIESEL   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 49   | 7      | 2-SV-201-CD1 | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL FRONT BANK FUEL OIL MANIFOLD SAFETY VALVE   | AUXILIARY | 587.00      | CD EMER DSL GEN RM - ON THE NORTHWEST END OF CD EMERGENCY DIESEL  | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 50   | 7      | 2-SV-201-CD2 | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL REAR BANK FUEL OIL MANIFOLD SAFETY VALVE  | AUXILIARY | 587.00      | CD EMER DSL GEN RM - IN THE SOUTHWEST CORNER OF CD EMERGENCY DIESEL GENERATOR ROOM, 10 FEET ABOVE FLOOR   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 51   | 7      | 2-SV-61-AB   | 0      | DIESEL JACKET WATER / AB EMERGENCY DIESEL AUXILIARY JACKET WATER HEATER QT-134-AB SAFETY VALVE                          | AUXILIARY | 587.00      | AB EMER DSL GEN RM - NEAR CENTER OF WEST WALL, 7 FEET ABOVE THE FLOOR   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 52   | 7      | 2-SV-61-CD   | 0      | DIESEL JACKET WATER / CD EMERGENCY DIESEL AUXILIARY JACKET WATER HEATER QT-134-CD SAFETY VALVE                          | AUXILIARY | 587.00      | CD EMER DSL GEN RM - NEAR THE CENTER OF THE EAST WALL, 7 FEET ABOVE THE FLOOR   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Walter Djordjevic  
Print or Type Name

Signature

Date

T.R. Satyan Sharma  
Print or Type Name

Signature

Date

| Item | Eq. Cl | Equip.ID No. | Rev No | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|--------------|--------|---|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 53   | 7      | 2-SV-78-AB1  | 0      | DIESEL STARTING AIR / AB EMERGENCY DIESEL STARTING AIR RECEIVER QT-141-AB1 SAFETY VALVE                         | AUXILIARY | 587.00      | AB EMER DSL GEN RM - IN SOUTHWEST PART OF ROOM   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 54   | 7      | 2-SV-78-AB2  | 0      | DIESEL STARTING AIR / AB EMERGENCY DIESEL STARTING AIR RECEIVER QT-141-AB2 SAFETY VALVE                         | AUXILIARY | 587.00      | AB EMER DSL GEN RM - IN SOUTHWEST PART OF ROOM   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 55   | 7      | 2-SV-78-CD1  | 0      | DIESEL STARTING AIR / CD EMERGENCY DIESEL STARTING AIR RECEIVER QT-141-CD1 SAFETY VALVE                         | AUXILIARY | 587.00      | CD EMER DSL GEN RM - IN THE NORTHWEST REGION OF THE ROOM   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 56   | 7      | 2-SV-78-CD2  | 0      | DIESEL STARTING AIR / CD EMERGENCY DIESEL STARTING AIR RECEIVER QT-141-CD2 SAFETY VALVE                         | AUXILIARY | 587.00      | CD EMER DSL GEN RM - IN THE NORTHWEST AREA OF THE ROOM   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 57   | 7      | 2-SV-79-AB1  | 0      | DIESEL STARTING AIR / AB EMERGENCY DIESEL CONTROL AIR DRYER QT-143-AB1 SAFETY VALVE                             | AUXILIARY | 587.00      | AB EMER DSL GEN RM - 2 FEET WEST OF THE AB EMERGENCY DIESEL GENERATOR ROOM DOORWAY, 3 FEET SOUTH OF THE NORTH WALL                       | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 58   | 7      | 2-SV-79-AB2  | 0      | DIESEL STARTING AIR / AB EMERGENCY DIESEL CONTROL AIR DRYER QT-143-AB2 SAFETY VALVE                             | AUXILIARY | 587.00      | AB EMER DSL GEN RM - 3 FEET WEST OF THE AB EMERGENCY DIESEL GENERATOR ROOM DOORWAY, 3 FEET SOUTH OF THE NORTH WALL                       | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 59   | 7      | 2-SV-79-CD1  | 0      | DIESEL STARTING AIR / CD EMERGENCY DIESEL CONTROL AIR DRYER QT-143-CD1 SAFETY VALVE                             | AUXILIARY | 587.00      | CD EMER DSL GEN RM - 3 FEET WEST OF THE CD EMERGENCY DIESEL GENERATOR ROOM DOORWAY, 3 FEET SOUTH OF THE NORTH WALL                       | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 60   | 7      | 2-SV-79-CD2  | 0      | DIESEL STARTING AIR / CD EMERGENCY DIESEL CONTROL AIR DRYER QT-143-CD2 SAFETY VALVE                             | AUXILIARY | 587.00      | CD EMER DSL GEN RM - 3 FEET WEST OF THE CD EMERGENCY DIESEL GENERATOR ROOM DOORWAY, 3 FEET SOUTH OF THE NORTH WALL                       | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 61   | 7      | 2-WRV-722-CD | 0      | ESSENTIAL SERVICE WATER / CD EMERGENCY DIESEL NORTH COMBUSTION AIR AFTERCOOLER HE-47-CDN ESW INLET/BYPASS VALVE | AUXILIARY | 587.00      | CD EMER DSL GEN RM - IN THE NORTHEAST PART OF THE ROOM, 2 FEET NORTH OF CD EMERGENCY DIESEL JACKET WATER SURGE TANK #2-QT-133-CD.        | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 62   | 7      | 2-WRV-724-CD | 0      | ESSENTIAL SERVICE WATER / CD EMERGENCY DIESEL SOUTH COMBUSTION AIR AFTERCOOLER HE-47-CDS ESW INLET/BYPASS VALVE | AUXILIARY | 587.00      | CD EMER DSL GEN RM - IN THE SOUTHEAST PART OF THE ROOM, ON THE SOUTHEAST CORNER OF CD EMERGENCY DIESEL GENERATOR #2-OME-150-CD, NEAR THE | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 63   | 7      | 2-WRV-726-AB | 0      | ESSENTIAL SERVICE WATER / AB EMERGENCY DIESEL NORTH COMBUSTION AIR AFTERCOOLER HE-47-ABN ESW INLET/BYPASS VALVE | AUXILIARY | 587.00      | AB EMER DSL GEN RM - 10 FEET SOUTH OF THE AB EMERGENCY DIESEL GENERATOR ROOM DOORWAY, ON THE DIESEL END OF AB EMERGENCY DIESEL GENERATOR | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Walter Djordjevic  
Print or Type Name

Signature

Date

T.R. Satyan Sharma  
Print or Type Name

Signature

Date



DC COAST IT 2  
SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|--|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 64   | 7      | 2-WRV-728-AB  | 0      | ESSENTIAL SERVICE WATER / AB EMERGENCY DIESEL SOUTH COMBUSTION AIR AFTERCOOLER HE-47-ABS ESW INLET/BYPASS VALVE    | AUXILIARY | 587.00      | AB EMER DSL GEN RM - IN THE SOUTHEAST REGION OF THE ROOM, ON THE DIESEL END OF AB EMERGENCY DIESEL GENERATOR #2-OME-150-AB, 4 FEET ABOVE THE FLOOR | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 65   | 7      | 2-XRV-220     | 0      | DIESEL STARTING AIR / AB EMERGENCY DIESEL STARTING AIR JET ASSIST CONTROL VALVE                                    | AUXILIARY | 587.00      | AB EMER DSL GEN RM - 10 FEET SOUTHEAST OF THE AB EMERGENCY DIESEL GENERATOR ROOM DOORWAY, ON THE DIESEL END OF AB EMERGENCY DIESEL GENERATOR       | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 66   | 7      | 2-XRV-221     | 0      | DIESEL STARTING AIR / AB EMERGENCY DIESEL FRONT BANK STARTING AIR SHUTOFF VALVE                                    | AUXILIARY | 587.00      | AB EMER DSL GEN RM - IN THE EAST REGION OF THE ROOM, 1 FOOT ABOVE THE DIESEL END OF AB EMERGENCY DIESEL GENERATOR #2-OME-150-AB                    | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 67   | 7      | 2-XRV-222     | 0      | DIESEL STARTING AIR / AB EMERGENCY DIESEL REAR BANK STARTING AIR SHUTOFF VALVE                                     | AUXILIARY | 587.00      | AB EMER DSL GEN RM - IN THE NORTHEAST REGION OF THE ROOM, ON THE DIESEL END OF AB EMERGENCY DIESEL GENERATOR #2-OME-150-AB, 10 FEET ABOVE THE      | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 68   | 7      | 2-XRV-225     | 0      | DIESEL STARTING AIR / CD EMERGENCY DIESEL STARTING AIR JET ASSIST CONTROL VALVE                                    | AUXILIARY | 587.00      | CD EMER DSL GEN RM - IN THE NORTHEAST PART OF THE ROOM, ON THE NORTHEAST END OF CD EMERGENCY DIESEL GENERATOR #2-OME-150-CD, 10 FEET ABOVE         | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 69   | 7      | 2-XRV-226     | 0      | DIESEL STARTING AIR / CD EMERGENCY DIESEL FRONT BANK STARTING AIR SHUTOFF VALVE                                    | AUXILIARY | 587.00      | CD EMER DSL GEN RM - ON THE NORTHEAST CORNER OF CD EMERGENCY DIESEL GENERATOR #2-OME-150-CD, 10 FEET ABOVE THE FLOOR                               | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 70   | 7      | 2-XRV-227     | 0      | DIESEL STARTING AIR / CD EMERGENCY DIESEL REAR BANK STARTING AIR SHUTOFF VALVE                                     | AUXILIARY | 587.00      | CD EMER DSL GEN RM - IN THE NORTHEAST PART OF THE ROOM, 3 FEET NORTHEAST OF CD EMERGENCY DIESEL GENERATOR #2-OME-150-CD, 10 FEET ABOVE             | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 71   | 8      | 2-HV-DDP-CD1  | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FAN HV-DGX-1 TEMPERING AIR DAMPER | AUXILIARY | 587.00      | CD EMER DSL GEN RM - 23 FEET WEST OF THE MAIN ENTRANCE DOOR, NEAR THE SOUTH WALL, 10 FEET ABOVE THE FLOOR  | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 72   | 8      | 2-HV-DDP-CD2  | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN HV-DGS-1 TEMPERING AIR DAMPER  | AUXILIARY | 587.00      | CD EMER DSL GEN RM - IN THE SOUTHEAST PART OF THE ROOM, NEAR THE WALL, 10 FEET ABOVE THE FLOOR   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 73   | 8      | 2-LSO-240     | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL UPPER VALVE GEAR LUBRICATION CONTROL SOLENOID #1                             | AUXILIARY | 587.00      | AB EMER DSL GEN RM - ON THE DIESEL END OF AB EMERGENCY DIESEL GENERATOR #2-OME-150-AB, 8 FEET ABOVE THE FLOOR                                      | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 74   | 8      | 2-LSO-241     | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL UPPER VALVE GEAR LUBRICATION CONTROL SOLENOID #2                             | AUXILIARY | 587.00      | AB EMER DSL GEN RM - ON THE DIESEL END OF AB EMERGENCY DIESEL GENERATOR #2-OME-150-AB, 7 FEET ABOVE THE FLOOR                                      | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 75   | 8      | 2-LSO-245     | 0      | DIESEL LUBE OIL / CD EMER DIESEL GEN UPPER VALVE GEAR LUBRICATION CONTROL SOLENOID #1                              | AUXILIARY | 587.00      | CD EMER DSL GEN RM - IN THE MIDDLE EAST PART OF THE ROOM, ON THE EAST END OF CD EMERGENCY DIESEL GENERATOR #2-OME-150-CD, 7 FEET ABOVE             | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Walter Djordjevic  
Print or Type Name

Signature

Date

T.R. Satyan Sharma  
Print or Type Name

Signature

Date

| Item | Eq. Cl | Equip.ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|--------------|--------|--|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 76   | 8      | 2-LSO-245    | 0      | DIESEL LUBE OIL / CD EMER DIESEL GEN UPPER VALVE GEAR LUBRICATION CONTROL SOLENOID #2                              | AUXILIARY | 587.00      | CD EMER DSL GEN RM - IN THE MIDDLE EAST PART OF THE ROOM, ON THE EAST END OF CD EMERGENCY DIESEL GENERATOR #2-OME-150-CD, 6 FEET ABOVE        | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 77   | 9      | 2-HV-DGS-1   | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN                                | AUXILIARY | 587.00      | CD EMER DSL GEN RM - IN THE SOUTHEAST PART OF THE ROOM, 20 FEET EAST OF THE GENERATOR END OF CD EMERGENCY GENERATOR #2-OME-150-CD, 10         | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 78   | 9      | 2-HV-DGS-2   | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN                                | AUXILIARY | 587.00      | AB EMER DSL GEN RM - IN THE SOUTHEAST REGION OF THE ROOM, ON THE EAST WALL, 15 FEET ABOVE THE FLOOR   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 79   | 9      | 2-HV-DGS-3   | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM CABINET VENTILATION SUPPLY FAN                        | AUXILIARY | 587.00      | AB EMER DSL GEN RM - 4 FEET EAST OF THE EAST END OF AB EMERGENCY DIESEL GENERATOR #2-OME-150-AB, IN A VENTILATION DUCT, 10 FEET ABOVE THE     | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 80   | 9      | 2-HV-DGS-4   | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM CABINET VENTILATION SUPPLY FAN                        | AUXILIARY | 587.00      | CD EMER DSL GEN RM - 12 FEET NORTHEAST OF CD EMERGENCY DIESEL GENERATOR CONTROL SUBPANEL #2-DGCD, LOCATED IN A VENTILATION DUCT, 12 FEET      | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 81   | 9      | 2-HV-DGX-1   | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FAN                               | AUXILIARY | 587.00      | CD EMER DSL GEN RM - IN THE SOUTHWEST CORNER OF THE ROOM, 15 FEET ABOVE THE FLOOR   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 82   | 9      | 2-HV-DGX-2   | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FAN                               | AUXILIARY | 587.00      | AB EMER DSL GEN RM - IN THE NORTHWEST REGION OF THE ROOM, ON THE NORTH WALL, 15 FEET ABOVE THE FLOOR  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 83   | 10     | 2-HV-DDP-AB1 | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FAN HV-DGX-2 TEMPERING AIR DAMPER | AUXILIARY | 587.00      | AB EMER DSL GEN RM - IN THE NORTHWEST REGION OF THE ROOM, 24 FEET WEST OF THE ROOM'S ENTRANCE DOORWAY, ON THE NORTH WALL, 15 FEET ABOVE       | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 84   | 10     | 2-HV-DDP-AB2 | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN HV-DGS-2 TEMPERING AIR DAMPER  | AUXILIARY | 587.00      | AB EMER DSL GEN RM - IN THE SOUTHEAST REGION OF THE ROOM, 3 FEET NORTHEAST OF THE AB EMERGENCY DIESEL FUEL OIL TRANSFER PUMP ROOM DOORWAY, 15 | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 85   | 12     | 2-QT-502-AB  | 0      | DIESEL COMBUSTION AIR / AB EMERGENCY DIESEL TURBOCHARGER   | AUXILIARY | 587.00      | AB EMER DSL GEN RM - 10 FEET SOUTH OF AB EMERGENCY DIESEL GENERATOR ROOM DOORWAY, 4 FEET EAST OF AB EMERGENCY DIESEL GENERATOR                | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 86   | 12     | 2-QT-502-CD  | 0      | DIESEL COMBUSTION AIR / CD EMERGENCY DIESEL TURBOCHARGER   | AUXILIARY | 587.00      | CD EMER DSL GEN RM - ON THE NORTHEAST CORNER OF THE CD EMERGENCY DIESEL GENERATOR #2-OME-150-CD, 9 FEET ABOVE THE FLOOR                       | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 87   | 14     | 2-AFW        | 0      | 120/208V MISC SAFETY RELATED POWER DISTRIBUTION / POWER PANEL  | AUXILIARY | 587.00      | CD EMER DSL GEN RM - 10 FEET NW OF CD EMERGENCY DIESEL GENERATOR #2-OME-150-CD, ON THE NORTH WALL, 3' ABOVE FLOOR                             | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 88   | 14     | 2-AFWX       | 0      | 120/208V MISC SAFETY RELATED POWER DISTRIBUTION / 120/208 VAC AUXILIARY FEEDWATER DISTRIBUTION PANEL               | AUXILIARY | 587.00      | CD EMER DSL GEN RM - IN NE REGION OF ROOM, 5 FT NORTH OF NE END OF EMERG DIESEL GEN CD, ON  | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | No           | No        |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Walter Djordjevic  
Print or Type Name

