

OCONEE NUCLEAR STATION

USI A-46 SEISMIC EVALUATION REPORT



December 1997

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EXECUTIVE SUMMARY

In December 1980, the Nuclear Regulatory Commission (NRC) Staff initiated Unresolved Safety Issue (USI) A-46, "Seismic Qualification of Equipment in Operating Plants," related to seismic adequacy of mechanical and electrical equipment in older nuclear plants. USI A-46 resolution addresses the seismic adequacy, at a licensing basis safe shutdown earthquake level, of equipment designed and installed prior to implementation of the more restrictive standards of the mid - 1970's. After substantial technical research by both the Seismic Qualification Utility Group (SQUG) and the NRC regarding this issue, the Staff published Generic Letter 87-02, "Verification of Seismic Adequacy of Mechanical and Electrical Equipment in Operating Reactors, Unresolved Safety Issue (USI) A-46", on February 19, 1987. This generic letter provided a detailed approach for resolving the USI A-46.

A Generic Implementation Procedure has been developed by SQUG and accepted by the NRC. This procedure establishes the methods by which the USI A-46 issue can be resolved to the satisfaction of the NRC. The NRC staff issued Supplement 1 to Generic Letter 87-02 on May 22, 1992 which included Supplemental Safety Evaluation Report No. 2 (SSER No. 2) on the Generic Implementation Procedure (GIP), Revision 2 (corrected February 14, 1992) (Reference #1). The resolution of USI A-46 using the GIP is based on equipment qualification using seismic experience data. This method requires a walkdown of the selected equipment. Also, as part of the equipment evaluation, circuits of interest require a chatter review for either chatter acceptability or chatter vulnerability.

Oconee Nuclear Station provided information in support of Generic Letter 87-02 to the NRC in a letter dated September 21, 1992 (Reference #4). On November 19, 1992, the NRC responded to the Oconee Nuclear Station with a letter of request for additional information. Also, the NRC requested clarification as to the Oconee Nuclear Station's commitment to the Generic Implementation Procedure (GIP), Revision 2, as corrected on February 14, 1992 and the associated Supplemental Safety Evaluation (SSER) No. 2. Duke responded with a letter dated January 15, 1993 clarifying the Oconee Nuclear Station's commitment to the GIP and providing the requested additional information to the NRC. The NRC's letter dated April 5, 1993 to Duke Power provides the Staff's evaluations and conclusions of the additional information (Reference #5).

In a letter dated October 3, 1995, Duke power updated the NRC Staff on the progress of the resolution to USI A-46 and revised the submittal date for the USI A-46 report to December 31, 1996. A partial USI A-46 report was submitted as an attachment to a letter dated December 30, 1996. The partial submittal covered the emergency power equipment which is located at the Keowee Hydro Units and in the Oconee Switchyard.

In a letter dated December 30, 1996, Duke Power indicated that an expected date for submittal of the remaining portion of the USI A-46 report would be provided to the NRC by March 31, 1997. Duke Power's letter to the NRC dated March 31, 1997, stated the balance of the USI A-46 submittal would be made by December 15, 1997.

In addition to the above stated correspondence, the NRC visited the Oconee Nuclear Station during the month of April 1995 for an In-Progress Audit. The primary intent was to observe and assess the effectiveness of identifying seismic concerns per the GIP and general implementation of the GIP with respect to the walkdowns and field assessments. The NRC's evaluation of this audit was provided to Duke Power in a letter dated June 15, 1995.

Oconee Nuclear Station is the only Duke Power Company nuclear station responsible for addressing the USI A-46 issue. The assessment documented here considers operating the plant from a normal-state condition to safe shutdown in 72 hours coincident with the site specific safe shutdown earthquake. The scope of this assessment includes all three Oconee nuclear units, the onsite emergency power, and any necessary support systems. The scope of this submittal addresses the three Oconee units. The USI A-46 evaluation for Oconee's Emergency Power System was submitted to the NRC staff in December, 1996.

This document addresses the scope of equipment required for review, defined applications of the GIP, project team qualifications, dispositionings of GIP Outliers, and Third-Party Audit assessments. These topics will be addressed for both the walkdown and relay chatter areas of work.

The walkdown results and related evaluations verified most items as being satisfactory and also identified recommended improvements. Of the 1487 items requiring a walkdown, 1092 of those met the GIP criteria as currently installed. Of the 395 GIP Outliers (excludes cable tray and HVAC ductwork outliers), 165 are resolved. The 230 remaining Outliers have issues requiring minor physical enhancements or require a detailed analytical review.

There were 22 cable tray analytical review outliers not meeting the requirements of the GIP. Of the 22 analytical review outliers, 7 have been resolved by analysis with the remaining 15 requiring modifications (this involved 55 supports). In addition, there were 75 cable tray walkdown outliers that can be divided into three groups: 32 of the cable tray outliers are resolved, 22 of the outliers involved block walls which need seismic qualification, and the remaining 21 cable tray outliers, involving 37 supports, require physical enhancements.

The relay chatter assessment for ONS has identified the relays for which either testing and/or replacement is required. A total of 4942 devices have been subjected to the chatter review in support to the ONS Safe Shutdown Equipment List. 4809 of these items have been found acceptable per the guidelines set forth in the GIP. Of the 137 (including 24 low ruggedness relays) relays not screening per the GIP, 6 of these have been resolved. The 24 low ruggedness relays are to be replaced. The other 107 relays outliers are scheduled for either testing and/or replacement. These outliers are distributed among various relay manufacturers and have unknown capacities.

Each Outlier is planned to be resolved to meet the intents and concerns for which the GIP is founded. Equipment/relay adequacy will be demonstrated by such methods as: testing, analytical efforts, demonstration of similarity to existing experience data beyond the SQUG Experience Data base of equipment and events, and other methods deemed appropriate for Outlier resolution per the GIP.

All SQUG outliers were evaluated to determine if the existing station Licensing Basis was challenged. In the event an Outlier finding did potentially challenge the Licensing Basis, the associated equipment/item/concern was logged into the appropriate station process for evaluation. Operability and compliance was addressed within the station's established procedures for such evaluations.

An individual schedule for the resolution of each Outlier will not be included within the text of this report. The transmittal letter for this report addresses the planned completion date for the overall outlier resolution effort and the submittal of the final completion letter. The actual schedule for each repair/replacement will be determined based on several factors including: 1) accessibility, 2) required engineering and procurement time, 3) PRA risk significance, and 4) associated or dependent modification projects.

Section 1

INTRODUCTION

1.1 PURPOSE

The purpose of this report is to document the Unresolved Safety Issue (USI) A-46 seismic adequacy evaluations for the Oconee Nuclear Station. These seismic evaluations were performed to address NRC Generic Letter 87-02, "Verification of Seismic Adequacy of Mechanical and Electrical Equipment in Operating Reactors, Unresolved Safety Issue (USI), A-46." These seismic evaluations were performed using the Generic Implementation Procedure (GIP) which was developed by the Seismic Qualification Utility Group (SQUG). The associated relay evaluations are documented in a separate report being submitted simultaneously entitled, "Oconee Nuclear Station, USI-A46 Relay Evaluation Report."

1.2 SCOPE

This report addresses the equipment which was included in the seismic walkdown Safe Shutdown Equipment List. The majority of this equipment is located in the following major structures: the Turbine Building, the Auxiliary Buildings, and the Reactor Buildings. All associated relay evaluations are documented in a separate report being submitted simultaneously entitled, "USI A-46 Relay Evaluation Report, Oconee Nuclear Station."

The Unresolved Safety Issue (USI) A-46 report which discussed the scope, methods, and results of the seismic adequacy review for the equipment included in the Emergency Power Path Safe Shutdown Equipment List was submitted to the Nuclear Regulatory Commission in December, 1996. That report encompassed the Keowee Hydro Station; the Overhead Power Path through the 230 kV Switchyard and terminating at the high voltage side of the CT1, 2, and 3 transformers. Also included was the underground power path which terminates at the high voltage side of the CT4 transformer.

1.3 PLANT DESCRIPTION

Oconee Nuclear Station is located in Oconee County in northwestern South Carolina. The station is sited on the shore of Lake Keowee, a Duke impoundment on the Keowee river, a tributary of the Savannah River. The station was built during the 1967 to 1974 period. Unit 1 began commercial operation in 1973, and the last Unit (Unit 3) began commercial operation in 1974. The station consists of three Babcock & Wilcox pressurized water reactors, each designed to generate approximately 890 MWe. The balance of plant was designed and constructed by

Duke Power Company, with Bechtel Corporation designing the Reactor Buildings and C.T. Main, Inc. designing the Intake Structure.