Signature

Date

T.R. Satyan Sharma  
Print or Type Name

Signature

Date



DC COAST T 2  
SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|--|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 89   | 14     | 2-ELSC        | 0      | 120/208V MISC SAFETY RELATED POWER DISTR / POWER PANEL   | AUXILIARY | 587.00      | AB EMER DSL GEN RM - IN THE NE REGION OF THE ROOM, ON THE EAST WALL   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 90   | 14     | 2-ELSCX       | 0      | 120/208V MISC SAFETY RELATED POWER DISTRIBUTION / 120/208VAC EMERGENCY LOCAL SHUTDOWN AUXILIARY DISTRIBUTION PANEL | AUXILIARY | 587.00      | AB EMER DSL GEN RM - IN SE REGION OF ROOM, ON SOUTH WALL, 10 FT SOUTH OF EAST END OF AB EMERG DIESEL GENERATOR, 5' ABOVE FLOOR. | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 91   | 17     | 2-OME-150-AB  | 0      | DIESEL GENERATION, CONTROL & INSTRUMENTATION / AB EMERGENCY DIESEL GENERATOR                                       | AUXILIARY | 587.00      | AB EMER DSL GEN RM - IN THE CENTER OF THE ROOM  | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 92   | 17     | 2-OME-150-CD  | 0      | DIESEL GENERATION, CONTROL & INSTRUMENTATION / CD EMERGENCY DIESEL GENERATOR                                       | AUXILIARY | 587.00      | CD EMER DSL GEN RM - IN THE CENTER OF THE ROOM, 10 FEET NORTH OF THE MAIN ENTRANCE DOOR   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 93   | 18     | 2-CPS-312     | 0      | DIESEL JACKET WATER / AB EMERGENCY DIESEL JACKET WATER PUMP QT-130-AB1 DISCHARGE PRESSURE SWITCH                   | AUXILIARY | 587.00      | AB EMER DSL GEN RM - 5 FEET WEST OF AB EMERGENCY DIESEL GENERATOR ROOM DOORWAY, IN CONTROL SUBPANEL #2-DGAB, ON THE NORTH WALL  | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 94   | 18     | 2-CPS-314     | 0      | DIESEL JACKET WATER / AB EMERGENCY DIESEL JACKET WATER PUMP QT-130-AB2 DISCHARGE PRESSURE SWITCH                   | AUXILIARY | 587.00      | AB EMER DSL GEN RM - 5 FEET WEST OF AB EMERGENCY DIESEL GENERATOR ROOM DOORWAY, IN SUBPANEL #2-DGAB, ON THE NORTH WALL          | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 95   | 18     | 2-CPS-317     | 0      | DIESEL JACKET WATER / CD EMERGENCY DIESEL JACKET WATER PUMP QT-130-CD1 DISCHARGE PRESSURE SWITCH                   | AUXILIARY | 587.00      | CD EMER DSL GEN RM - 5 FEET WEST OF CD EMERGENCY DIESEL GENERATOR ROOM DOORWAY, IN SUBPANEL #2-DGCD, ON THE SOUTH WALL          | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 96   | 18     | 2-CPS-319     | 0      | DIESEL JACKET WATER / CD EMERGENCY DIESEL JACKET WATER PUMP QT-130-CD2 DISCHARGE PRESSURE SWITCH                   | AUXILIARY | 587.00      | CD EMER DSL GEN RM - 5 FEET WEST OF CD EMERGENCY DIESEL GENERATOR ROOM DOORWAY, IN SUBPANEL #2-DGCD, ON THE SOUTH WALL          | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 97   | 18     | 2-LLS-120     | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL DAY TANK QT-107-AB HIGH LEVEL SWITCH #1                             | AUXILIARY | 587.00      | AB EMER DSL GEN RM - *RELAY CHATTER ANALYSIS IS DONE UNDER FUEL TRANSFER PUMP   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 98   | 18     | 2-LLS-121     | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL DAY TANK QT-107-AB LOW LEVEL SWITCH #1                              | AUXILIARY | 587.00      | AB EMER DSL GEN RM - *RELAY CHATTER ANALYSIS IS DONE UNDER FUEL TRANSFER PUMP   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 99   | 18     | 2-LLS-122     | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL DAY TANK QT-107-AB HIGH LEVEL SWITCH #2                             | AUXILIARY | 587.00      | AB EMER DSL GEN RM - *RELAY CHATTER ANALYSIS IS DONE UNDER FUEL TRANSFER PUMP   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 100  | 18     | 2-LLS-123     | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL DAY TANK QT-107-AB LOW LEVEL SWITCH #2                              | AUXILIARY | 587.00      | AB EMER DSL GEN RM - *RELAY CHATTER ANALYSIS IS DONE UNDER FUEL TRANSFER PUMP   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 101  | 18     | 2-LLS-125     | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL FUEL OIL DAY TANK QT-107-CD HIGH LEVEL SWITCH #1                             | AUXILIARY | 587.00      | CD EMER DSL GEN RM - *RELAY CHATTER ANALYSIS IS DONE UNDER FUEL TRANSFER PUMP   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 102  | 18     | 2-LLS-126     | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL FUEL OIL DAY TANK QT-107-CD LOW LEVEL SWITCH #1                              | AUXILIARY | 587.00      | CD EMER DSL GEN RM - *RELAY CHATTER ANALYSIS IS DONE UNDER FUEL TRANSFER PUMP   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 103  | 18     | 2-LLS-127     | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL FUEL OIL DAY TANK QT-107-CD HIGH LEVEL SWITCH #2                             | AUXILIARY | 587.00      | CD EMER DSL GEN RM - *RELAY CHATTER ANALYSIS IS DONE UNDER FUEL TRANSFER PUMP   | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Walter Djordjevic  
Print or Type Name

Signature

Date

T.R. Satyan Sharma  
Print or Type Name

Signature

Date

DC CODE UNIT 2  
SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip.ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis                                     | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|--------------|--------|--|-----------|-------------|--|------------|------|---|---------------|-------------|------------|--------------|-----------|
| 104  | 18     | 2-LLS-128    | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL FUEL OIL DAY TANK QT-107-CD LOW LEVEL SWITCH #2                    | AUXILIARY | 587.00      | CD EMER DSL GEN RM - "RELAY CHATTER ANALYSIS IS DONE UNDER FUEL TRANSFER PUMP  | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum            | Yes           | Yes         | Yes        | Yes          | Yes       |
| 105  | 18     | 2-XPS-300    | 0      | DIESEL COMBUSTION AIR / AB EMERGENCY DIESEL FRONT BANK AIR CHEST EXTREME HIGH PRESSURE SWITCH            | AUXILIARY | 587.00      | AB EMER DSL GEN RM - 5 FEET WEST OF AB EMERGENCY DIESEL GENERATOR ROOM DOORWAY, INSIDE DOUBLE DOORS OF CONTROL SUBPANEL #2-DGAB, ON THE NORTH WALL | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum            | Yes           | Yes         | Yes        | Yes          | Yes       |
| 106  | 18     | 2-XPS-305    | 0      | DIESEL COMBUSTION AIR / CD EMERGENCY DIESEL FRONT BANK AIR CHEST EXTREME HIGH PRESSURE SWITCH            | AUXILIARY | 587.00      | CD EMER DSL GEN RM - 5 FEET WEST OF CD EDG ROOM DOORWAY, INSIDE DOUBLE DOORS OF CD EMERGENCY DIESEL CONTROL SUBPANEL #2-DGCD, ON THE SOUTH WALL    | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum            | Yes           | Yes         | Yes        | Yes          | Yes       |
| 107  | 19     | 2-VTS-341    | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION FANS HV-DGX-2 THERMOSTAT        | AUXILIARY | 587.00      | AB EMER DSL GEN RM - NORTHWEST REGION OF ROOM, ON AB EMERG DIESEL GEN RM VENT EXHAUST FAN #2-HV-DGX-2, NEAR THE NORTH WALL                         | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum            | Yes           | Yes         | N/A        | Yes          | Yes       |
| 108  | 19     | 2-VTS-346    | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FAN HV-DGX-1 THERMOSTAT | AUXILIARY | 587.00      | CD EMER DSL GEN RM - IN THE SOUTHWEST CORNER OF THE ROOM, ON THE WEST SIDE OF CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FIRE          | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum            | Yes           | Yes         | N/A        | Yes          | Yes       |
| 109  | 20     | 2-DGAB       | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / AB EMERGENCY DIESEL GENERATOR OME-150-AB CONTROL SUBPANEL    | AUXILIARY | 587.00      | AB EMER DSL GEN RM - MIDDLE SOUTH REGION OF THE ROOM, 10 FEET NORTHWEST OF AUXILIARY BUILDING VENTILATION EXHAUST UNIT #2-HV-AX-2                  | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum            | Yes           | Yes         | Yes        | Yes          | Yes       |
| 110  | 20     | 2-DGAB-X     | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / AB EMERGENCY DIESEL GENERATOR OME-150-AB AUXILIARY SUBPANEL  | AUXILIARY | 587.00      | AB EMER DSL GEN RM - NEAR THE CENTER OF THE WEST WALL, 3 FEET NORTH OF AB EMERGENCY DIESEL STARTING AIR RECEIVER #2-QT-141-AB1                     | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum            | Yes           | Yes         | Yes        | No           | No        |
| 111  | 20     | 2-DGCD       | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / CD EMERGENCY DIESEL GENERATOR OME-150-CD CONTROL SUBPANEL    | AUXILIARY | 587.00      | CD EMER DSL GEN RM - 5 FEET WEST OF CD EMERGENCY DIESEL GENERATOR ROOM DOORWAY, 4 FEET SOUTHEAST OF CD EMERGENCY DIESEL GENERATOR EXCITER          | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum            | Yes           | Yes         | Yes        | Yes          | Yes       |
| 112  | 20     | 2-DGCD-X     | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / CD EMERGENCY DIESEL GENERATOR OME-150-CD AUXILIARY SUBPANEL  | AUXILIARY | 587.00      | CD EMER DSL GEN RM - IN THE MIDDLE WEST REGION OF THE ROOM, 15 FEET SOUTH OF CD EMERGENCY DIESEL STARTING AIR RECEIVER #2-QT-141-CD1               | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum            | Yes           | Yes         | Yes        | No           | No        |
| 113  | 0      | 2-POV-1-AB   | 0      | STARTING AIR SYSTEM / PILOT OPERATED 4 WAY VALVE FOR AIR START XRV'S FOR DIESEL ENGINE                   | Auxiliary | 587.00      |  | 587.00     | N/A  | Judgement vs Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 114  | 0      | 2-POV-1-CD   | 0      | STARTING AIR SYSTEM / PILOT OPERATED 4 WAY VALVE FOR AIR START XRV'S FOR DIESEL ENGINE                   | Auxiliary | 587.00      |  | 587.00     | N/A  | Judgement vs Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 115  | 0      | 2-POV-2-AB   | 0      | STARTING AIR SYSTEM / PILOT OPERATED 4 WAY VALVE FOR AIR START XRV'S FOR DIESEL ENGINE                   | Auxiliary | 587.00      |  | 587.00     | N/A  | Judgement vs Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 116  | 0      | 2-POV-2-CD   | 0      | STARTING AIR SYSTEM / PILOT OPERATED 4 WAY VALVE FOR AIR START XRV'S FOR DIESEL ENGINE                   | Auxiliary | 587.00      |  | 587.00     | N/A  | Judgement vs Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Walter Djordjevic  
Print or Type Name

Signature

Date

T.R. Satyan Sharma  
Print or Type Name

Signature

Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description   | Building    | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|--|-------------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 1    | 7      | 2-QRV-170     | 0      | LETDOWN (CVCS) / EXCESS LETDOWN HEAT EXCHANGER HE-13 1 AIR OPERATED OUTLET PRESSURE CONTROL VALVE                    | CONTAINMENT | 612.00      | REGEN HEAT XCHGR RM - AT THE WEST END OF EXCESS LETDOWN HEAT EXCHANGER #2-HE-13, WEST OF AIR OPERATED VALVE #2-QRV-171, 1 FOOT ABOVE THE | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 2    | 7      | 2-QRV-171     | 0      | LETDOWN (CVCS) / EXCESS LETDOWN HEAT EXCHANGER HE-13 1 AIR OPERATED OUTLET DIVERSION VALVE                           | CONTAINMENT | 612.00      | REGEN HEAT XCHGR RM - NEAR CENTER OF EXCESS LETDOWN HEAT EXCHANGER #2-HE-13, 1 FOOT ABOVE THE FLOOR                                      | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 3    | 7      | 2-SV-64       | 0      | CCW / EXCESS LETDOWN HEAT EXCHANGER HE-13 CCW OUTLET SAFETY VALVE  | CONTAINMENT | 612.00      | REGEN HEAT XCHGR RM - NEAR CONT WALL, 1 FT. FROM EXCESS LETDOWN HEAT EXCHANGER #2-HE-13, AZ 300.   | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 4    | 8      | 2-HV-DGS-DAB  | 0      | DIESEL ROOM VENTILAT / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN HV-DGS-1 OUTSIDE AIR SHUTOFF DAMPER | AUXILIARY   | 596.00      | INNER PLANT GROUNDS - 50 FT NORTHWEST OF RWST TANK #12-TK-33, ACCESSIBLE FROM A MANHOLE NEAR THE 609 ELEVATION AIR INTAKE FILTER         | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 5    | 8      | 2-ICM-305     | 0      | RESIDUAL HEAT REMOVAL / RECIRCULATION SUMP TO EAST RHR/CTS PUMPS SUCTION CONTAINMENT ISOLATION VALVE                 | AUXILIARY   | 591.00      | VESTIBULE - 15 FEET SOUTHEAST OF THE ROOM'S ENTRANCE DOOR, INSIDE EAST VALVE ENCLOSURE TANK #2-TK-86                                     | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 6    | 8      | 2-ICM-306     | 0      | RESIDUAL HEAT REMOVAL / RECIRCULATION SUMP TO WEST RHR/CTS PUMPS SUCTION CONTAINMENT ISOLATION VALVE                 | AUXILIARY   | 591.00      | VESTIBULE - 10 FEET SOUTHEAST OF THE ROOM'S ENTRANCE DOOR, INSIDE WEST VALVE ENCLOSURE TANK #2-TK-87                                     | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

[Signature]  
Signature

12/14/95  
Date

I.C. Huang  
Print or Type Name

[Signature]  
Signature

1-15-96  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip.ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|--------------|--------|--|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 1    | 20     | 2-CG1        | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / REACTOR PROTECTION CONTROL GROUP #1 CABINET #14, 15, 16          | AUXILIARY | 633.00      | CONTROL ROOM - IN THE NORTHEAST REGION OF THE ROOM, NEAR MIDDLE OF THE NORTH WALL   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 2    | 20     | 2-CG2        | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / REACTOR PROTECTION CONTROL GROUP #2 CABINET #17, #18 & #19       | AUXILIARY | 633.00      | CONTROL ROOM - IN THE NORTHEAST CORNER OF THE ROOM, NEAR THE NORTH WALL * FULL WALKDOWN DONE DURING RHR                             | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 3    | 20     | 2-CG3        | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / REACTOR PROTECTION CONTROL GROUP #3 CABINET #20, #21             | AUXILIARY | 633.00      | CONTROL ROOM - IN THE NORTHEAST REGION OF THE ROOM, ON THE REAR SIDE OF RADIATION MONITORING SYSTEM RACK I PANEL #2-RMS-I           | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 4    | 20     | 2-CG4        | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / REACTOR PROTECTION CONTROL GROUP #4 CABINET #22, #23, #24, & #25 | AUXILIARY | 633.00      | CONTROL ROOM - IN THE NORTHEAST REGION OF THE ROOM, ON THE REAR SIDE OF RADIATION MONITORING SYSTEM RACK I PANEL #2-RMS-I           | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 5    | 20     | 2-RPC-I      | 0      | REACTOR PROTECTION / REACTOR PROTECTION CHANNEL I CAB #1, 2, 3 & 4   | AUXILIARY | 633.00      | CONTROL ROOM - IN THE SOUTHWEST REGION OF THE ROOM, ON THE REAR SIDE OF CONDENSATE HEATER LEVEL CONTROL PANEL #2-C, NEAR CONDENSATE | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | No           | No        |
| 6    | 20     | 2-RPC-II     | 0      | REACTOR PROTECTION / REACTOR PROTECTION CHANNEL II CABINET #5, 6 & 7   | AUXILIARY | 633.00      | CONTROL ROOM - IN THE SOUTHWEST REGION OF THE ROOM, ON THE REAR SIDE OF TURBINE CONTROL PANEL #2-T, NEAR TURBINE PANEL REAR         | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | No           | No        |
| 7    | 20     | 2-RPC-III    | 0      | REACTOR PROTECTION / REACTOR PROTECTION CHANNEL III CABINET #9, 10 & 11                                      | AUXILIARY | 633.00      | CONTROL ROOM - IN THE SOUTHWEST REGION OF THE ROOM, ON THE REAR SIDE OF STEAM GENERATOR AND AUXILIARY FEED PUMP CONTROL PANEL #2-SG | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | No           | No        |
| 8    | 20     | 2-RPC-IV     | 0      | REACTOR PROTECTION / REACTOR PROTECTION CHANNEL IV CABINET #12   | AUXILIARY | 633.00      | CONTROL ROOM - IN THE SOUTHWEST REGION OF THE ROOM, ON THE REAR SIDE OF CONDENSATE PUMP CONTROL PANEL #2-CP                         | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | No          | Yes        | Yes          | No        |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