The station consists of three reactor buildings, a single turbine building (each Unit is seismically isolated) and two auxiliary buildings, one servicing Units 1 and 2, and the other servicing Unit 3. The nuclear steam supply system has two loops with two cold legs each. Each Unit has two "once-through" steam generators that produce superheated steam at constant pressure. The reactor and nuclear steam supply system are contained within the reactor building, a post-tensioned reinforced concrete cylinder and dome with a steel liner.

A reliable source of emergency onsite power is provided by the two-unit Keowee Hydroelectric Station, which is located at the Keowee Dam, about a mile away from the plant. Emergency power is supplied via two separate and independent paths, one of which is the Overhead Power Path through the 230 kV Switchyard and the second is the underground power path to transformer CT4 and the standby busses. In addition to a large grid network, backup power is also available through a dedicated line from three combustion turbine Units at the Lee Steam Station, approximately 30 miles away.

Within ONS, this power is distributed through 4.16 kV switchgear TC, TD and TE. This switchgear provides power for major pumps, 600V Load Centers as well as 600 and 208V Motor Control Centers. 600 and 208V Motor Control Centers provide power to the various AC power loads. 120V AC power is provided by various power panel panelboards within the plant. DC power is supplied by 600V Battery Chargers and 125/250V DC Battery Systems and Distribution Centers which provide power to instrumentation and controls that are needed during loss of power conditions. Emergency lighting is also provided through the 125/250V DC Battery System and associated lighting panelboards.

The plant design incorporates the Standby Shutdown Facility (SSF), a totally independent means of achieving and maintaining safe shutdown conditions if the normal plant safety systems are unavailable.

1.4 BACKGROUND

Due to the extent of the changes in the requirements for seismic qualification of equipment over the years, the U.S. Nuclear Regulatory Commission (NRC) initiated USI A-46, "Seismic Qualification of Equipment in Operating Nuclear Plants," in December 1980. The purpose of USI A-46 is to verify the seismic adequacy of essential equipment in operating plants which had not been qualified in accordance with more recent criteria.

In 1982, the Seismic Qualification Utility Group (SQUG) was formed to develop a practical approach for seismic qualification of equipment in operating plants. The approach developed by SQUG was to use experience with the performance of power plant and industrial equipment in actual earthquakes as the primary basis for evaluating the seismic ruggedness and functionality of essential equipment in nuclear power plants. In 1983, the NRC issued NUREG 1018 which includes a general endorsement of the use of experience data for verification of the seismic adequacy of equipment in nuclear plants.

In early 1987, the NRC issued Generic Letter (GL) 87-02 to owners of operating nuclear plants which were licensed prior to development of modern seismic qualification standards. The recipients of GL 87-02 are referred to as A-46 plants and include the Oconee Nuclear Station. Essentially, all owners of A-46 plants, including Duke Power Company, are SQUG members. GL 87-02 requires owners to take action to verify the seismic adequacy of important equipment in their plants. The SQUG approach, embodied in the Generic Implementation Procedure (GIP), is explicitly recognized by the NRC as the preferred method for accomplishing this objective.

In 1992, the NRC issued Supplement No. 1 to GL 87-02 (Reference #2) which transmitted Supplemental Safety Evaluation Report No. 2 on SQUG GIP, Revision 2, as corrected on February 14, 1992 (Reference #1). References #1 and #2 are the basis for the seismic evaluations described in this report.

Oconee Nuclear Station provided information in support of Generic Letter 87-02 to the NRC in a letter dated September 21, 1992 (Reference #4). On November 19, 1992, the NRC responded to the Oconee Nuclear Station with a letter of request for additional information. Also, the NRC requested clarification as to the Oconee Nuclear Station's commitment to the Generic Implementation Procedure (GIP), Revision 2, as corrected on February 14, 1992 and the associated Supplemental Safety Evaluation (SSER) No. 2. Duke responded with a letter dated January 15, 1993 clarifying the Oconee Nuclear Station's commitment to the GIP and providing the requested additional information to the NRC. The NRC's letter dated April 5, 1993 to Duke Power provides the Staff's evaluations and conclusions of the additional information (Reference #5).