I.C. Huang  
Print or Type Name

*J. Chen Huang*  
Signature

1-15-96  
Date

Paul Krugh  
Print or Type Name

*Paul R. Krugh*  
Signature

12/21/95  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description  | Building    | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|---|-------------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 1    | 7      | 2-MRV-152     | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #2 STEAM SAMPLE MSX-102 SAMPLE SHUTOFF VALVE                   | CONTAINMENT | 612.00      | W CONT LOWER VENT RM - ON THE CRANEWALL SIDE OF THE WALKWAY   | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | No          | N/A        | Yes          | No        |
| 2    | 7      | 2-MRV-154     | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #4 STEAM SAMPLE MSX-104 SAMPLE SHUTOFF VALVE                   | CONTAINMENT | 612.00      | E CONT LOWER VENT RM - ON THE CRANEWALL SIDE OF THE WALKWAY, BETWEEN COLUMNS #6 AND #7, 2 FEET ABOVE THE FLOOR                                      | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | No          | N/A        | Yes          | No        |
| 3    | 7      | 2-SV-122-3    | 0      | CCW / CCW TO CONT VENTILATION FAN HV-CEQ-2 MOTOR AIR COOLER CCW OUTLET SAFETY VALVE               | CONTAINMENT | 625.00      | HV-CEQ-2 FAN RM - ON THE CRANEWALL SIDE OF THE WALKWAY, 1 FOOT FROM VENT FAN #2-HV-CEQ-2, 10 FEET FROM COLUMN #26, 4 FEET ABOVE THE 625 EL PLATFORM | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 4    | 7      | 2-SV-122-4    | 0      | CCW / CONTAINMENT VENT FAN HV-CEQ-1 MOTOR AIR COOLER CCW OUTLET SAFETY VALVE                      | CONTAINMENT | 625.00      | HV-CEQ-1 FAN RM - ON THE CRANEWALL SIDE OF THE WALKWAY, 1 FOOT FROM VENT FAN #2-HV-CEQ-1, 15 FEET FROM COLUMN #1, NEAR THE GRATING                  | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 5    | 7      | 2-SV-62-1     | 0      | CCW / REACTOR COOLANT PUMP PP-45-1 THERMAL BARRIER CCW OUTLET SAFETY VALVE                        | CONTAINMENT | 617.00      | LOWER CONT, QUAD NO. 1 - BETWEEN REACTOR COOLANT PUMP #1 AND SG #1, ON THE SG SIDE OF 617 EL. PLATFORM.   | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 6    | 7      | 2-SV-62-2     | 0      | REACTOR COOLANT PUMP PP-45-2 THERMAL BARRIER CCW OUTLET SAFETY VALVE                              | CONTAINMENT | 617.00      | LOWER CONTAINMENT, QUADRANT NO. 2 - BETWEEN REACTOR COOLANT PUMP #2-PP-45-2 AND THE SHIELD WALL, ON THE 617 ELEVATION PLATFORM.                     | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 7    | 7      | 2-SV-62-3     | 0      | REACTOR COOLANT PUMP PP-45-3 THERMAL BARRIER CCW OUTLET SAFETY VALVE                              | CONTAINMENT | 612.00      | LOWER CONTAINMENT, QUADRANT NO. 3 - BETWEEN RCP #3 AND STEAM GENERATOR #3, ON 618 ELEVATION PLATFORM.   | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 8    | 7      | 2-SV-62-4     | 0      | REACTOR COOLANT PUMP PP-45-4 THERMAL BARRIER CCW OUTLET SAFETY VALVE                              | CONTAINMENT | 612.00      | LOWER CONTAINMENT, QUADRANT NO. 4 - BETWEEN REACTOR COOLANT PUMP #4 AND SHIELD WALL, ON 618 ELEVATION PLATFORM.                                     | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 9    | 8      | 2-IMO-51      | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP #1 SHUTOFF VALVE                        | CONTAINMENT | 598.00      | ANNULUS, QUAD NO. 1 - ON THE CRANEWALL SIDE OF THE WALKWAY, 10 FEET FROM COLUMN #2, 3 FEET ABOVE THE FLOOR  | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 10   | 8      | 2-IMO-52      | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP #2 SHUTOFF VALVE                        | CONTAINMENT | 598.00      | ANNULUS, QUAD NO. 2 - ON THE CRANEWALL SIDE OF THE WALKWAY  | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 11   | 8      | 2-IMO-53      | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP #3 SHUTOFF VALVE                        | CONTAINMENT | 598.00      | ANNULUS, QUAD NO. 3 - ON THE CRANEWALL SIDE OF THE WALKWAY, 10 FEET FROM COLUMN #18, 4 FEET ABOVE THE FLOOR   | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 12   | 8      | 2-IMO-54      | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP #4 SHUTOFF VALVE                        | CONTAINMENT | 598.00      | ANNULUS, QUAD NO. 4 - 15 FEET FROM COLUMN #9, 5 FEET ABOVE THE FLOOR, BY THE CRANEWALL  | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 13   | 18     | 2-FI-51       | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP #1 FLOW INDICATOR TRANSMITTER           | CONTAINMENT | 598.00      | ANNULUS, QUAD NO. 1 - NEAR THE CRANEWALL SIDE OF THE WALKWAY, BETWEEN COLUMNS #2 AND #3, 4 FEET ABOVE THE FLOOR                                     | 598.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 14   | 7      | 2-NRV-163     | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP #3 TO PRESSURIZER SPRAY CONTROL 4 AIR OPERATED GLOBE VALVE | CONTAINMENT | 612.00      | LOWER CONT, QUAD NO. 3 - AT THE 612 ELEVATION PLATFORM, ON THE CRANEWALL SIDE OF REACTOR COOLANT PUMP #2-PP-45-3, 2 FEET ABOVE THE 612 EL           | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 15   | 7      | 2-NRV-164     | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP #4 TO PRESSURIZER SPRAY CONTROL 4 AIR OPERATED GLOBE VALVE | CONTAINMENT | 612.00      | LOWER CONT, QUAD NO. 3 - AT 612 PLATFORM ELEVATION, NEAR REACTOR COOLANT PUMP #2-PP-45-3, ON THE CRANEWALL SIDE OF THE WALKWAY                      | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Stephen Anagnostis

Print or Type Name

Signature

12/14/95

Date

I.C. Huang

Print or Type Name

Signature

1-15-96

Date



## SCREENING VERIFICATION DATA SHEET (SVDS)

|   | Eq. CI | Equip. ID No. | Rev No. | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|---|--------|---------------|---------|--|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 1 | 7      | 2-SV-121      | 0       | 1/2-DRA-300 SAMPLE HEAT EXCHANGERS CCW RETURN HEADER SAFETY VALVE                  | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM - 10 FT NW OF THE VESTIBULE DOORWAY | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 2 | 7      | 2-CRV-410     | 0       | 1/ DEMINERALIZED MAKEUP WATER TO CCW SURGE TANK 'A' 1.5 AIR OPERATED SHUTOFF VALVE | AUXILIARY | 650.00      |   | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 3 | 7      | 2-CRV-411     | 0       | 1/ DEMINERALIZED MAKEUP WATER TO CCW SURGE TANK 'B' 1.5 AIR OPERATED SHUTOFF VALVE | AUXILIARY | 650.00      | HALLWAY   | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas

Print or Type Name



Signature

12/16/95

Date

I.C. Huang

Print or Type Name



Signature

1-15-96

Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|---|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 1    | 7      | 2-DCR-301     | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #1 BLOWDOWN SAMPLE DSR-301 CONTAINMENT ISOLATION VALVE           | AUXILIARY | 591.00      | VESTIBULE - ON THE EAST END, BELOW THE PLATFORM GRATING  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 2    | 7      | 2-DCR-302     | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #2 BLOWDOWN SAMPLE DSR-302 CONTAINMENT ISOLATION VALVE           | AUXILIARY | 591.00      | VESTIBULE - ON THE EAST END, BELOW THE PLATFORM GRATING  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 3    | 7      | 2-DCR-303     | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #3 BLOWDOWN SAMPLE DSR-303 CONTAINMENT ISOLATION VALVE           | AUXILIARY | 591.00      | VESTIBULE - ON THE EAST END, BELOW THE PLATFORM GRATING  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 4    | 7      | 2-DCR-304     | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #4 BLOWDOWN SAMPLE DSR-304 CONTAINMENT ISOLATION VALVE           | AUXILIARY | 591.00      | VESTIBULE - ON THE EAST END, BELOW THE PLATFORM GRATING  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 5    | 7      | 2-DCR-310     | 0      | BLOWDOWN / STEAM GENERATOR OME-3-1 BLOWDOWN CONTAINMENT ISOLATION VALVE                             | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM - IN THE NORTHEAST SECTION OF THE ROOM, 20 FEET EAST OF STARTUP BLOWDOWN FLASHTANK #2-TK-49, ON THE 601 ELEVATION      | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 6    | 7      | 2-DCR-320     | 0      | BLOWDOWN / STEAM GENERATOR OME-3-2 BLOWDOWN CONTAINMENT ISOLATION VALVE                             | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM - IN THE NORTHEAST SECTION OF THE ROOM, 20 FEET SOUTHEAST OF STARTUP BLOWDOWN FLASHTANK #2-TK-49, ON THE 601 ELEVATION | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 7    | 7      | 2-DCR-330     | 0      | BLOWDOWN / STEAM GENERATOR OME-3-3 BLOWDOWN CONTAINMENT ISOLATION VALVE                             | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM - 15 FEET NORTHEAST OF STARTUP BLOWDOWN FLASHTANK #2-TK-49, ON THE 601 ELEVATION PLATFORM                              | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 8    | 7      | 2-DCR-340     | 0      | BLOWDOWN / STEAM GENERATOR OME-3-4 BLOWDOWN CONTAINMENT ISOLATION VALVE                             | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM - IN THE NW PART OF THE ROOM, 20 FT. FROM STARTUP BLOWDOWN FLASHTANK #2-TK-49, ON THE 601 ELEVATION PLATFORM           | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 9    | 7      | 2-GCR-314     | 0      | NITROGEN (REACTOR PLANT SERVICE) / NITROGEN SUPPLY TO ACCUMULATOR TANKS CONTAINMENT ISOLATION VALVE | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM - IN THE NORTHEAST REGION OF THE ROOM, ON THE EAST SIDE OF THE 601 ELEVATION PLATFORM                                  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 10   | 7      | 2-IRV-260     | 0      | SAFETY INJECTION / SAFETY INJECTION TEST LINE SHUTOFF VALVE   | AUXILIARY | 587.00      | S SAFETY INJ PMP RM - IN THE SOUTHEAST REGION OF THE ROOM, 6 FEET SOUTHEAST OF SOUTH SAFETY INJECTION PUMP #2-PP-26S, NEAR THE SOUTH WALL            | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 11   | 7      | 2-MCR-251     | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #1 STEAM SAMPLE MSX-101 CONTAINMENT ISOLATION VALVE              | AUXILIARY | 591.00      | VESTIBULE - IN THE SOUTHEAST REGION OF THE ROOM, ON THE 596 ELEVATION PLATFORM, UNDER THE 601 ELEVATION PLATFORM                                     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 12   | 7      | 2-MCR-252     | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #2 STEAM SAMPLE MSX-102 CONTAINMENT ISOLATION VALVE              | AUXILIARY | 591.00      | VESTIBULE - IN THE SOUTHEAST REGION OF THE ROOM, ON THE 596 ELEVATION PLATFORM, UNDER THE 601 ELEVATION PLATFORM                                     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 13   | 7      | 2-MCR-253     | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #3 STEAM SAMPLE MSX-103 CONTAINMENT ISOLATION VALVE              | AUXILIARY | 591.00      | VESTIBULE - IN THE SOUTHEAST REGION OF THE ROOM, ON THE 596 ELEVATION PLATFORM, UNDER THE 601 ELEVATION PLATFORM                                     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/16/95  
Date

J.C. Huang  
Print or Type Name

*J Chen Huang*  
Signature

1-15-96  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip ID No. | Rev No | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|--------------|--------|---|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 14   | 7      | 2-MCR-254    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #4 STEAM SAMPLE MSX-104 CONTAINMENT ISOLATION VALVE  | AUXILIARY | 591.00      | VESTIBULE - IN THE SOUTHEAST REGION OF THE ROOM, ON THE 596 ELEVATION PLATFORM, UNDER THE 601 ELEVATION PLATFORM                                     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 15   | 7      | 2-QRV-251    | 0      | CHARGING (CVCS) / CVCS CENTRIFUGAL CHARGING PUMPS DISCHARGE FLOW 3 AIR OPERATED CONTROL GLOBE VALVE                                       | AUXILIARY | 587.00      | RECIPROCATING CHARG PMP RM - IN THE NORTHEAST PART OF THE ROOM, 3' EAST OF THE NORTH END OF RECIPROCATING CHARGING PUMP #2-PP-49, 2 FEET ABOVE FLOOR | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 16   | 7      | 2-QRV-421    | 0      | BORON MAKEUP (CVCS) / SOUTH BORIC ACID FILTER TO CVCS CHARGING PUMPS AND SOUTH BORIC ACID BLENDER 1 AIR OPERATED FLOW CONTROL GLOBE VALVE | AUXILIARY | 587.00      | BORIC ACID STOR TANK AREA - IN THE SOUTHEAST REGION OF THE ROOM, 7' SOUTHEAST OF SOUTH BORIC ACID STORAGE TANK #2-TK-12S, 2 FEET ABOVE THE FLOOR     | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 17   | 7      | 2-QRV-430    | 0      | BORON MAKEUP (CVCS) / SOUTH BORIC ACID STORAGE TANK TK-12S 2 AIR OPERATED INLET FLOW CONTROL GLOBE VALVE                                  | AUXILIARY | 587.00      | BORIC ACID STOR TANK AREA - IN THE SOUTHEAST REGION OF THE ROOM, 1' SOUTHEAST OF SOUTH BORIC ACID STORAGE TANK #2-TK-12S, 2 FEET ABOVE THE FLOOR     | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 18   | 7      | 2-SV-101     | 0      | NITROGEN (REACTOR PLANT SERVICE) / NITROGEN SUPPLY HEADER TO ACCUMULATOR TANKS SAFETY VALVE   | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM - 20 FEET SOUTHEAST OF THE BLOWDOWN TANK, ABOVE GRATING, NEAR THE CONTAINMENT WALL                                     | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 19   | 7      | 2-SV-166     | 0      | CCW / POST-ACCIDENT SAMPLE HEAT EXCHANGER CCW RETURN HEADER SAFETY VALVE  | AUXILIARY | 587.00      | NUCLEAR SAMPLING RM - ON THE UNIT 2 SAMPLE RACK 'B', ON THE EAST WALL, AT THE SOUTH END OF THE RACK, 8 FEET ABOVE THE FLOOR                          | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 20   | 7      | 2-SV-56      | 0      | LETDOWN (CVCS) / CVCS CHARGING PUMPS SUCTION HEADER SAFETY VALVE  | AUXILIARY | 587.00      | RECIPROCATING CHARG PMP RM - SOUTHEAST OF THE PUMP, 9 FEET ABOVE THE FLOOR   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 21   | 7      | 2-SV-60      | 0      | COMPONENT COOLING WATER / COMPONENT COOLING WATER SURGE TANK TK-37 SAFETY VALVE   | AUXILIARY | 650.00      | 650 HALLWAY - ON TOP OF THE COMPONENT COOLING WATER SURGE TANK   | 650.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 22   | 7      | 2-SV-65      | 0      | CCW / LETDOWN HEAT EXCHANGER HE-14 CCW OUTLET SAFETY VALVE  | AUXILIARY | 633.00      | 633 HALLWAY - 5 FEET EAST OF FREIGHT ELEVATOR SOUTH DOOR, NEAR THE EAST WALL, 12 FEET ABOVE THE FLOOR  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 23   | 7      | 2-SV-66      | 0      | CCW / CCW TO SOUTH BORIC ACID EVAP DRUM 12-HE-19-DS SAFETY VALVE  | AUXILIARY | 587.00      | 587 HALLWAY - NORTH OF THE SOUTH BORIC ACID EVAPORATOR ROOM DOORWAY, 597 ELEVATION P' ATFORM, ON THE WEST WALL                                       | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 24   | 7      | 2-SV-67-1    | 0      | CCW / FAILED NUCLEAR FUEL DETECTOR SAMPLE HEAT EXCHANGER QC-501-13 CCW OUTLET SAFETY VALVE  | AUXILIARY | 587.00      | REFUEL WTR PURIFICATION PMP RM - 7 FEET NORTH OF THE DOORWAY, ON THE WEST WALL, 6 FEET ABOVE THE FLOOR   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 25   | 7      | 2-SV-67-2    | 0      | CCW / NUCLEAR SAMPLING SAMPLE RACK A CCW RETURN HEADER SAFETY VLVE  | AUXILIARY | 587.00      | NUCLEAR SAMPLING RM - ON UNIT 2 SAMPLE RACK A LOCATED IN THE NORTHWEST AREA OF THE ROOM, NORTHERN END OF THE RACK                                    | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 26   | 7      | 2-SV-67-3    | 0      | CCW / NUCLEAR SAMPLING SAMPLE RACK B CCW RETURN HEADER SAFETY VALVE   | AUXILIARY | 587.00      | NUCLEAR SAMPLING RM - ON UNIT 2 SAMPLE RACK B LOCATED ON THE EAST END WALL, SOUTHERN END OF THE RACK   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

Signature

Date

I.C. Huang  
Print or Type Name

Signature

Date

12/16/95

I Chen Huang

1-15-96

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|--------------|--------|--|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 27   | 7      | 2-SV-72W     | 0      | COMPONENT COOLING WATER / WEST RESIDUAL HEAT REMOVAL HEAT EXCHANGER COMPONENT COOLING WATER OUTLET SAFETY VALVE    | AUXILIARY | 633.00      | 633 HALLWAY - 25 FEET SOUTH OF THE FREIGHT ELEVATOR SOUTH DOOR, ABOVE THE STAIRWAY ENCLOSURE AT 645 ELEVATION, AT THE EAST WALL   | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 28   | 7      | 2-SV-96      | 0      | REFUELING WATER STORAGE TANK SUPPLY / SAFETY INJECTION PUMPS SUCTION HEADER SAFETY VALVE                           | AUXILIARY | 587.00      | S SAFETY INJ PMP RM - IN THE NORTHEAST REGION OF THE ROOM   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 29   | 7      | 2-SV-98N     | 0      | SAFETY INJECTION / NORTH SAFETY INJECTION PUMP PP-26N DISCHARGE HEADER SAFETY VALVE                                | AUXILIARY | 587.00      | N SAFETY INJ PMP RM - EAST OF NORTH SAFETY INJECTION PUMP #2-PP-26N, 6 FEET ABOVE THE FLOOR   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 30   | 7      | 2-SV-98S     | 0      | SAFETY INJECTION / SOUTH SAFETY INJECTION PUMP PP-26S DISCHARGE HEADER SAFETY VALVE                                | AUXILIARY | 587.00      | S SAFETY INJ PMP RM - SOUTHEAST REGION OF THE ROOM  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 31   | 8      | 2-CCM-451    | 0      | COMPONENT COOLING WATER / RC PUMPS BEARING OIL COOLERS CCW RETURN HEADER TRAIN 'A' CONTAINMENT ISOLATION VALVE     | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM - IN THE MIDDLE EAST REGION OF THE ROOM, 20' S-E OF STEAM GENERATOR STARTUP BLOWDOWN FLASHTANK #2-TK-49, 5' ABOVE THE 596' ELEV. PLATFORM | 609.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 32   | 8      | 2-CCM-452    | 0      | COMPONENT COOLING WATER / RC PUMPS BEARING OIL COOLERS CCW RETURN HEADER TRAIN 'B' CONTAINMENT ISOLATION VALVE     | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM - 12 FEET SOUTHEAST OF STEAM GENERATOR STARTUP BLOWDOWN FLASHTANK #2-TK-49, 4 FEET ABOVE THE 596 ELEVATION PLATFORM                       | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 33   | 8      | 2-CCM-453    | 0      | COMPONENT COOLING WATER / RCP THERMAL BARRIER COMPONENT COOLING WATER OUTLET TRAIN 'A' CONTAINMENT ISOLATION VALVE | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM - 30 FEET SOUTHEAST OF STEAM GENERATOR STARTUP BLOWDOWN FLASHTANK #2-TK-49, ON THE 596 ELEVATION PLATFORM                                 | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 34   | 8      | 2-CCM-454    | 0      | COMPONENT COOLING WATER / RC PUMPS THERMAL BARRIER CCW RETURN HEADER TRAIN 'B' CONTAINMENT ISOLATION VALVE         | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM - 30 FEET SOUTH OF STEAM GENERATOR STARTUP BLOWDOWN FLASHTANK #2-TK-49, ON THE 596 ELEVATION PLATFORM                                     | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 35   | 8      | 2-CCM-458    | 0      | COMPONENT COOLING WATER / COMPONENT COOLING WATER TO REACTOR COOLANT PUMPS TRAIN 'A' CONTAINMENT ISOLATION VALVE   | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM - 3 FEET SOUTH OF STEAM GENERATOR STARTUP BLOWDOWN FLASHTANK #2-TK-49, ON THE EAST SIDE OF THE PIPE TUNNEL                                | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 36   | 8      | 2-CCM-459    | 0      | COMPONENT COOLING WATER / COMPONENT COOLING WATER TO REACTOR COOLANT PUMPS TRAIN 'B' CONTAINMENT ISOLATION VALVE   | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM - 6 FEET SOUTH OF STEAM GENERATOR STARTUP BLOWDOWN FLASHTANK #2-TK-49, ON THE EAST EDGE OF THE PIPE TUNNEL                                | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 37   | 8      | 2-CMO-429    | 0      | COMPONENT COOLING WATER / WEST RHR HEAT EXCHANGER HE-17W CCW OUTLET SHUTOFF VALVE                                  | AUXILIARY | 633.00      | 633 HALLWAY - 25 FEET SOUTH OF THE FREIGHT ELEVATOR SOUTH DOOR, AT THE STAIR ENCLOSURE AT 645 EL., NEAR EAST WALL 15 FEET UP  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/16/95  
Date

I.C. Huang  
Print or Type Name

*I.C. Huang*  
Signature

1-15-96  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No. | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|---------|---|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 38   | 8      | 2-FMO-221     | 0       | AUXILIARY FEEDWATER / TURBINE DRIVEN AUXILIARY FEED PUMP PP-4 DISCHARGE TO STEAM GENERATOR OME-3-2 4 MOTOR OPERATED CONTROL VALVE       | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM - IN THE SOUTH PART OF THE ROOM, NEAR THE PIPE TUNNEL, 30 FEET SOUTH OF STARTUP BLOWDOWN FLASHTANK #2-TK-49, NEAR THE FLOOR | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 39   | 8      | 2-FMO-222     | 0       | AUXILIARY FEEDWATER / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP PP-3E SUPPLY TO STEAM GENERATOR OME-3-2 4 MOTOR OPERATED CONTROL VALVE | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM - IN THE SOUTH PART OF THE ROOM, NEAR THE PIPE TUNNEL, 35 FEET SOUTH OF STARTUP BLOWDOWN FLASHTANK #2-TK-49, NEAR THE FLOOR | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 40   | 8      | 2-FMO-231     | 0       | AUXILIARY FEEDWATER / TURBINE DRIVEN AUXILIARY FEED PUMP SUPPLY TO STEAM GENERATOR OME-3-3 4 MOTOR OPERATED CONTROL VALVE               | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM - IN THE SOUTH END OF THE ROOM, NEAR THE PIPE TUNNEL, 40 FEET SOUTH OF STARTUP BLOWDOWN FLASHTANK #2-TK-49, NEAR THE FLOOR  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 41   | 8      | 2-FMO-232     | 0       | AUXILIARY FEEDWATER / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP PP-3E SUPPLY TO STEAM GENERATOR OME-3-3 4 MOTOR OPERATED CONTROL VALVE | AUXILIARY | 591.00      | STARTUP BLOWDOWN FLASHTANK RM - IN THE SOUTH END OF THE ROOM, NEAR THE PIPE TUNNEL, 45 FEET SOUTH OF STARTUP BLOWDOWN FLASHTANK #2-TK-49, NEAR THE FLOOR  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 42   | 8      | 2-ICM-260     | 0       | SAFETY INJECTION / NORTH SAFETY INJECTION PUMP PP-26N DISCHARGE CONTAINMENT ISOLATION VALVE   | AUXILIARY | 587.00      | N SAFETY INJ PMP RM - ON THE NORTH WALL, 3 FEET NORTH OF NORTH SAFETY INJECTION PUMP #2-PP-26N, 3 FEET ABOVE THE FLOOR                                    | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 43   | 8      | 2-ICM-265     | 0       | SAFETY INJECTION / SOUTH SAFETY INJECTION PUMP PP-26S DISCHARGE CONTAINMENT ISOLATION VALVE   | AUXILIARY | 587.00      | S SAFETY INJ PMP RM - IN THE SOUTHEAST REGION OF THE ROOM, 3 FEET SOUTHEAST OF SOUTH SAFETY INJECTION PUMP #2-PP-26S, ON THE EAST WALL                    | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 44   | 8      | 2-IMO-261     | 0       | REFUELING WATER STORAGE TANK SUPPLY / REFUELING WATER STORAGE TANK TK-33 SUPPLY TO SAFETY INJECTION PUMPS SHUTOFF VALVE                 | AUXILIARY | 587.00      | S SAFETY INJ PMP RM - IN THE NORTHEAST CORNER OF THE ROOM, 3' NORTHEAST OF SOUTH SAFETY INJECTION PUMP #2-PP-26S, 3 FEET ABOVE THE FLOOR                  | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 45   | 8      | 2-IMO-262     | 0       | REFUELING WATER STORAGE TANK SUPPLY / SAFETY INJECTION PUMPS RECIRC TO REFUELING WATER STORAGE TANK TK-33 TRAIN 'A' SHUTOFF VALVE       | AUXILIARY | 587.00      | N SAFETY INJ PMP RM - 5 FEET NORTHEAST OF NORTH SAFETY INJECTION PUMP #2-PP-26N, ON THE EAST WALL, 3 FEET ABOVE THE FLOOR                                 | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 46   | 8      | 2-IMO-263     | 0       | REFUELING WATER STORAGE TANK SUPPLY / SAFETY INJECTION PUMPS RECIRC TO REFUELING WATER STORAGE TANK TK-33 TRAIN 'B' SHUTOFF VALVE       | AUXILIARY | 587.00      | N SAFETY INJ PMP RM - ON THE EAST WALL, 3 FEET EAST OF NORTH SAFETY INJECTION PUMP #2-PP-26N, 4 FEET ABOVE THE FLOOR                                      | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 47   | 8      | 2-IMO-270     | 0       | SAFETY INJECTION / SAFETY INJECTION PUMPS DISCHARGE CROSSTIE TRAIN 'A' SHUTOFF VALVE  | AUXILIARY | 587.00      | N SAFETY INJ PMP RM - IN THE SOUTHEAST PART OF THE ROOM, 5 FEET SOUTHEAST OF NORTH SAFETY INJECTION PUMP #2-PP-26N, 5 FEET ABOVE THE FLOOR                | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/16/95  
Date

I.C. Huang  
Print or Type Name

*I.C. Huang*  
Signature

1-15-96  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|--|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 48   | 8      | 2-IMO-275     | 0      | SAFETY INJECTION / SAFETY INJECTION PUMPS DISCHARGE CROSSTIE TRAIN 'B' SHUTOFF VALVE   | AUXILIARY | 587.00      | S SAFETY INJ PMP RM - 2 FEET SOUTH OF SOUTH SAFETY INJECTION PUMP #2-PP-26S, AGAINST THE SOUTH WALL, 3 FEET ABOVE THE FLOOR                            | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 49   | 8      | 2-IMO-360     | 0      | SAFETY INJECTION / SAFETY INJECTION PUMPS TO CVCS CHARGING PUMPS SUCTION HEADER CROSSTIE SHUTOFF VALVE                                     | AUXILIARY | 587.00      | W CENTRIFUGAL CHARG PMP RM - IN THE SOUTHWEST PART OF THE ROOM, 5 FEET SOUTHWEST OF WEST CENTRIFUGAL CHARGING PUMP #2-PP-50W, 3 FEET ABOVE THE FLOOR   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 50   | 8      | 2-IMO-361     | 0      | SAFETY INJECTION / SAFETY INJECTION PUMPS SUCTION TO AND FROM CHARGING PUMPS SUCTION TRAIN 'A' SHUTOFF VALVE                               | AUXILIARY | 587.00      | N SAFETY INJ PMP RM - IN THE SOUTHEAST CORNER OF THE ROOM, 3 FEET SOUTHEAST OF NORTH SAFETY INJECTION PUMP #2-PP-26N                                   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 51   | 8      | 2-IMO-362     | 0      | SAFETY INJECTION / SAFETY INJECTION PUMPS SUCTION TO AND FROM CHARGING PUMPS SUCTION TRAIN 'B' SHUTOFF VALVE                               | AUXILIARY | 587.00      | N SAFETY INJ PMP RM - IN THE SOUTHEAST CORNER OF THE ROOM, 2' SOUTHEAST OF NORTH SAFETY INJECTION PUMP #2-PP-26N, 2 FEET ABOVE THE FLOOR               | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 52   | 8      | 2-IMO-390     | 0      | RESIDUAL HEAT REMOVAL / REFUELING WATER STORAGE TANK TK-33 TO RESIDUAL HEAT REMOVAL PUMPS SUCTION SHUTOFF VALVE                            | AUXILIARY | 591.00      | VESTIBULE - IN THE NORTHWEST PART OF THE ROOM, 10 FEET NORTHEAST OF WEST VALVE ENCLOSURE TANK #2-TK-86   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 53   | 8      | 2-IMO-910     | 0      | REFUELING WATER STORAGE TANK SUPPLY / REFUELING WATER STORAGE TANK TO CVCS CHARGING PUMPS SUCTION HEADER TRAIN 'A' SHUTOFF VALVE           | AUXILIARY | 587.00      | RECIPROCATING CHARG PMP RM - IN THE SOUTHWEST CORNER OF THE ROOM, 3 FEET SOUTHWEST OF RECIPROCATING CHARGING PUMP #2-PP-49, 2 FEET ABOVE THE FLOOR     | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 54   | 8      | 2-IMO-911     | 0      | REFUELING WATER STORAGE TANK SUPPLY / REFUELING WATER STORAGE TANK TO CVCS CHARGING PUMPS SUCTION HEADER TRAIN 'B' SHUTOFF VALVE           | AUXILIARY | 587.00      | E CENTRIFUGAL CHARG PMP ROOM - IN THE SOUTHEAST PART OF THE ROOM, 2 FEET SOUTHEAST OF EAST CENTRIFUGAL CHARGING PUMP #2-PP-50E, 2 FEET ABOVE THE FLOOR | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 55   | 8      | 2-QCM-350     | 0      | REACTOR COOLANT PUMP SEAL WATER INJLEAKOFF / REACTOR COOLANT PUMP SEAL WATER RETURN TRAIN 'B' CONTAINMENT ISOLATION 4 MOTOR OPERATED VALVE | AUXILIARY | 591.00      | VESTIBULE - AT THE 601 ELEVATION PLATFORM, 10 FEET SOUTH OF WEST VALVE ENCLOSURE TANK #2-TK-86   | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 56   | 8      | 2-QMO-200     | 0      | CHARGING (CVCS) / CVCS CHARGING TO REGENERATIVE HEAT EXCHANGER TRAIN 'A' SHUTOFF VALVE   | AUXILIARY | 587.00      | RECIPROCATING CHARG PMP RM - IN THE SOUTHEAST CORNER OF THE ROOM, 3 FEET SOUTHEAST OF RECIPROCATING CHARGING PUMP #2-PP-49, 2 FEET ABOVE THE FLOOR     | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 57   | 8      | 2-QMO-201     | 0      | CHARGING (CVCS) / CVCS CHARGING TO REGENERATIVE HEAT EXCHANGER TRAIN 'B' SHUTOFF VALVE   | AUXILIARY | 587.00      | RECIPROCATING CHARG PMP RM - IN THE SOUTHEAST CORNER OF THE ROOM, 3 FEET SOUTHEAST OF RECIPROCATING CHARGING PUMP #2-PP-49, 3 FEET ABOVE THE FLOOR     | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

Signature

Date

I.C. Huang  
Print or Type Name

Signature

Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|--|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 58   | 8      | 2-QMO-225     | 0      | CHARGING (CVCS) / EAST CENTRIFUGAL CHARGING PUMP MINI-FLOW TO RCP SEAL WATER HEAT EXCHANGER HE-11 2 MOTOR OPERATED SHUTOFF VALVE | AUXILIARY | 587.00      | E CENTRIFUGAL CHARG PMP ROOM - IN THE SOUTHWEST AREA OF THE ROOM, 3 FEET SOUTHWEST OF EAST CENTRIFUGAL CHARGING PUMP #2-PP-50E, 2 FEET ABOVE THE FLOOR | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 59   | 8      | 2-QMO-226     | 0      | CHARGING (CVCS) / WEST CENTRIFUGAL CHARGING PUMP MINI-FLOW TO RCP SEAL WATER HEAT EXCHANGER HE-11 2 MOTOR OPERATED SHUTOFF VALVE | AUXILIARY | 587.00      | W CENTRIFUGAL CHARG PMP RM - IN THE SOUTHWEST CORNER OF THE ROOM, 2' SOUTHWEST OF WEST CENTRIFUGAL CHARGING PUMP #2-PP-50W, 4 FEET ABOVE THE FLOOR     | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 60   | 8      | 2-QMO-420     | 0      | BORON MAKEUP (CVCS) / EMERGENCY BORATION TO CVCS CHARGING PUMPS SUCTION HEADER SHUTOFF VALVE                                     | AUXILIARY | 587.00      | BORIC ACID STOR TANK AREA - IN THE SOUTHEAST REGION OF THE ROOM, 5 FEET EAST OF SOUTH BORIC ACID STORAGE TANK #2-TK-12S                                | 587.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 61   | 8      | 2-WMO-712     | 0      | ESSENTIAL SERVICE WATER / EAST CONTAINMENT SPRAY HEAT EXCHANGER HE-18E ESSENTIAL SERVICE WATER INLET SHUTOFF VALVE               | AUXILIARY | 633.00      | 633 HALLWAY - 30 FEET EAST OF THE UNIT 2 LETDOWN HEAT EXCHANGER ROOM'S DOORWAY, ON THE EAST WALL   | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |
| 62   | 8      | 2-WMO-716     | 0      | ESSENTIAL SERVICE WATER / WEST CONTAINMENT SPRAY HEAT EXCHANGER ESSENTIAL SERVICE WATER INLET SHUTOFF VALVE                      | AUXILIARY | 633.00      | 633 HALLWAY - 10 FEET EAST OF THE UNIT 2 LETDOWN HEAT EXCHANGER ROOM'S DOORWAY, INSIDE A FENCED-IN AREA  | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