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1.5 REPORT ORGANIZATION

The remaining sections of this report are organized in accordance with Section II.9.4 of the GIP (Reference #1). These sections include the following:

- Section 2, "Safe Shutdown Earthquake"—The Oconee Ground Response Spectra (GRS) and In-Structure Response Spectra (IRS) are described. The bases for determining how seismic demand is determined for each equipment are provided in Section 5, and documented on the Screening Verification Data Sheet (SVDS) forms in Appendix D of this report.
- Section 3, "Project Team"—The Duke project team is discussed. Seismic Capability Engineers (SCEs) involved with equipment walkdowns are listed. Résumés for (SCEs) are included in Appendix A. The credentials of the third party audit group are also discussed.
- Section 4, "Safe Shutdown Equipment List (SSEL)"—This section contains information from the SSEL report recommended for submittal to the NRC, per Section II.9.2 of the GIP. Descriptions of the safe shutdown path selection, plant operation procedures used, and Oconee Nuclear Operations Department review of the SSEL are discussed. Lists of equipment on the Composite SSEL and Seismic Review SSEL are included in Appendices B and C of this report. The list of equipment included on the Relay Review SSEL is included in the Relay Report (Reference #3).
- Section 5, "Mechanical and Electrical Equipment Review"—Screening Verification and Walkdown results for mechanical and electrical equipment are discussed, in addition to the SVDS forms provided in Appendix D. Instances in which the intent of a caveat is met without meeting the specific wording of the caveat rule are identified. A summary of outliers and their resolution is provided.
- Section 6, "Tanks and Heat Exchanger Review"—Results of the tanks and heat exchangers review 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 7, "Cable Tray, Cable Trench, Conduit and HVAC Review"—Results of the raceway review, including bounding samples and outliers, are summarized.

- Section 8, "Dispositioning of Outliers"— A summary of the GIP Outliers is presented along with current resolutions for those with a Resolved status, or proposed resolutions for those with Unresolved status.
- Section 9, "Significant or Programmatic Deviations from the GIP"—A statement is made that no significant or programmatic deviations from the GIP are made in the Oconee Nuclear Station USI A-46 Implementation Program.
- Section 10, "Third-Party Audit Summary"—The Third-Party Audits are summarized, including resolution of recommendations made by the Auditors during the initial Audit. The Peer Review Team close-out letter is included as Appendix E.
- Section 11, "References"

Section 2

SAFE SHUTDOWN EARTHQUAKE

2.1 GROUND RESPONSE SPECTRA

The Oconee Nuclear Station maximum hypothetical earthquake (MHE) acceleration value is 0.10 g for Class 1 structures founded on bedrock and 0.15 g for structures founded on overburden (Ref. # 6, Section 2.5.2.6). The design basis earthquake (DBE) acceleration value is 0.05 g for both vertical and horizontal ground acceleration (Reference #6, Section 2.5.2.7). The CT transformers 1-4, radwaste facility, miscellaneous MCC's & outdoor equipment are the only SSEL equipment (included in this report) which are founded on overburden. All other structures are founded on bedrock.

2.2 IN-STRUCTURE RESPONSE SPECTRA

The ONS in-structure response spectra were generated using the time history methodology as described in section 3.7.1 and 3.7.2 of the UFSAR. The time history record of the N-S, May 1940 El Centro earthquake, scaled to 0.1g peak ground acceleration, was used for input motion. Structural damping used for the Turbine Building model was 2% of critical damping and for the Auxiliary and Reactor Building models, 5% of critical damping was used.

A letter dated September 21, 1992 from Duke Power Company (Reference #4) to the USNRC discussed the generation of the requested in-structure response for the USI A-46 Program. This letter includes a description of methodology and miscellaneous plots of the in-structure response for several buildings and locations. In its response to Duke Power Company (Reference #5), the USNRC defined the Oconee Nuclear Station IRS as "Realistic, Median-Centered" per GIP Section II.4.2 (Reference #1).