George G. Thomas  
Print or Type Name

*George G. Thomas*  
Signature

12/16/95  
Date

I.C. Huang  
Print or Type Name

*I.C. Huang*  
Signature

1-15-96  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq Cl | Equip.ID No. | Rev No | System/Equipment Description  | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|-------|--------------|--------|---|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 1    | 14    | 2-BATT-AB-SH | 0      | 250VDC DISTRIBUTION / PLANT BATTERY BATT-AB AMMETER SHUNT   | AUXILIARY | 609.00      | CRID INVERTER AREA - 2 FEET SOUTH OF CRID INVERTER III, ON THE WEST SIDE OF THE DIVIDING ROOM WALL, 5 FEET ABOVE THE FLOOR              | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 2    | 14    | 2-BATT-CD-SH | 0      | 250VDC DISTRIBUTION / PLANT BATTERY BATT-CD AMMETER SHUNT CABINET                                 | AUXILIARY | 626.00      | CD BATTERY EQUIP AREA - IN THE NORTH END OF THE HALLWAY, 3 FEET EAST OF 250VDC TRAIN 'A' TRANSFER PANEL #2-TDCD, 5 FEET ABOVE THE FLOOR | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 3    | 14    | 2-BATT-N-SH  | 0      | 250VDC CONTROL AND I/ METERING SHUNT  | AUXILIARY | 633.00      | 633 HALLWAY -   | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 4    | 14    | 2-BC-AB-SH   | 0      | 250VDC DISTRIBUTION / PLANT BATTERY CHARGER AMMETER BC-AB SHUNT CABINET                           | AUXILIARY | 609.00      | CRID INVERTER AREA - 2 FEET SOUTH OF CRID INVERTER III, ON THE WEST SIDE OF THE DIVIDING ROOM WALL, 6 FEET ABOVE THE FLOOR              | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 5    | 14    | 2-BC-CD-SH   | 0      | 250VDC DISTRIBUTION / PLANT BATTERY CHARGER BC-CD SHUNT CABINET                                   | AUXILIARY | 626.00      | CD BATTERY EQUIP AREA - IN THE NORTH END OF THE HALLWAY, 3 FEET EAST OF 250VDC TRAIN 'A' TRANSFER PANEL #2-TDCD, 3 FEET ABOVE THE FLOOR | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 6    | 14    | 2-BCTC-AB    | 0      | 250VDC DISTRIBUTION / PLANT BATTERY CHARGERS BC-AB1 AND BC-AB2 TRANSFER SWITCH CABINET            | AUXILIARY | 613.00      | 4KV ROOM - MEZZANINE AREA   | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 7    | 14    | 2-BCTC-CD    | 0      | 250VDC DISTRIBUTION / PLANT BATTERY CHARGERS BC-CD1 AND BC-CD2 TRANSFER CABINET                   | AUXILIARY | 626.00      | CD BATTERY EQUIP AREA   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 8    | 14    | 2-CCV-AB     | 0      | 250VDC DISTRIBUTION / 250VDC TRAIN 'B' CRITICAL SOLENOID VALVES DISTRIBUTION PANEL                | AUXILIARY | 633.00      | CONTROL ROOM - IN THE SOUTHWEST CORNER OF THE ROOM, ON THE WEST WALL  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 9    | 14    | 2-CCV-CD     | 0      | 250VDC DISTRIBUTION / 250VDC TRAIN 'A' CRITICAL SOLENOID VALVES DISTRIBUTION PANEL                | AUXILIARY | 633.00      | CONTROL ROOM - IN THE SOUTHWEST CORNER OF THE ROOM, ON THE WEST WALL  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 10   | 14    | 2-CRAB       | 0      | 250VDC DISTRIBUTION / 250VDC CONTROL ROOM DISTRIBUTION PANEL CRAB                                 | AUXILIARY | 633.00      | CONTROL ROOM - IN THE MIDDLE EAST REGION OF THE ROOM, ON THE EAST WALL  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 11   | 14    | 2-CRCD       | 0      | 250VDC DISTRIBUTION / POWER PANEL   | AUXILIARY | 633.00      | CONTROL ROOM - IN THE NORTHWEST PART OF THE ROOM, ON THE WEST WALL  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 12   | 14    | 2-CRID-I     | 0      | 120V CONTROL ROOM IN / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION CHANNEL I DISTRIBUTION PANEL   | AUXILIARY | 633.00      | CONTROL ROOM - IN THE SOUTHWEST CORNER OF THE ROOM  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 13   | 14    | 2-CRID-II    | 0      | 120V AC DISTRIBUTION / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION CHANNEL II DISTRIBUTION PANEL  | AUXILIARY | 633.00      | CONTROL ROOM - IN THE SOUTHWEST CORNER OF THE ROOM, ON THE WEST WALL, 5 FEET ABOVE THE FLOOR  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 14   | 14    | 2-CRID-III   | 0      | 120V CONTROL ROOM IN / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION CHANNEL III DISTRIBUTION PANEL | AUXILIARY | 633.00      | CONTROL ROOM - IN THE SOUTHWEST CORNER OF THE ROOM, ON THE WEST WALL  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Stephen Anagnostis  
Print or Type Name

Signature

Date

I.C. Huang  
Print or Type Name

Signature

Date



## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|--|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 15   | 14     | 2-CRID-IV     | 0      | 120V CONTROL ROOM IN / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION CHANNEL IV DISTRIBUTION PANEL | AUXILIARY | 633.00      | CONTROL ROOM - IN THE SOUTHWEST CORNER OF THE ROOM, ON THE WEST WALL, ON CONTROL ROOM SOUTHWEST INSTRUMENT/RELAY RACK #2-SWRR                   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 16   | 14     | 2-DCN         | 0      | 250VDC CONTROL AND I / 250VDC POWER PANEL  | AUXILIARY | 633.00      | 633 HALLWAY - IN THE SOUTHEAST CORNER OF THE ROOM, NEAR SOUTH WALL  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 17   | 14     | 2-MCAB        | 0      | 250VDC DISTRIBUTION / 250VDC DISTRIBUTION PANEL MCAB   | AUXILIARY | 609.00      | AB BATTERY EQUIP AREA - IN THE MIDDLE SOUTH REGION OF THE ROOM  | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 18   | 14     | 2-MCCD        | 0      | 250VDC DISTRIBUTION / 250VDC DISTRIBUTION POWER PANEL  | AUXILIARY | 626.00      | CD BATTERY EQUIP AREA - IN THE NORTH END OF THE HALLWAY, ON THE WEST WALL, 10 FEET SOUTHWEST OF THE ROOM'S ENTRANCE DOORWAY                     | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 19   | 14     | 2-MDAB        | 0      | 250VDC DISTRIBUTION / 250 VDC POWER PANEL  | AUXILIARY | 609.00      | AB BATTERY EQUIP AREA - IN THE MIDDLE SOUTH PART OF THE ROOM, ON THE SOUTH WALL   | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 20   | 14     | 2-MDCD        | 0      | 250VDC DISTRIBUTION / 250VDC DISTRIBUTION PANEL MDCD   | AUXILIARY | 626.00      | CD BATTERY EQUIP AREA - IN THE NORTH END OF THE HALLWAY, ON THE WEST WALL, 10 FEET SOUTHWEST OF THE ROOM'S ENTRANCE DOORWAY                     | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 21   | 14     | 2-SSV-A1      | 0      | 250VDC DISTRIBUTION / 250VDC TRAIN 'A' NUCLEAR SAMPLING FEEDER PANEL #1                          | AUXILIARY | 587.00      | NUCLEAR SAMPLING RM - IN THE MIDDLE OF THE ROOM, ON THE NORTH END OF NUCLEAR SAMPLING SYSTEM CONTROL PANEL #2-SCP, 6 FEET ABOVE THE FLOOR       | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 22   | 14     | 2-SSV-A2      | 0      | 250VDC DISTRIBUTION / 250VDC NUCLEAR SAMPLING FEEDER PANEL #2                                    | AUXILIARY | 587.00      | NUCLEAR SAMPLING RM - IN THE MIDDLE OF THE ROOM, ON THE NORTH END NUCLEAR SAMPLING SYSTEM SAMPLING CONTROL PANEL #2-SCP, 3 FEET ABOVE THE FLOOR | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 23   | 14     | 2-SSV-B       | 0      | 250VDC DISTRIBUTION / POWER PANEL  | AUXILIARY | 587.00      | NUCLEAR SAMPLING RM - IN THE MIDDLE SOUTHEAST REGION OF THE ROOM, ON THE SOUTH END OF THE ROOM P  | 587.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 24   | 14     | 2-TDAB        | 0      | 250VDC DISTRIBUTION / 250 VDC POWER PANEL  | AUXILIARY | 609.00      | AB BATTERY EQUIP AREA - IN THE SOUTHEAST REGION OF THE ROOM, 6 FEET SOUTH OF THE ENTRANCE DOOR  | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 25   | 14     | 2-TCDD        | 0      | 250VDC DISTRIBUTION / POWER PANEL, TRAIN A TRANSFER CABINET                                      | AUXILIARY | 626.00      | CD BATTERY EQUIP AREA - AT THE NORTH END OF THE HALLWAY, ON THE WEST WALL, 10 FEET SW OF THE ROOM   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 26   | 14     | 2-VDAB-1      | 0      | 250VDC DISTRIBUTION / 250VDC VALVE DISTRIBUTION PANEL VDAB-1                                     | AUXILIARY | 633.00      | CONTROL ROOM - BEHIND CONDENSATE CONTROL PUMP PANEL #2-CP   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 27   | 14     | 2-VDAB-2      | 0      | 250VDC DISTRIBUTION / 250VDC VALVE DISTRIBUTION PANEL VDAB-2                                     | AUXILIARY | 633.00      | CONTROL ROOM - ON THE REAR SIDE OF CONDENSATE PUMP CONTROL PANEL #2-CP  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 28   | 14     | 2-VDCCD-1     | 0      | 250VDC DISTRIBUTION / 250VDC VALVE DISTRIBUTION PANEL VDCCD-1                                    | AUXILIARY | 633.00      | CONTROL ROOM - NEAR THE REAR OF BORIC ACID CHARGING AND LETDOWN CONTROL PANEL #2-BA   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 29   | 14     | 2-VDCCD-2     | 0      | 250VDC DISTRIBUTION / 250VDC VALVE DISTRIBUTION PANEL VDCCD-2                                    | AUXILIARY | 633.00      | CONTROL ROOM - NEAR THE REAR OF BORIC ACID CHARGING AND LETDOWN CONTROL PANEL #2-BA   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 30   | 15     | 2-BATT-AB     | 0      | 250VDC DISTRIBUTION / PLANT BATTERY AB   | AUXILIARY | 609.00      | AB BATTERY EQUIP AREA - IN THE CENTER OF THE ROOM, 3 FEET NORTH OF THE ENTRANCE DOOR  | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | No          | Yes        | Yes          | No        |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Stephen Anagnostis  
Print or Type Name

Signature

Date

I.C. Huang  
Print or Type Name

Signature

Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq Cl | Equip ID No. | Rev No | System/Equipment Description                   | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|-------|--------------|--------|--|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 31   | 15    | 2-BATT-CD    | 0      | 250VDC DISTRIBUTION / PLATT BATTERY CD         | AUXILIARY | 626.00      | CD BATTERY EQUIP AREA - IN THE CENTER OF THE SOUTH END OF THE ROOM | 609.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | No          | Yes        | Yes          | No        |
| 32   | 15    | 2-BATT-N     | 0      | 250VDC CONTROL AND I / TRAIN 'N' PLANT BATTERY | AUXILIARY | 633.00      | 633 HALLWAY - 2-DCN  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Stephen Anagnostis  
Print or Type Name

Signature

Date

I.C. Huang  
Print or Type Name

Signature

Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip. ID No. | Rev No | System/Equipment Description                                 | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|---------------|--------|--|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 1    | 20     | 1-TSC-VO-07   | 0      | NONE / TSC COMPUTER INPUT/OUTPUT CABINET #07                 | AUXILIARY | 633.00      | HALLWAY, IN THE NW PART OF THE HALLWAY, 20' W OF CONT AUX SUBPANEL # 1-CAS  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 2    | 20     | 1-TSC-VO-09   | 0      | NONE / TSC COMPUTER INPUT/OUTPUT CABINET #9                  | AUXILIARY | 633.00      | HALLWAY, IN THE NW PART OF HALLWAY, 20' W OF CONT AUX SUBPANEL #1-CAS.      | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 3    | 20     | 1-TSC-VO-13   | 0      | NONE / TSC COMPUTER INPUT/OUTPUT CABINET #13                 | AUXILIARY | 633.00      | HALLWAY, IN THE NW PART OF HALLWAY, 20' W OF CONT AUX SUBPANEL #1-CAS.      | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 4    | 20     | 1-TSC-VO-15   | 0      | COMPUTER SUPPORT SYS / TSC COMPUTER INPUT/OUTPUT CABINET #15 | AUXILIARY | 633.00      | HALLWAY, IN THE NW PART OF THE HALLWAY, 20' W OF CONT. AUX SUBPANEL #1-CAS. | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Stephen Anagnostis  
Print or Type Name

Signature

12/14/95  
Date

Tom Huang  
Print or Type Name

Signature

1-15-96  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|--------------|--------|--|-----------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 1    | 20     | 2-CR         | 0      | MISCELLANEOUS EQUIPM / CONDENSATE PANEL REAR INSTRUMENT/RELAY RACK               | AUXILIARY | 633.00      | CONTROL ROOM - IN THE SOUTHWEST REGION OF THE ROOM, NEAR THE REAR OF CONDENSATE HEATER LEVEL CONTROL PANEL #2-C                                 | 633.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 2    | 20     | 2-EFR        | 0      | MISCELLANEOUS EQUIPM / EMERGENCY FIRE PANEL INSTRUMENT/RELAY RACK                | AUXILIARY | 633.00      | CONTROL ROOM - IN THE NORTHEAST REGION OF THE ROOM, NEAR THE REAR OF VENTILATION CONTROL PANEL #2-VS, 1 FOOT SOUTH OF THE DOOR                  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 3    | 20     | 2-GR-1       | 0      | MISCELLANEOUS EQUIPM / GENERATOR PANEL REAR INSTRUMENT/RELAY RACK #1             | AUXILIARY | 633.00      | CONTROL ROOM - IN THE NORTHWEST REGION OF THE ROOM, ON REAR SIDE OF MAIN GENERATOR CONTROL PANEL  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 4    | 20     | 2-GR-2       | 0      | MISCELLANEOUS EQUIPM / GENERATOR PANEL REAR INSTRUMENT/RELAY RACK #2             | AUXILIARY | 633.00      | CONTROL ROOM - IN THE MIDDLE WEST REGION OF THE ROOM, NEAR MAIN GENERATOR CONTROL PANEL #2-G, 5 FEET SOUTHWEST OF THE DOORWAY                   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 5    | 20     | 2-GRB        | 0      | MISCELLANEOUS EQUIPM / GENERATOR PANEL REAR INSTRUMENT/RELAY RACK 'B'            | AUXILIARY | 633.00      | CONTROL ROOM - IN THE MIDDLE WEST REGION OF THE ROOM, NEAR MAIN GENERATOR CONTROL PANEL #2-G, 7 FEET SOUTHWEST OF THE REAR PANEL ACCESS DOORWAY | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 6    | 20     | 2-GRC        | 0      | MISCELLANEOUS EQUIPM / GENERATOR PANEL REAR INSTRUMENT/RELAY RACK 'C'            | AUXILIARY | 633.00      | CONTROL ROOM - IN THE MIDDLE NORTHWEST REGION OF THE ROOM, ON THE REAR SIDE OF MAIN GENERATOR CONTROL PANEL #2-G, 9 FEET SOUTHWEST OF           | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 7    | 20     | 2-IV         | 0      | CONTAINMENT SPRAY / CONTAINMENT ISOLATION VALVE CONTROL PANEL                    | AUXILIARY | 633.00      | CONTROL PANEL   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 8    | 20     | 2-NSR        | 0      | MISCELLANEOUS EQUIPM / NUCLEAR INSTRUMENTATION SYSTEM REAR INSTRUMENT/RELAY RACK | AUXILIARY | 633.00      | CONTROL ROOM - IN THE MIDDLE REGION OF THE ROOM, ON THE REAR OF CONTROL PANEL #2-NIS-III, 15 FEET SOUTHEAST OF THE DOORWAY                      | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 9    | 20     | 2-RHR        | 0      | RESIDUAL HEAT REMOVA / RESIDUAL HEAT REMOVAL CONTROL PANEL                       | AUXILIARY | 633.00      | CONTROL ROOM - IN THE SOUTHEAST PART OF THE ROOM, 14 FEET SOUTHEAST OF THE UNIT SUPERVISOR'S DESK   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 10   | 20     | 2-SIS        | 0      | SAFETY INJECTION / SAFETY INJECTION CONTROL PANEL                                | AUXILIARY | 633.00      | CONTROL ROOM - IN THE SOUTHEAST PART OF THE ROOM, 13 FEET EAST OF THE UNIT SUPERVISOR'S DESK  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 11   | 20     | 2-SPY        | 0      | CONTAINMENT SPRAY / CONTAINMENT SPRAY CONTROL PANEL                              | AUXILIARY | 633.00      | CONTROL ROOM - IN THE MIDDLE EAST PART OF THE ROOM, 14 FEET NORTHEAST OF THE UNIT SUPERVISOR'S DESK   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 12   | 20     | 2-SR1        | 0      | MISCELLANEOUS EQUIPM / STATION AUXILIARIES REAR INSTRUMENT/RELAY RACK #1         | AUXILIARY | 633.00      | CONTROL ROOM - IN THE MIDDLE WEST REGION OF THE ROOM, ON THE REAR SIDE OF STATION AUXILIARIES CONTROL PANEL #2-SA                               | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 13   | 20     | 2-SR2        | 0      | MISCELLANEOUS EQUIPM / STATION AUXILIARIES REAR INSTRUMENT/RELAY RACK #2         | AUXILIARY | 633.00      | CONTROL ROOM - IN THE MIDDLE WEST REGION OF THE ROOM, NEAR THE REAR SIDE OF STATION AUXILIARIES CONTROL PANEL #2-SA                             | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Stephen Anagnostis  
Print or Type Name