Section 3

PROJECT TEAM

A primary SQUG project team was established at Duke Power in 1992 to address issues relating to USI A-46. This multidiscipline team was responsible for overall project coordination, performing relay evaluations and seismic walkdowns, and coordination of contractor activities. A team of on-site mechanical and electrical systems engineers was responsible for development of the SSEL and provided guidance, as needed, to the core project team. All of the above was performed with in-house engineering staff. A contractor, EQE Inc., assisted with seismic walkdown of miscellaneous SSEL items and outlier resolution of items which were determined to be outside the scope of the GIP.

3.1 UTILITY REPRESENTATIVES

The core A-46 project team included engineers involved with structural, and electrical and control systems disciplines. The team also employed a contract employee who had retired from Oconee Nuclear Station as a electrical equipment craft supervisor, with over twenty five years experience. This contractor assisted the Seismic Capability Engineers (SCE) in many ways including locating equipment, safe electrical equipment access, Plant Operations/SQUG team liaison, and advising the SCE's concerning original equipment installation techniques. A team of mechanical systems engineers provided information to the Seismic Capability Engineers (described below) performing the seismic evaluations. The project team consulted site Licensing and Operations personnel, as needed. The Utility Representative to the SQUG Membership is Raymond L. McCoy. Jim E. Thomas served as the Utility Member Representative earlier in the SQUG program as well as serving as a SQUG Steering Committee Member for 14 years, to date.

3.2 SEISMIC CAPABILITY ENGINEERS

The majority of the equipment seismic evaluations were performed by Seismic Capability Engineers who were assigned to the USI A-46 project team and based at the Oconee Nuclear Station. The remainder of the seismic evaluations were performed by offsite SCEs based within Duke Power Company, Duke Engineering and Services, Inc., or EQE Inc. Resumes for each walkdown Seismic Capability Engineer are contained in Appendix A. Each SCE has been trained in accordance with the expectations of the GIP.

The Seismic Capability Engineers who were involved with this project are listed below:

Raymond L. McCoy, PE	Lead Project Coordinator	Duke Power Company (Oconee Nuclear Station)
Russell P. Childs, PE	Walkdown Coordinator/ Seismic Capability Engineer	"
Lawrence B. Elrod, PE	Seismic Capability Engineer	"
Robert V. Hester, PE	Seismic Capability Engineer	"
Darryl A. Kelley, PE	Seismic Capability Engineer	"
Robert W. McAuley, PE	Seismic Capability Engineer	Duke Power Company (Nuclear General Office)
John M. Richards, PE	Seismic Capability Engineer	"
Gerald L. Green, PE	Seismic Capability Engineer	Duke Engineering and Services, Inc.
Richard W. Hough, PE	Seismic Capability Engineer	"
Ron Polivka, PE	EQE Project Manager	EQE, Inc.
Steve Eder, PE	EQE Walkdown Coordinator	"
Gayle Johnson, PE	Seismic Capability Engineer	"
Leo J. Bragagnolo, PE	Seismic Capability Engineer	"
Farzin Beigi, PE (See Note 1)	Seismic Capability Engineer	"
Brantley Buerger, PE	Seismic Capability Engineer	"
Jim White, PE	Seismic Capability Engineer	"
Jim Disser, PE	Seismic Capability Engineer	"
Carl Nelman, PE	Seismic Capability Engineer	"
Rick Augustine, PE	Seismic Capability Engineer	"
John Dizon, PE	Seismic Capability Engineer	"
Bascilio N. Sumobodobila, PE	Seismic Capability Engineer	"

Note 1: Professional Engineering Registration obtained after equipment walkdown.

3.3 THIRD-PARTY AUDITOR(S)

The initial Oconee Nuclear Station A-46 Peer Review effort was combined with the IPEEE Peer Review. The A-46 efforts often were enhanced to address IPEEE concerns, as well as A-46, thus supporting a combined implementation. The efforts were combined in the interest of overall cost efficiency and consistency of technical review.

In the interest of conducting a solid technical review, our third-party auditor team was formed from various resources from Duke Power Company and EQE. We sought the high level expertise of EQE due to their consistent and long-term role in the development of SQUG methodologies. In addition, we sought out internal expertise having familiarity with Oconee's technical design issues to compliment this team. Together, our third-party audit team consisted of highly trained, experienced engineers who were familiar with the Oconee Nuclear Station, the GIP and were able to critique the core A-46 project team's application of SQUG methodologies.

Third Party Auditors

Duke Power Participants:

William B. Shoemaker (Chairperson of Team) is a senior engineer with twenty-one years experience at Duke Company in structural analysis and design and is a Registered Professional Engineer. He has a BS and MS in engineering and is a member of ASCE. Mr. Shoemaker led and coordinated the IPEEE and EPRI seismic margin assessment efforts at Duke Power's Catawba Nuclear Station, and provided input into the development of the EPRI procedures. Experienced in seismic plant walkdowns, he was a member of the observer team at Zion Nuclear Station for the SQUG trial walkdown.

James E. Thomas has over twenty-six years of experience as an electrical engineer and is a Registered Professional Engineer. He has been manager of the electrical section of the Design Engineering Department at Duke Power's Catawba Nuclear Station. He was responsible for electrical engineering and design work necessary to support the operation of Catawba, including electrical and instrumentation and control design engineering for modifications, upgrades, operability evaluations and test acceptance criteria. He also represents the company as a member of the SQUG Steering Committee. In addition, he has provided electrical and electronic engineering for nuclear station modifications, supervised and managed various electrical engineering groups, and developed company programs for establishing and maintaining environmental qualifications of electrical equipment.

Dr. P. M. Abraham is the manager of the Severe Accident Analysis section in the Nuclear Engineering Division of Duke Power Company and a Registered Professional Engineer. He has a MS in Nuclear Engineering as well as a Ph.D in Nuclear Physics. Dr. Abraham is responsible for analysis of severe accidents including PRA and severe accident thermal-hydraulic and consequence analysis for Duke's nuclear power facilities. He has over twenty years experience in the Duke nuclear program, working in the areas of licensing, safety analysis and operating experience. Dr. Abraham is an alternate member of the Duke Nuclear Safety Review Board, where he served as a full member from 1993 till 1995. He is a member of the American Nuclear Society (ANS) and served on the ANS NRSD (Nuclear Reactor Safety Division) program committee during 1982-1988.

David R. Kulla is an engineering supervisor with Duke Power Company and a Registered Professional Engineer. He has extensive experience over the last twenty-four years in structural analysis and design for nuclear power plants. Mr. Kulla participated in the development of the EPRI seismic margin assessment procedure. He is a member of the ASME General Requirements Sub-Group.

R. Wayne Revels is a senior engineer with Duke Company. He has a BS in mechanical engineering and has more than thirty years of engineering experience. His career at Duke Power began in 1974 and has involved a wide range of nuclear plant design, startup, and operation issues.

EQE Participants:

Ronald Polivka (Co-Chairperson) served as facilitator for the EQE portion of the team and did not actually participate technically as part of the Third-Party Audit Team.

Dr. Mayasandra K. Ravindra, Paul D. Baughman and David L. Moore of EQE International served as senior level participants on the peer review team in conjunction with Duke Power Company personnel.

David L. Moore has served as Project Manager, Program Manager, Management Consultant and Senior Consultant for numerous Seismic evaluations including USI A-46, Seismic Margin Assessments, Probabilistic Risk Assessments and Probabilistic Safety Assessments for several utilities. Mr. Moore has conducted numerous PRA courses for utilities, EPRI and the NRC. Publications include PRA's for Salem Units 1&2 (co-author), Kewaunee Nuclear Power Auxiliary Feedwater System(co-author), and Brunswick Steam Electric Plant (co-author); "Seismic Margin Reviews of Nuclear Power Plants: Identification of Important Functions and Systems" (co-author), Reliability and System Safety 20 (1988) 263-275 and also Transactions of the 9th International Conference on Structural Mechanics in Reactor Technology, Lausanne, Switzerland, 17-21 August, 1987; Seismic Margin Review of the Maine Yankee Atomic Power Station (co-author), NUREG/CR-4826, Volume 2, March 1987.