Signature

Date

Tom Huang  
Print or Type Name

Signature

Date

1-15-96



## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq Cl | Equip ID No. | Rev No | System/Equipment Description   | Building  | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|-------|--------------|--------|--|-----------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 14   | 20    | 2-SR3        | 0      | MISCELLANEOUS EQUIPM / STATION AUXILIARIES REAR INSTRUMENT/RELAY RACK #3           | AUXILIARY | 633.00      | CONTROL ROOM - IN THE MIDDLE WEST REGION OF THE ROOM, NEAR THE REAR OF STATION AUXILIARIES CONTROL PANEL #2-SA                                     | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 15   | 20    | 2-SR4        | 0      | MISCELLANEOUS EQUIPM / STATION AUXILIARIES REAR INSTRUMENT/RELAY RACK #4           | AUXILIARY | 633.00      | CONTROL ROOM - IN THE MIDDLE NORTHWEST REGION OF THE ROOM, NEAR THE REAR OF CONTROL PANEL #2-SA  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 16   | 20    | 2-SSR        | 0      | MISCELLANEOUS EQUIPM / ENGINEER SAFETY SYSTEM REAR INSTRUMENT/RELAY RACK           | AUXILIARY | 633.00      | CONTROL ROOM - IN THE SOUTHEAST REGION OF THE ROOM, ON THE REAR SIDE OF SAFETY INJECTION CONTROL PANEL #2-SIS, NEAR THE EMERGENCY                  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 17   | 20    | 2-SWR        | 0      | MISCELLANEOUS EQUIPM / NUCLEAR INSTRUMENTAL SOURCE RANGE N21 INSTRUMENT/RELAY RACK | AUXILIARY | 633.00      | CONTROL ROOM - ON THE MIDDLE OF THE EAST WALL, NEAR THE REAR OF ESSENTIAL SERVICE WATER CONTROL PANEL #2-ESW                                       | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 18   | 20    | 2-SWRR       | 0      | MISCELLANEOUS EQUIPM / CONTROL ROOM SOUTHWEST INSTRUMENT/RELAY RACK                | AUXILIARY | 633.00      | CONTROL ROOM - IN THE SOUTHWEST CORNER OF THE ROOM, ON THE WEST WALL   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 19   | 20    | 2-TRB        | 0      | MISCELLANEOUS EQUIPM / TURBINE PANEL REAR INSTRUMENT/RELAY RACK 'B'                | AUXILIARY | 633.00      | CONTROL ROOM - IN THE MIDDLE WEST REGION OF THE ROOM, NEAR THE REAR SIDE OF CONTROL PANEL #2-T, ON TURBINE PANEL REAR INSTRUMENT/RELAY RACK #2-TR4 | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 20   | 20    | 2-TRD        | 0      | MISCELLANEOUS EQUIPM / TURBINE PANEL REAR INSTRUMENT/RELAY RACK 'D'                | AUXILIARY | 633.00      | CONTROL ROOM - IN THE MIDDLE WEST REGION OF THE ROOM, NEAR THE REAR SIDE OF CONTROL PANEL #2-T, 25 FEET SOUTHWEST OF THE REAR PANEL ACCESS DOORWAY | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 21   | 20    | 2-TRE        | 0      | MISCELLANEOUS EQUIPM / TURBINE PANEL REAR INSTRUMENT/RELAY RACK                    | AUXILIARY | 633.00      | CONTROL ROOM - IN THE MIDDLE WEST REGION OF THE ROOM, NEAR THE REAR OF CONTROL PANEL #2-T, NEAR TURBINE PANEL REAR INSTRUMENT/RELAY RACK #2-TRF    | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 22   | 20    | 2-TSC-VO-07  | 0      | COMPUTER SUPPORT SYS / TSC COMPUTER INPUT/OUTPUT CABINET #07                       | AUXILIARY | 633.00      | 633 HALLWAY -  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 23   | 20    | 2-TSC-VO-09  | 0      | COMPUTER SUPPORT SYS / TSC COMPUTER INPUT/OUTPUT CABINET #9                        | AUXILIARY | 633.00      | 633 HALLWAY -  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 24   | 20    | 2-TSC-VO-13  | 0      | NONE / TSC COMPUTER INPUT/OUTPUT CABINET #13                                       | AUXILIARY | 633.00      | 633 HALLWAY -  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 25   | 20    | 2-TSC-VO-15  | 0      | COMPUTER SUPPORT SYS / TSC COMPUTER INPUT/OUTPUT CABINET #15                       | AUXILIARY | 633.00      | 633 HALLWAY -  | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |
| 26   | 20    | 2-VS         | 0      | CONTAINMENT VENTILATION / VENTILATION CONTROL PANEL                                | AUXILIARY | 633.00      | CONTROL ROOM, IN THE NORTHEAST SECTION OF THE ROOM, 34 FET NORTHWEST OF THE UNIT SUPERVISOR'S DESK   | 633.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Stephen Anagnostis  
Print or Type Name

Signature

12/14/95  
Date

Tom Huang  
Print or Type Name

Signature

1-15-96  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. Cl | Equip ID No. | Rev No | System/Equipment Description   | Building    | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis                                     | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|--------------|--------|--|-------------|-------------|--|------------|------|---|---------------|-------------|------------|--------------|-----------|
| 1    | 0      | 2-TK-253-1   | 0      | CONTROL AIR / PRESSURIZER TRAIN 'A' PRESSURE RELIEF VLV NRV-153 RESERVE CONTROL AIR BOTTLE RACK                                  | CONTAINMENT | 612.00      | LOWER CONT. QUAD NO. 3 - 2 FEET BELOW THE PRESSURIZER DECK, 15 FEET FROM REACTOR COOLANT PUMP #2-PP-45-3                       | 650.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 2    | 0      | 2-TK-253-2   | 0      | CONTROL AIR / PRESSURIZER TRAIN 'A' PRESSURE RELIEF VLV NRV-153 RESERVE CONTROL AIR BOTTLE RACK                                  | CONTAINMENT | 612.00      | LOWER CONT. QUAD NO. 4 - 2 FEET BELOW THE PRESSURIZER DECK   | 625.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 3    | 0      | 2-TK-253-3   | 0      | CONTROL AIR / PRESSURIZER TRAIN 'B' PRESSURE RELIEF VLV NRV-152 EMERGENCY AIR BOTTLE RACK  | CONTAINMENT | 650.00      | UPPER CONT. QUAD 4 - ON THE OUTSIDE OF THE PRESSURIZER ENCLOSURE, 1 FOOT ABOVE THE FLOOR                                       | 650.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 4    | 0      | 2-TK-253-4   | 0      | CONTROL AIR / PRESSURIZER TRAIN 'A' PRESSURE RELIEF VLV NRV-153 EMERGENCY AIR BOTTLE RACK  | CONTAINMENT | 650.00      | UPPER CONT. QUAD 4 - ON THE OUTSIDE OF THE PRESSURIZER ENCLOSURE, 1 FOOT ABOVE THE FLOOR                                       | 650.00     | N/A  | Judgment vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 5    | 7      | 2-GRV-341    | 0      | NITROGEN (REACTOR PLANT SERVICE) / NITROGEN SUPPLY TO ACCUMULATOR TANKS VENT VALVE   | CONTAINMENT | 598.00      | ANNULUS, QUAD NO. 2 - ON THE CONTAINMENT WALL SIDE OF THE WALKWAY, 1 FOOT FROM COLUMN #2                                       | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum            | Yes           | Yes         | N/A        | Yes          | Yes       |
| 6    | 7      | 2-IRV-112    | 0      | NITROGEN (REACTOR PLANT SERVICE) / ACCUMULATOR TANK OME-6-1 NITROGEN SUPPLY/VENT VALVE   | CONTAINMENT | 612.00      | ACCUMULATOR TANK #1 AREA - ON THE CRANEWALL SIDE OF THE WALKWAY, 3 FEET ABOVE THE FLOOR  | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum            | Yes           | Yes         | N/A        | Yes          | Yes       |
| 7    | 7      | 2-IRV-122    | 0      | NITROGEN (REACTOR PLANT SERVICE) / ACCUMULATOR TANK OME-6-2 NITROGEN SUPPLY/VENT VALVE   | CONTAINMENT | 612.00      | ACCUMULATOR TANK #2 AREA - ON THE CRANEWALL SIDE OF THE WALKWAY, AT THE BASE OF ACCUMULATOR TANK #2-OME-6-2                    | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum            | Yes           | Yes         | N/A        | Yes          | Yes       |
| 8    | 7      | 2-IRV-132    | 0      | NITROGEN (REACTOR PLANT SERVICE) / ACCUMULATOR TANK OME-6-3 NITROGEN SUPPLY/VENT VALVE   | CONTAINMENT | 612.00      | ACCUMULATOR TANK #3 AREA - ON THE CRANEWALL SIDE OF THE WALKWAY, 3 FEET FROM THE ACCUMULATOR TANK #2-OME-6-3                   | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum            | Yes           | Yes         | N/A        | Yes          | Yes       |
| 9    | 7      | 2-IRV-142    | 0      | NITROGEN (REACTOR PLANT SERVICE) / ACCUMULATOR TANK OME-6-4 NITROGEN SUPPLY/VENT VALVE   | CONTAINMENT | 612.00      | ACCUMULATOR TANK #4 AREA -   | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum            | Yes           | Yes         | N/A        | Yes          | Yes       |
| 10   | 7      | 2-IRV-149    | 0      | RESIDUAL HEAT REMOVAL / WEST RESIDUAL HEAT REMOVAL TO REACTOR COOLANT LOOPS #2 AND #3 0.75 AIR OPERATED TEST (GLOBE) VALVE       | CONTAINMENT | 612.00      | HV-CEQ-2 FAN RM - NEAR THE CONTAINMENT WALL, BELOW CONTAINMENT HYDROGEN SKIMMER VENTILATION FAN #2-HV-CEQ-2, NEAR COLUMN #26,  | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum            | Yes           | Yes         | N/A        | Yes          | Yes       |
| 11   | 7      | 2-IRV-150    | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL TO REACTOR COOLANT LOOPS #1 AND #4 0.75 AIR OPERATED TEST VALVE               | CONTAINMENT | 612.00      | HV-CEQ-2 FAN RM - NEAR THE CONTAINMENT WALL, BELOW THE 612 ELEVATION STAIRWAY, 10 FEET FROM COLUMN #27, 2 FEET ABOVE THE FLOOR | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum            | Yes           | Yes         | N/A        | Yes          | Yes       |
| 12   | 7      | 2-IRV-156    | 0      | RESIDUAL HEAT REMOVAL / ACCUMULATOR TANK OME-6-1 0.75 AIR OPERATED OUTLET AND SAFETY INJECTION TO RC LOOP #1 COLD LEG TEST VALVE | CONTAINMENT | 598.00      | ANNULUS, QUAD NO. 1 - ON THE CRANEWALL SIDE OF THE WALKWAY, 12 FEET FROM COLUMN #4, 6 FEET ABOVE THE FLOOR                     | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum            | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Stephen Anagnostis  
Print or Type Name

Signature

Date

I.C. Huang  
Print or Type Name

Signature

Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq Cl | Equip.ID No. | Rev No | System/Equipment Description   | Building    | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis                          | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|-------|--------------|--------|--|-------------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 13   | 7     | 2-IRV-157    | 0      | RESIDUAL HEAT REMOVAL / WEST RHR AND SAFETY INJECTION TO REACTOR COOLANT LOOPS #2 AND #3 0.75 AIR OPERATED TEST VALVE            | CONTAINMENT | 612.00      | HV-CEQ-2 FAN RM - NEAR THE CONTAINMENT WALL, 1 FOOT FROM COLUMN #26, 1 FOOT ABOVE THE FLOOR  | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 14   | 7     | 2-IRV-158    | 0      | RESIDUAL HEAT REMOVAL / EAST RHR AND NORTH SAFETY INJECTION TO REACTOR COOLANT PUMPS #1 AND #4 0.75 AIR OPERATED TEST VALVE      | CONTAINMENT | 612.00      | HV-CEQ-2 FAN RM - ON THE CONTAINMENT WALL, BELOW THE 612 ELEVATION STAIRWAY, 12 FEET FROM COLUMN #27, 2 FEET ABOVE THE FLOOR           | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 15   | 7     | 2-IRV-166    | 0      | RESIDUAL HEAT REMOVAL / ACCUMULATOR TANK OME-6-2 0.75 AIR OPERATED OUTLET AND SAFETY INJECTION TO RC LOOP #2 COLD LEG TEST VALVE | CONTAINMENT | 598.00      | ANNULUS, QUAD NO. 2 - ON THE CRANEWALL SIDE OF THE WALKWAY, 10 FEET FROM COLUMN #23, 7 FEET ABOVE THE FLOOR                            | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 16   | 7     | 2-IRV-176    | 0      | RESIDUAL HEAT REMOVAL / ACCUMULATOR TANK OME-6-3 0.75 AIR OPERATED OUTLET AND SAFETY INJECTION TO RC LOOP #3 COLD LEG TEST VALVE | CONTAINMENT | 598.00      | ANNULUS, QUAD NO. 3 - ON THE CRANEWALL SIDE OF THE WALKWAY, 5 FEET FROM COLUMN #17, 3 FEET ABOVE THE FLOOR                             | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 17   | 7     | 2-IRV-186    | 0      | RESIDUAL HEAT REMOVAL / ACCUMULATOR TANK OME-6-4 1 AIR OPERATED OUTLET AND SAFETY INJECTION TO RC LOOP #4 COLD LEG TEST VALVE    | CONTAINMENT | 598.00      | ANNULUS, QUAD NO. 4 - ON THE CRANEWALL SIDE OF THE WALKWAY, 8 FEET FROM COLUMN #9, 1 FOOT ABOVE THE FLOOR                              | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 18   | 7     | 2-IRV-50     | 0      | BORON INJECTION / BORON INJECTION TO ACCUMULATOR FILL LINE CONTROL VALVE   | CONTAINMENT | 598.00      | ANNULUS, QUAD NO. 2 - ON THE CONTAINMENT WALL SIDE OF THE WALKWAY, 6 FEET FROM COLUMN #25, 1 FOOT ABOVE THE FLOOR                      | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 19   | 7     | 2-IRV-60     | 0      | SAFETY INJECTION / SAFETY INJECTION TO ACCUMULATOR FILL LINE CONTROL VALVE   | CONTAINMENT | 598.00      | ANNULUS, QUAD NO. 2 - ON THE CONTAINMENT WALL SIDE OF THE WALKWAY, 6 FEET FROM COLUMN #26, 1 FOOT ABOVE THE FLOOR                      | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 20   | 7     | 2-MRV-151    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #1 STEAM SAMPLE MSX-101 SAMPLE SHUTOFF VALVE  | CONTAINMENT | 612.00      | E CONT LOWER VENT RM - ON THE CRANEWALL SIDE OF THE WALKWAY, 8 FEET FROM COLUMN #6, 2 FEET ABOVE THE FLOOR                             | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 21   | 7     | 2-MRV-153    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #3 STEAM SAMPLE MSX-103 SAMPLE SHUTOFF VALVE  | CONTAINMENT | 612.00      | W CONT LOWER VENT RM - ON THE CRANEWALL SIDE OF THE WALKWAY  | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 22   | 7     | 2-NRV-101    | 0      | NUCLEAR SAMPLING / REACTOR COOLANT LOOP #1 HOT LEG SAMPLE NSX-101 SHUTOFF VALVE  | CONTAINMENT | 598.00      | ANNULUS, QUAD NO. 1 - ON THE CONTAINMENT WALL SIDE OF WALKWAY, NEAR COLUMN #5, 7 FEET ABOVE THE FLOOR                                  | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 23   | 7     | 2-NRV-102    | 0      | NUCLEAR SAMPLING / PRESSURIZER LIQUID SPACE SAMPLE NSX-102 SHUTOFF VALVE   | CONTAINMENT | 612.00      | INSTRUMENTATION RM - ON THE CRANEWALL SIDE OF THE WALKWAY, AT THE 622 ELEVATION PLATFORM   | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |
| 24   | 7     | 2-NRV-103    | 0      | NUCLEAR SAMPLING / REACTOR COOLANT LOOP #3 HOT LEG SAMPLE NSX-103 SHUTOFF VALVE  | CONTAINMENT | 598.00      | ANNULUS, QUAD NO. 3 - ON THE CONTAINMENT WALL SIDE OF THE WALKWAY, 5 FEET FROM COLUMN #19, 10 FEET ABOVE THE FLOOR, ABOVE A CABLE TRAY | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Stephen Anagnostis  
Print or Type Name