Mayasandra K. Ravindra has specialized in reliability analysis, seismic risk analysis, probabilistic design development, and evaluation of natural and man-made hazards for critical facilities. He has over twenty-six years experience in research, design, construction, and teaching. He has served as Project Manager on programs for the Nuclear Regulatory Commission, and the Lawrence Livermore and Brookhaven National Laboratories and on previous IPEEE walkdowns. Dr Ravindra is a present member of ASCE Committees on Nuclear Energy, Dynamic Analysis, and Minimum Design Loading Standard, and the Society of Risk Analysis and the Earthquake Engineering Research Institute. He is a former Chairman of the ASCE Committee on Safety of Nuclear Structures(1983-1989). Publications include "Methodologies for Seismic Verification of Existing Nuclear Plants," "Seismic Fragilities for Nuclear Power Plant Risk Studies," "Seismic Risk Analysis" and "Analysis of External Events"

Paul Baughman is a senior consultant with EQE International and has over twenty-five years experience in nuclear power plant seismic design and equipment qualification. He is EQE's project manager for the generic SQUG program and is one of the consultants to the SQUG Steering Committee. He has managed EQE's A-46 efforts at four plants, and he has participated in or acted as a peer reviewer for several other A-46 evaluations. He is a licensed professional engineer and attended the SQUG Walkdown and IPEEE add-on training courses.

Section 4

SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

The Oconee Safe Shutdown Equipment List (SSEL) was prepared in accordance with Section II.3 and Appendix A of the GIP (Reference #1).

4.1 SAFE SHUTDOWN PATH SELECTION

Resolution of USI A-46 requires verification of the seismic adequacy of the equipment necessary to achieve and maintain a safe shutdown condition for Oconee Nuclear Station during the first 72 hours following a Design Basis Earthquake (DBE). The key assumptions used in the USI A-46 review are:

1. The unit will be operating normally, with the reactor coolant system at or near normal operating pressure and temperature, prior to the DBE;
2. The earthquake will not cause a loss of coolant accident (LOCA);
3. No other extraordinary event or accident; e.g. fire, flood, or LOCA will occur simultaneously with the DBE.
4. Loss of off-site power may or may not occur as a result of the earthquake; and
5. There is sufficient redundancy such that the failure of the active function of a single component will not prevent safe shutdown.

4.1.1 Safe Shutdown Systems

The following sections describe the safe shutdown systems and main operating procedure steps necessary to meet USI A-46 requirements. The four basic functions of reactivity control, pressure control, inventory control, and decay heat removal are addressed. Each section describes the plant systems and main operator actions that are used to accomplish these safe shutdown functions.

Reactivity Control. Reactivity control is accomplished by inserting negative reactivity after obtaining the signal to shutdown. Additional negative reactivity is needed some time later to compensate for the combined effects of Xenon-135 decay and reactor coolant temperature decreases.

Primary Success Path

Alternate Success Path

Short Term:

Control Rod Insertion

Meets single failure

Long Term:

HPI System injection from
Borated Water Storage Tank (BWST)

Meets single failure

Letdown through RV Head Vents

Letdown to spent fuel pool

Discussion:

The selected SQUG alternative for short term reactivity control is control rod insertion. The single active failure criteria is met since the failure of the most reactive rod to insert is acceptable. The selected SQUG alternative for long term reactivity control is injection of borated water from the Borated Water Storage Tank (BWST) using the High Pressure Injection (HPI) System. Redundancy is ensured for the HPI System by identifying two trains of HPI. The BWST does not need a backup since active failure does not include structural integrity failure. Operators must manually align the HPI pump suction to the BWST. The operators are directed by procedure to do this on low Letdown Storage Tank (LDST) level. For this reason the LDST and its level instrumentation is required to remain intact. Only the initial stored inventory in the LDST is assumed to be available. No credit is taken for letdown or makeup to the LDST since the components necessary to provide this function require plant instrument air. Instrument air may or may not be available during a seismic event. Worst case must be assumed.

The BWST will supply makeup water required due to thermal shrinkage of the reactor coolant and boron requirements to maintain a 1% subcriticality margin throughout the shutdown transient. After makeup has replenished the RCS due to thermal shrinkage, a letdown path must be established to allow continued injection of borated water to maintain adequate subcriticality margin for subsequent plant cooldown. Sufficient letdown capability is ensured by either use of the RV Head Vents or an alternate letdown path through 1,2,3HP-426 and 1,2,3HP-428 to the fuel transfer tube. The RV Head Vents discharge to the outlet of the Reactor Building Cooling Units (RBCUs) so that the steam/water mixture can be cooled/condensed by the cool air discharging from the RBCUs. Additionally, the reactor vessel head vents would be opened for a natural circulation cool-down (See Decay Heat Removal Function Section).