Signature

Date

I.C. Huang

Print or Type Name

Signature

Date



## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq Cl | Equip. ID No. | Rev No | System/Equipment Description  | Building    | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|-------|---------------|--------|---|-------------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 25   | 7     | 2-NRV-104     | 0      | NUCLEAR SAMPLING / PRESSURIZER STEAM SPACE SAMPLE NSX-104 SHUTOFF VALVE   | CONTAINMENT | 612.00      | INSTRUMENTATION RM - ON THE CRANEWALL SIDE OF THE WALKWAY, AT THE 622 ELEVATION PLATFORM   | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 26   | 7     | 2-NRV-151     | 0      | PRESSURIZER / PRESSURIZER TRAIN 'B' PRESSURE RELIEF VALVE   | CONTAINMENT | 650.00      | PRESSURIZER ENCL, INTERIOR - ON THE 686 ELEVATION PLATFORM, NORTHWEST OF THE LADDER  | 688.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | No            | Yes         | N/A        | Yes          | No        |
| 27   | 7     | 2-NRV-152     | 0      | PRESSURIZER / PRESSURIZER TRAIN 'B' PRESSURE RELIEF VALVE   | CONTAINMENT | 650.00      | PRESSURIZER ENCL, INTERIOR - ON THE 686 ELEVATION PLATFORM, NORTH OF THE LADDER  | 688.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | No            | Yes         | N/A        | Yes          | No        |
| 28   | 7     | 2-NRV-153     | 0      | PRESSURIZER / PRESSURIZER OME-4 TRAIN 'A' PRESSURE RELIEF VALVE   | CONTAINMENT | 650.00      | PRESSURIZER ENCL, INTERIOR - ON THE 686 ELEVATION PLATFORM, NORTH OF THE LADDER  | 688.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | No            | Yes         | N/A        | Yes          | No        |
| 29   | 7     | 2-QRV-10      | 0      | REACTOR COOLANT PUMP SEAL WATER INJ/LEAKOFF / REACTOR COOLANT PUMP #1 SEAL #1 LEAKOFF TO RCP SEAL WATER RETURN FILTER QC-109 2 AIR OPERATED SHUTOFF VALVE         | CONTAINMENT | 617.00      | LOWER CONT, QUAD NO. 1 - BY REACTOR COOLANT PUMP #2-PP-45-1 AND THE CRANEWALL, ON THE CRANEWALL SIDE OF THE 617 ELEVATION PLATFORM | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 30   | 7     | 2-QRV-111     | 0      | LETDOWN (CVCS) / REACTOR COOLANT NORMAL LETDOWN TRAIN 'A' SHUTOFF VALVE   | CONTAINMENT | 612.00      | LOWER CONT, QUAD NO. 4 - INSIDE THE CRANEWALL DOOR AND EAST  | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 31   | 7     | 2-QRV-112     | 0      | LETDOWN (CVCS) / REACTOR COOLANT NORMAL LETDOWN TRAIN 'B' SHUTOFF VALVE   | CONTAINMENT | 612.00      | LOWER CONT, QUAD NO. 4 - INSIDE THE CRANEWALL DOOR AND EAST  | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 32   | 7     | 2-QRV-113     | 0      | LETDOWN (CVCS) / REACTOR COOLANT EXCESS LETDOWN TO EXCESS LETDOWN HEAT EXCHANGER HE-13 1 AIR OPERATED TRAIN 'B' SHUTOFF VALVE                                     | CONTAINMENT | 612.00      | LOWER CONT, QUAD NO. 4 - INSIDE THE CRANEWALL DOOR AND EAST  | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 33   | 7     | 2-QRV-114     | 0      | LETDOWN (CVCS) / REACTOR COOLANT EXCESS LETDOWN TO EXCESS LETDOWN HEAT EXCHANGER HE-13 1 AIR OPERATED TRAIN 'A' SHUTOFF VALVE                                     | CONTAINMENT | 612.00      | LOWER CONT, QUAD NO. 4 - INSIDE THE CRANEWALL DOOR AND EAST  | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 34   | 7     | 2-QRV-150     | 0      | REACTOR COOLANT PUMP SEAL WATER INJ/LEAKOFF / REACTOR COOLANT PUMPS STARTUP SEAL SYSTEM BYPASS TO SEAL WATER RETURN FILTER QC-109 0.75 AIR OPERATED SHUTOFF VALVE | CONTAINMENT | 598.00      | ANNULUS, QUAD NO. 2 - ON THE CRANEWALL SIDE OF THE WALKWAY, 6 FEET FROM COLUMN #23, 2 FEET ABOVE THE FLOOR                         | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 35   | 7     | 2-QRV-20      | 0      | REACTOR COOLANT PUMP SEAL WATER INJ/LEAKOFF / REACTOR COOLANT PUMP #2 SEAL #1 LEAKOFF TO RCP SEAL WATER RETURN FILTER QC-109 2 AIR OPERATED SHUTOFF GLOBE VALVE   | CONTAINMENT | 625.00      | LOWER CONT, QUAD NO. 2 - BETWEEN REACTOR COOLANT PUMP #2-PP-45-2 AND THE SHIELD WALL, ON THE 625 ELEVATION PLATFORM                | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Stephen Anagnostis  
Print or Type Name

Signature

Date

I.C. Huang  
Print or Type Name

Signature

Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq Cl | Equip ID No. | Rev No | System/Equipment Description  | Building    | Floor Elev. | Room or Row/Column*   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|-------|--------------|--------|---|-------------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 36   | 7     | 2-QRV-30     | 0      | REACTOR COOLANT PUMP SEAL WATER INJ/LEAKOFF / REACTOR COOLANT PUMP #3 SEAL #1 LEAKOFF TO RCP SEAL WATER RETURN FILTER QC-109 2 AIR OPERATED SHUTOFF GLOBE VALVE | CONTAINMENT | 612.00      | LOWER CONT, QUAD NO. 3 - ON THE GRATING BY REACTOR COOLANT PUMP #2-PP-45-3 SEAL, 3 FEET ABOVE THE PLATFORM                              | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 37   | 7     | 2-QRV-40     | 0      | REACTOR COOLANT PUMP SEAL WATER INJ/LEAKOFF / REACTOR COOLANT PUMP #4 SEAL #1 LEAKOFF TO RCP SEAL WATER RETURN FILTER QC-109 2 AIR OPERATED SHUTOFF GLOBE VALVE | CONTAINMENT | 612.00      | LOWER CONT, QUAD NO. 4 - BETWEEN REACTOR COOLANT PUMP #2-PP-45-4 AND STEAM GENERATOR #2-OME-3-4 ON THE 618 ELEVATION PLATFORM           | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 38   | 7     | 2-SV-102     | 0      | RESIDUAL HEAT REMOVAL / RESIDUAL HEAT REMOVAL TO REACTOR COOLANT LOOPS #2 & #3 COLD LEGS SAFETY VALVE   | CONTAINMENT | 598.00      | ANNULUS, QUAD NO. 2 - ON CRANE WALL SIDE OF WALKWAY, ABOVE THE SUMP   | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 39   | 7     | 2-SV-103     | 0      | RESIDUAL HEAT REMOVAL / REACTOR COOLANT LOOP #2 HOT LEG TO RESIDUAL HEAT REMOVAL PUMPS SAFETY VALVE   | CONTAINMENT | 598.00      | ANNULUS, QUAD NO. 2 - ON CRANEWALL SIDE OF WALKWAY  | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 40   | 7     | 2-SV-122-23  | 0      | CCW / REACTOR SUPPORT COOLERS CCW RETURN HEADER SAFETY VALVE  | CONTAINMENT | 598.00      | ANNULUS, QUAD NO. 3 - ON THE CONTAINMENT WALL SIDE OF THE WALKWAY, 10 FEET ABOVE THE FLOOR  | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 41   | 7     | 2-SV-45A     | 0      | PRESSURIZER / PRESSURIZER OME-4 SAFETY VALVE 'A'  | CONTAINMENT | 650.00      | PRESSURIZER ENCL, INTERIOR - ON THE INTERIOR WALL OF PRESSURIZER #2-OME-4, AT THE 680 ELEVATION PLATFORM                                | 688.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | No            | Yes         | N/A        | Yes          | No        |
| 42   | 7     | 2-SV-45B     | 0      | PRESSURIZER / PRESSURIZER OME-4 SAFETY VALVE 'B'  | CONTAINMENT | 650.00      | PRESSURIZER ENCL, INTERIOR - ON THE NORTH SIDE OF THE PRESSURIZER, 686 ELEVATION PLATFORM   | 688.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | No            | Yes         | N/A        | Yes          | No        |
| 43   | 7     | 2-SV-45C     | 0      | PRESSURIZER / PRESSURIZER OME-4 SAFETY VALVE 'C'  | CONTAINMENT | 650.00      | PRESSURIZER ENCL, INTERIOR - ON THE INTERIOR WALL OF PRESSURIZER #2-OME-4, ON THE 680 ELEVATION PLATFORM                                | 688.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | No            | Yes         | N/A        | Yes          | No        |
| 44   | 7     | 2-SV-50      | 0      | REACTOR COOLANT PUMP SEAL WATER INJ/LEAKOFF / RC PUMPS SEAL #1 AND STARTUP SEAL SYSTEM BYPASS TO SEAL WATER RETURN FILTERS SAFETY VALVE                         | CONTAINMENT | 598.00      | ANNULUS, QUAD NO. 3 - NEAR THE CRANEWALL SIDE OF THE WALKWAY, 8 FEET FROM COLUMN #20, 3 FEET FROM THE CRANEWALL, 9 FEET ABOVE THE FLOOR | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 45   | 7     | 2-SV-51      | 0      | LETDOWN (CVCS) / REGENERATIVE HEAT EXCHANGER HE-12 LETDOWN OUTLET SAFETY VALVE  | CONTAINMENT | 598.00      | ANNULUS, QUAD NO. 4 - 5 FEET NORTHWEST OF COLUMN #10, 7 FEET FROM THE CRANEWALL, 8 FEET ABOVE THE FLOOR                                 | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 46   | 7     | 2-SV-63      | 0      | CCW / REACTOR COOLANT PUMP MOTORS BEARING OIL COOLERS CCW RETURN HEADER SAFETY VALVE  | CONTAINMENT | 612.00      | W CONT LOWER VENT RM - BETWEEN THE CONTAINMENT WALL AND THE HV-CLV-2 FAN BY COL #22, 3 FEET ABOVE THE FLOOR                             | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 47   | 8     | 2-ICM-111    | 0      | RESIDUAL HEAT REMOVAL / RHR TO REACTOR COOLANT LOOPS #2 & #3 COLD LEGS CONTAINMENT ISOLATION VALVE  | CONTAINMENT | 598.00      | ANNULUS, QUAD NO. 2 - ON THE CRANEWALL SIDE OF THE WALKWAY, BETWEEN COLUMN #24 AND #25  | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Stephen Anagnostis  
Print or Type Name

Signature

Date

I.C. Huang  
Print or Type Name

Signature

Date

1-15-96

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq Cl | Equip ID No. | Rev No | System/Equipment Description   | Building    | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis   | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|-------|--------------|--------|--|-------------|-------------|---|------------|------|---|---------------|-------------|------------|--------------|-----------|
| 48   | 8     | 2-ICM-129    | 0      | RESIDUAL HEAT REMOVAL / REACTOR COOLANT LOOP #2 HOT LEG TO RESIDUAL HEAT REMOVAL PUMPS SUCTION CONTAINMENT ISOLATION VALVE | CONTAINMENT | 598.00      | ANNULUS, QUAD NO. 2 - ON THE CRANEWALL SIDE OF THE WALKWAY, 8 FEET FROM COLUMN #24, 2 FEET ABOVE THE FLOOR                              | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                      | Yes           | Yes         | N/A        | Yes          | Yes       |
| 49   | 8     | 2-IMO-128    | 0      | RESIDUAL HEAT REMOVAL / REACTOR COOLANT LOOP #2 HOT LEG TO RESIDUAL HEAT REMOVAL PUMPS SUCTION SHUTOFF VALVE               | CONTAINMENT | 617.00      | LOWER CONT, QUAD NO. 2 - BETWEEN STEAM GENERATOR #2-OME-3-2 AND REACTOR COOLANT PUMP #2-PP-45-2, NEAR THE SHIELD WALL, 4 FEET BELOW THE | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                      | Yes           | Yes         | N/A        | Yes          | Yes       |
| 50   | 8     | 2-IMO-315    | 0      | RESIDUAL HEAT REMOVAL / EAST RHR AND NORTH SAFETY INJECTION TO REACTOR COOLANT LOOPS #1 AND #4 HOT LEGS SHUTOFF VALVE      | CONTAINMENT | 612.00      | E CONT LOWER VENT RM - BETWEEN THE LADDER AND VENT UNIT #2-HV-CLV-4, 7 FEET FROM COLUMN #7  | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                      | Yes           | Yes         | N/A        | Yes          | Yes       |
| 51   | 8     | 2-IMO-316    | 0      | RESIDUAL HEAT REMOVAL / EAST RHR AND NORTH SAFETY INJECTION TO REACTOR COOLANT LOOPS #1 AND #4 COLD LEGS SHUTOFF VALVE     | CONTAINMENT | 612.00      | E CONT LOWER VENT RM - BETWEEN THE LADDER AND VENT UNIT #2-HV-CLV-4, 5 FEET FROM COLUMN #7  | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                      | Yes           | Yes         | N/A        | Yes          | Yes       |
| 52   | 8     | 2-IMO-325    | 0      | RESIDUAL HEAT REMOVAL / WEST RHR AND SOUTH SAFETY INJECTION TO REACTOR COOLANT LOOPS #2 AND #3 HOT LEGS SHUTOFF VALVE      | CONTAINMENT | 612.00      | W CONT LOWER VENT RM - BETWEEN THE LADDER AND VENT UNIT #2-HV-CLV-3, 7 FEET FROM COLUMN #20, 4 FEET ABOVE THE FLOOR                     | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                      | Yes           | Yes         | N/A        | Yes          | Yes       |
| 53   | 8     | 2-IMO-326    | 0      | RESIDUAL HEAT REMOVAL / WEST RHR AND SOUTH SAFETY INJECTION TO REACTOR COOLANT LOOPS #2 AND #3 COLD LEGS SHUTOFF VALVE     | CONTAINMENT | 612.00      | W CONT LOWER VENT RM - BETWEEN THE LADDER AND VENT UNIT #2-HV-CLV-3, 5 FEET FROM COLUMN #20, 4 FEET ABOVE THE FLOOR                     | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                      | Yes           | Yes         | N/A        | Yes          | Yes       |
| 54   | 8     | 2-NMO-151    | 0      | PRESSURIZER / PRESSURIZER RELIEF VALVE NRV-151 UPSTREAM 3 MOTOR OPERATED SHUTOFF VALVE                                     | CONTAINMENT | 650.00      | PRESSURIZER ENCL, INTERIOR - NEAR THE 686 ELEVATION PLATFORM, NORTHWEST OF THE LADDER   | 688.00     | N/A  | MOV-GERS vs. Amplified Realistic Median Centered Floor Response Spectra | No            | Yes         | N/A        | Yes          | No        |
| 55   | 8     | 2-NMO-152    | 0      | PRESSURIZER / PRESSURIZER RELIEF VALVE NRV-152 UPSTREAM 3 MOTOR OPERATED SHUTOFF VALVE                                     | CONTAINMENT | 650.00      | PRESSURIZER ENCL, INTERIOR - NEAR THE 686 ELEVATION PLATFORM, NORTH OF THE LADDER   | 688.00     | N/A  | MOV-GERS vs. Amplified Realistic Median Centered Floor Response Spectra | No            | Yes         | N/A        | Yes          | No        |
| 56   | 8     | 2-NMO-153    | 0      | PRESSURIZER / PRESSURIZER RELIEF VALVE NRV-153 UPSTREAM 3 MOTOR OPERATED SHUTOFF VALVE                                     | CONTAINMENT | 650.00      | PRESSURIZER ENCL, INTERIOR - NEAR THE 686 ELEVATION PLATFORM, NORTH OF THE LADDER   | 688.00     | N/A  | MOV-GERS vs. Amplified Realistic Median Centered Floor Response Spectra | No            | Yes         | N/A        | Yes          | No        |
| 57   | 8     | 2-NSO-21     | 0      | REACTOR COOLANT SYSTEM VENTS / REACTOR VESSEL OME-1 POST-ACCIDENT VENT TRAIN 'A' SOLENOID VALVE                            | CONTAINMENT | 621.00      | RCTR VESSEL HEAD AREA - ABOVE THE CONTROL ROD DRIVE MECHANISM, ON THE REACTOR HEAD  | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                      | Yes           | Yes         | N/A        | Yes          | Yes       |
| 58   | 8     | 2-NSO-22     | 0      | REACTOR COOLANT SYSTEM VENTS / REACTOR VESSEL OME-1 POST-ACCIDENT VENT TRAIN 'A' SOLENOID VALVE                            | CONTAINMENT | 621.00      | RCTR VESSEL HEAD AREA - ABOVE THE CONTROL ROD DRIVE MECHANISM, ON THE REACTOR HEAD  | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                      | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Stephen Anagnostis  
Print or Type Name

[Signature]  
Signature

12/14/95  
Date

I.C. Huang  
Print or Type Name

[Signature]  
Signature

1-15-96  
Date

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq Cl | Equip ID No. | Rev No | System/Equipment Description   | Building    | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|-------|--------------|--------|--|-------------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 59   | 8     | 2-NSO-23     | 0      | REACTOR COOLANT SYSTEM VENTS / REACTOR VESSEL OME-1 POST-ACCIDENT VENT TRAIN 'B' SOLENOID VALVE  | CONTAINMENT | 621.00      | RCTR VESSEL HEAD AREA - ABOVE THE CONTROL ROD DRIVE MECHANISM, ON THE REACTOR HEAD  | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 60   | 8     | 2-NSO-24     | 0      | REACTOR COOLANT SYSTEM VENTS / REACTOR VESSEL OME-1 POST-ACCIDENT VENT TRAIN 'B' SOLENOID VALVE  | CONTAINMENT | 621.00      | RCTR VESSEL HEAD AREA - ABOVE THE CONTROL ROD DRIVE MECHANISM, ON THE REACTOR HEAD  | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 61   | 8     | 2-NSO-61     | 0      | REACTOR COOLANT SYSTEM VENTS / PRESSURIZER OME-4 POST-ACCIDENT VENT TRAIN 'A' SOLENOID VALVE   | CONTAINMENT | 650.00      | PRESSURIZER ENCL. INTERIOR - IN THE PRESSURIZER ENCLOSURE, AT TOP OF PRESSURIZER, ON CONTAINMENT WALL, AT 680 ELEVATION PLATFORM                    | 688.00     | N/A  | Test Data vs. Amplified Realistic Median Centered Floor Response Spectra     | Yes           | Yes         | N/A        | Yes          | Yes       |
| 62   | 8     | 2-NSO-62     | 0      | REACTOR COOLANT SYSTEM VENTS / PRESSURIZER OME-4 POST-ACCIDENT VENT TRAIN 'A' SOLENOID VALVE   | CONTAINMENT | 650.00      | PRESSURIZER ENCL. INTERIOR - IN THE PRESSURIZER ENCLOSURE, ON CONTAINMENT WALL, AT 680 ELEVATION PLATFORM, AT TOP OF PRESSURIZER                    | 688.00     | N/A  | Test Data vs. Amplified Realistic Median Centered Floor Response Spectra     | Yes           | Yes         | N/A        | Yes          | Yes       |
| 63   | 8     | 2-NSO-63     | 0      | REACTOR COOLANT SYSTEM VENTS / PRESSURIZER OME-4 POST-ACCIDENT VENT TRAIN 'B' SOLENOID VALVE   | CONTAINMENT | 650.00      | PRESSURIZER ENCL. INTERIOR - IN THE PRESSURIZER ENCLOSURE, AT TOP OF PRESSURIZER, ON CONTAINMENT WALL, AT 680 ELEVATION PLATFORM                    | 688.00     | N/A  | Test Data vs. Amplified Realistic Median Centered Floor Response Spectra     | Yes           | Yes         | N/A        | Yes          | Yes       |
| 64   | 8     | 2-NSO-64     | 0      | REACTOR COOLANT SYSTEM VENTS / PRESSURIZER OME-4 POST-ACCIDENT VENT TRAIN 'B' SOLENOID VALVE   | CONTAINMENT | 650.00      | PRESSURIZER ENCL. INTERIOR - IN THE PRESSURIZER ENCLOSURE, AT TOP OF PRESSURIZER, ON CONTAINMENT WALL, AT 680 ELEVATION PLATFORM                    | 688.00     | N/A  | Test Data vs. Amplified Realistic Median Centered Floor Response Spectra     | Yes           | Yes         | N/A        | Yes          | Yes       |
| 65   | 8     | 2-QCM-250    | 0      | REACTOR COOLANT PUMP SEAL WATER IN/LEAKOFF / REACTOR COOLANT PUMP SEAL WATER RETURN TRAIN 'A' CONTAINMENT ISOLATION 4 MOTOR OPERATED VALVE | CONTAINMENT | 598.00      | ANNULUS, QUAD NO. 2 - ON THE CRANEWALL SIDE OF THE WALKWAY  | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 66   | 8     | 2-XSO-505    | 0      | CONTROL AIR / PRESSURIZER TRAIN 'B' PRESSURE RELIEF VALVE NRV-152 CONTROL SOLENOID   | CONTAINMENT | 650.00      | PRESSURIZER ENCL. INTERIOR - ON THE 686 ELEVATION PLATFORM, NORTH OF THE LADDER, NEAR AIR OPERATED VALVE #2-NRV-152                                 | 688.00     | N/A  | MOV-GERS vs. Amplified Realistic Median Centered Floor Response Spectra      | Yes           | Unk         | N/A        | Yes          | Yes       |
| 67   | 8     | 2-XSO-507    | 0      | CONTROL AIR / PRESSURIZER TRAIN 'A' PRESSURE RELIEF VALVE NRV-153 CONTROL SOLENOID   | CONTAINMENT | 650.00      | PRESSURIZER ENCL. INTERIOR - ON THE 686 ELEVATION PLATFORM, NORTH OF THE LADDER, NEAR AIR OPERATED VALVE #2-NRV-153                                 | 688.00     | N/A  | MOV-GERS vs. Amplified Realistic Median Centered Floor Response Spectra      | Yes           | Unk         | N/A        | Yes          | Yes       |
| 68   | 9     | 2-HV-CEQ-1   | 0      | HYDROGEN SKIMMER / CONTAINMENT HYDROGEN SKIMMER VENTILATION FAN #1   | CONTAINMENT | 625.00      | HV-CEQ-1 FAN RM - IN THE MIDDLE OF THE ROOM   | 625.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 69   | 9     | 2-HV-CEQ-2   | 0      | HYDROGEN SKIMMER / CONTAINMENT HYDROGEN SKIMMER VENTILATION FAN #2   | CONTAINMENT | 625.00      | HV-CEQ-2 FAN RM - CEQ FANS ARE NEEDED FOR ACCIDENTS AND WILL NOT BE ACTIVATED   | 625.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 70   | 18    | 2-BLI-110    | 0      | STEAM GENERATING / STEAM GENERATOR OME-3-1 WIDE RANGE LEVEL INDICATOR TRANSMITTER  | CONTAINMENT | 612.00      | ACCUMULATOR TANK #1 AREA - NEAR THE CRANEWALL SIDE OF THE ROOM, 10 FEET FROM COLUMN #3, NEAR VENT UNIT #2-HV-CLV-1, ON A SUPPORT RACK, 4 FEET ABOVE | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 71   | 18    | 2-BLI-120    | 0      | STEAM GENERATING / STEAM GENERATOR OME-3-2 WIDE RANGE LEVEL INDICATOR TRANSMITTER  | CONTAINMENT | 612.00      | WCONT LOWER VENT RM - ON THE CRANEWALL SIDE OF THE ROOM, 8 FEET FROM COLUMN #21, ON A SUPPORT RACK, 5 FEET ABOVE THE FLOOR                          | 612.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Stephen Anagnostis  
Print or Type Name

Signature

Date

I.C. Huang  
Print or Type Name

Signature

Date



## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq Cl | Equip ID No. | Rev No | System/Equipment Description  | Building    | Floor Elev. | Room or Row/Column   | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|-------|--------------|--------|---|-------------|-------------|--|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 72   | 18    | 2-BLI-130    | 0      | STEAM GENERATING / STEAM GENERATOR OME-3-3 WIDE RANGE LEVEL INDICATOR TRANSMITTER       | CONTAINMENT | 612.00      | ACCUMULATOR TANK #3 AREA - ON THE CRANEWALL SIDE OF THE ROOM, 10 FEET FROM COLUMN #18, 5 FEET FROM ACCUMULATOR TANK #2-OME-6-3, 4 FEET ABOVE THE FLOOR | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 73   | 18    | 2-BLI-140    | 0      | STEAM GENERATING / STEAM GENERATOR OME-3-4 WIDE RANGE LEVEL INDICATOR TRANSMITTER       | CONTAINMENT | 612.00      | ACCUMULATOR TANK #4 AREA - NEAR THE CRANEWALL SIDE OF ACCUMULATOR TANK #2-OME-6-4, 10 FEET FROM COLUMN #10, 7 FEET ABOVE THE FLOOR                     | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 74   | 18    | 2-IFI-52     | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP #2 FLOW INDICATOR TRANSMITTER | CONTAINMENT | 598.00      | ANNULUS, QUAD NO. 2 - ON THE CRANEWALL SIDE OF THE WALKWAY, 10 FEET FROM COLUMN #23, 6 FEET ABOVE THE FLOOR  | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 75   | 18    | 2-IFI-53     | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP #3 FLOW INDICATOR TRANSMITTER | CONTAINMENT | 598.00      | ANNULUS, QUAD NO. 3 - ON THE CRANEWALL SIDE OF THE WALKWAY, 12 FEET FROM COLUMN #18, 6 FEET ABOVE THE FLOOR  | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 76   | 18    | 2-IFI-54     | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP #4 FLOW INDICATOR TRANSMITTER | CONTAINMENT | 598.00      | ANNULUS, QUAD NO. 4 - ON THE CONTAINMENT WALL SIDE OF THE WALKWAY, NEAR COLUMN #8, 13 FEET ABOVE THE FLOOR   | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 77   | 18    | 2-NLI-151    | 0      | PRESSURIZER / PRESSURIZER OME-4 LEVEL INDICATOR TRANSMITTER                             | CONTAINMENT | 612.00      | INSTRUMENTATION RM - ON THE CRANEWALL SIDE OF THE WALKWAY, INSIDE A METAL SHIELD BOX, 4 FEET ABOVE THE FLOOR   | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 78   | 18    | 2-NLP-151    | 0      | PRESSURIZER / PRESSURIZER OME-4 PROTECTION CHANNEL I LEVEL TRANSMITTER                  | CONTAINMENT | 612.00      | INSTRUMENTATION RM - ON THE CRANEWALL SIDE OF THE WALKWAY, 5 FEET WEST OF THE 612 AIRLOCK DOOR, 4 FEET ABOVE THE FLOOR                                 | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 79   | 18    | 2-NLP-152    | 0      | PRESSURIZER / PRESSURIZER OME-4 PROTECTION CHANNEL II LEVEL TRANSMITTER                 | CONTAINMENT | 612.00      | INSTRUMENTATION RM - ON THE CONTAINMENT WALL SIDE OF THE WALKWAY, ACROSS FROM THE ANNULUS HATCH, 3 FEET FROM COLUMN #13, 3 FEET ABOVE THE FLOOR        | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 80   | 18    | 2-NLP-153    | 0      | PRESSURIZER / PRESSURIZER OME-4 PROTECTION CHANNEL III LEVEL TRANSMITTER                | CONTAINMENT | 612.00      | INSTRUMENTATION RM - ON THE CRANEWALL SIDE OF THE WALKWAY, 8 FEET EAST OF THE 612 AIRLOCK DOORWAY, 3 FEET ABOVE THE FLOOR                              | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 81   | 18    | 2-NPP-151    | 0      | PRESSURIZER / PRESSURIZER OME-4 PROTECTION CHANNEL I PRESSURE TRANSMITTER               | CONTAINMENT | 612.00      | INSTRUMENTATION RM - ON THE CRANEWALL SIDE OF THE WALKWAY, 6 FEET FROM THE 612 AIRLOCK DOOR, 4 FEET ABOVE THE FLOOR                                    | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 82   | 18    | 2-NPP-152    | 0      | PRESSURIZER / PRESSURIZER OME-4 PROTECTION CHANNEL II PRESSURE TRANSMITTER              | CONTAINMENT | 612.00      | INSTRUMENTATION RM - ON THE CONTAINMENT WALL SIDE OF THE WALKWAY, 1 FOOT FROM COLUMN #13, 3 FEET ABOVE THE FLOOR                                       | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 83   | 18    | 2-NPP-153    | 0      | PRESSURIZER / PRESSURIZER OME-4 PROTECTION CHANNEL III PRESSURE TRANSMITTER             | CONTAINMENT | 612.00      | INSTRUMENTATION RM - ON THE CRANEWALL SIDE OF THE WALKWAY, 10 FEET EAST OF THE 612 AIRLOCK DOORWAY, AT THE FOOT OF THE STAIRS TO THE 625               | 612.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 84   | 18    | 2-NPS-121    | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP #2 HOT LEG WIDE RANGE PRESSURE TRANSMITTER       | CONTAINMENT | 612.00      | WCONT LOWER VENT RM - ON THE CONTAINMENT WALL SIDE OF THE WALKWAY, NEAR #2-CPN-27, 5 FEET ABOVE THE FLOOR  | 612.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Stephen Anagnostis  
Print or Type Name

Signature

Date

I.C. Huang  
Print or Type Name

Signature

Date

1-15-96

[The page contains extremely faint, illegible text, likely bleed-through from the reverse side. The text is organized into several paragraphs and possibly a list or table structure, but the characters are too light to transcribe accurately.]

## SCREENING VERIFICATION DATA SHEET (SVDS)

| Item | Eq. CI | Equip. ID No.  | Rev No. | System/Equipment Description   | Building    | Floor Elev. | Room or Row/Column  | Base Elev. | <40' | Capacity vs. Demand Basis  | Cap > Demand? | Caveats OK? | Anchor OK? | Interact OK? | Equip OK? |
|------|--------|----------------|---------|--|-------------|-------------|---|------------|------|--|---------------|-------------|------------|--------------|-----------|
| 85   | 18     | 2-NPS-122      | 0       | REACTOR COOLANT / REACTOR COOLANT LOOP #1 HOT LEG WIDE RANGE PRESSURE TRANSMITTER                              | CONTAINMENT | 612.00      | E CONT LOWER VENT RM - ON THE CRANEWALL SIDE, 10 FEET FROM COLUMN #5, 5 FEET ABOVE THE FLOOR                            | 612.00     | N/A  | 1.5 x Bounding Spectrum vs. Realistic Median Centered Floor Response Spectra | Yes           | Yes         | Yes        | Yes          | Yes       |
| 86   | 18     | 2-NRI-21       | 0       | NUCLEAR INSTRUMENTATION / NUCLEAR INSTRUMENTATION SOURCE RADIATION DETECTOR                                    | CONTAINMENT | 626.00      | REACTOR CAVITY -  | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 87   | 18     | 2-NRI-23       | 0       | NUCLEAR INSTRUMENTATION / NUCLEAR INSTRUMENTATION SOURCE RANGE RADIATION DETECTOR                              | CONTAINMENT | 626.00      | REACTOR CAVITY - AZ 270.  | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 88   | 18     | 2-XRV-RACK-152 | 0       | CONTROL AIR / PRESSURIZER TRAIN 'B' PRESSURE RELIEF VALVE NRV-152 VALVE RACK EMERGENCY AIR PRESSURE REGULATOR  | CONTAINMENT | 650.00      | CONTROL AIR/N2  | 650.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 89   | 18     | 2-XRV-RACK-153 | 0       | CONTROL AIR / PRESSURIZER TRAIN 'A' PRESSURE RELIEF VALVE #NRV-153 VALVE RACK EMERGENCY AIR PRESSURE REGULATOR | CONTAINMENT | 650.00      | CONTROL AIR/N2  | 650.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | Yes        | Yes          | Yes       |
| 90   | 19     | 2-NTR-110      | 0       | REACTOR COOLANT / REACTOR COOLANT LOOP #1 HOT LEG WIDE RANGE TEMPERATURE RECORDER THERMAL SENSOR               | CONTAINMENT | 598.00      | LOWER CONT, QUAD NO. 1 - ON THE SHIELD WALL SIDE OF STEAM GENERATOR #2-OME-3-1, 20 FEET ABOVE THE FLOOR                 | 598.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 91   | 19     | 2-NTR-120      | 0       | REACTOR COOLANT / REACTOR COOLANT LOOP #2 HOT LEG WIDE RANGE TEMPERATURE RECORDER THERMAL SENSOR               | CONTAINMENT | 617.00      | LOWER CONT, QUAD NO. 2 - ON THE SHIELD WALL SIDE OF STEAM GENERATOR #2-OME-3-2, ON THE 621 ELEVATION PLATFORM           | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 92   | 19     | 2-NTR-130      | 0       | REACTOR COOLANT / REACTOR COOLANT LOOP #3 HOT LEG WIDE RANGE TEMPERATURE RECORDER THERMAL SENSOR               | CONTAINMENT | 625.00      | LOWER CONT, QUAD NO. 3 - ON THE SHIELD WALL SIDE OF STEAM GENERATOR #2-OME-3-3, ON THE 621 ELEVATION PLATFORM           | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 93   | 19     | 2-NTR-140      | 0       | REACTOR COOLANT / REACTOR COOLANT LOOP #4 HOT LEG WIDE RANGE TEMPERATURE RECORDER THERMAL SENSOR               | CONTAINMENT | 617.00      | LOWER CONT, QUAD NO. 4 - ON THE SHIELD WALL SIDE OF STEAM GENERATOR #2-OME-3-4, 2 FEET ABOVE THE 617 ELEVATION PLATFORM | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 94   | 19     | 2-NTR-210      | 0       | REACTOR COOLANT / REACTOR COOLANT LOOP #1 COLD LEG WIDE RANGE TEMPERATURE RECORDER THERMAL SENSOR              | CONTAINMENT | 617.00      | LOWER CONT, QUAD NO. 1 - BETWEEN REACTOR COOLANT PUMP #2-PP-45-1 AND THE SHIELD WALL, ON THE 617 ELEVATION PLATFORM     | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 95   | 19     | 2-NTR-220      | 0       | REACTOR COOLANT / REACTOR COOLANT LOOP #2 COLD LEG WIDE RANGE TEMPERATURE RECORDER THERMAL SENSOR              | CONTAINMENT | 617.00      | LOWER CONT, QUAD NO. 2 - BETWEEN REACTOR COOLANT PUMP #2-PP-45-2 AND THE SHIELD WALL, ON THE 617 ELEVATION PLATFORM     | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 96   | 19     | 2-NTR-230      | 0       | REACTOR COOLANT / REACTOR COOLANT LOOP #3 COLD LEG WIDE RANGE TEMPERATURE RECORDER THERMAL SENSOR              | CONTAINMENT | 617.00      | LOWER CONT, QUAD NO. 3 - BETWEEN REACTOR COOLANT PUMP #2-PP-45-3 AND THE SHIELD WALL, ON THE 617 ELEVATION PLATFORM     | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |
| 97   | 19     | 2-NTR-240      | 0       | REACTOR COOLANT / REACTOR COOLANT LOOP #4 COLD LEG WIDE RANGE TEMPERATURE RECORDER THERMAL SENSOR              | CONTAINMENT | 617.00      | LOWER CONT, QUAD NO. 4 - BETWEEN REACTOR COOLANT PUMP #2-PP-45-4 AND THE SHIELD WALL, ON THE 617 ELEVATION PLATFORM     | 625.00     | Yes  | Bounding Spectrum vs. SSE Ground Response Spectrum                           | Yes           | Yes         | N/A        | Yes          | Yes       |

## Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate. "All information" includes each entry and conclusion (whether verified to be seismically adequate or not).

Approved: (Signatures of all Seismic Capability Engineers on the Seismic Review Team (SRT) are required; there should be at least two on the SRT. All signatories should agree with all the entries and conclusions. One signatory should be a licensed professional engineer.)

Stephen Anagnostis  
Print or Type Name

Signature

Date

I.C. Huang

Print or Type Name

Signature

Date

1-15-96