The ability to sample for RCS Boron concentration is required to allow RCS cool-down to cold shutdown conditions. All normal sample paths are assumed isolated via closed containment isolation valves (loss of Instrument Air). Manual sampling using a portable sample cooler and ice bath using the Post Accident Sample path from the B Steam Generator (through 1,2,3RC-162, 1,2,3RC-163, 1,2,3RC-164, 1,2,3RC-165, 1,2,3RC-179 and manual valve 1,3LP-128/2RC-178) or the discharge of the LPI coolers (through 1,2,3LP-126 and manual valve 1,3LP-128/2RC-178) ensures the ability to confirm Boron concentration. This method of RCS sampling is consistent with the sampling method identified for the Appendix R program.

Support System Requirements:

The Low Pressure Service Water (LPSW) System is designed to supply cooling water throughout the plant during normal and emergency conditions. The Unit 1 and 2 LPSW Systems share three LPSW pumps which take suction off the CCW crossover header. The Unit 3 LPSW System has two LPSW pumps which take suction off the CCW crossover header. Separate flow paths and redundant components ensure that no single active failure will prohibit the systems from performing their safety function. For the reactivity control function, the LPSW System provides cooling water to the HPI pump motor bearing coolers and the Reactor Building Cooling Units (RBCUs).

Support Systems:

- LPSW - Cooling to HPI pumps and RBCU's
- CCW - Support for LPSW
- AC Power - MOVs, pumps, fans
- DC Power - PORV, controls, instrumentation
- RPS

Reactor Coolant Pressure Control - Pressure control of the reactor coolant system (RCS) is required to avoid exceeding RCS pressure-temperature limits. Giving the operator the ability to have some control over RCS pressure also provides operational flexibility while placing the plant in a safe stable condition. Different combinations of equipment can be used to raise or lower the RCS pressure and temperature.

Available Alternatives:

- 1) Decrease Pressure
 - a) Pressurizer Code Safety Relief Valves (SRVs)
 - b) Pressurizer PORV
 - c) Auxiliary Pressurizer Spray from HPI System
 - d) Secondary-Side heat removal (covered in Decay Heat Removal Function)

2) Increase Pressure

- a) Injection from the HPI System
- b) Pressurizer Heaters

Discussion:

RCS pressure can be decreased by operator action through either the use of the pressurizer PORV or the auxiliary pressurizer spray path (via HPI System). The pressurizer SRVs ensure RCS overpressure protection is maintained. No credit is taken for the normal letdown path since this path may be unavailable if instrument air is lost. Additionally, the normal pressurizer spray path is unavailable since no credit is taken for the Reactor Coolant Pumps (RCPs) being available (non-essential power). RCS pressure can be increased if required by utilizing the pressurizer heaters (Bank 2 Group B) or controlling the injection rate of the HPI System. In addition to the method described above, the emergency feedwater system (EFW) and steam generators provide some control of the RCS cool-down and depressurization rate. However, these systems will be addressed in the Decay Heat Removal section.

Support System Requirements:

The Low Pressure Service Water (LPSW) System is designed to supply cooling water throughout the plant during normal and emergency conditions. The Unit 1 and 2 LPSW Systems share three LPSW pumps which take suction off the CCW crossover header. The Unit 3 LPSW System has two LPSW pumps which take suction off the CCW crossover header. Separate flow paths and redundant components ensure that no single active failure will prohibit the system from performing its safety function. For the pressure control function, the LPSW System provides cooling to the HPI pump motor bearing coolers.

Support Systems:

- LPSW - Cooling to HPI pumps
- CCW - Support for LPSW
- AC Power - MOVs, pumps
- DC Power - PORV, controls, instrumentation
- RPS

Reactor Coolant Inventory Control - RCS inventory control is achieved by injecting water into the RCS and minimizing the loss of coolant from various openings or potential openings in the RCS.

RCS Makeup/Injection Alternatives:

HPI System Injection from BWST

Meets single failure

Maintain RCP Seal Assembly Integrity
by HPI System Seal Injection

Meets single failure

Prevent RCS Losses in Following Paths:

RCS Letdown
PORV
RCS Vents
RCS Sampling

Discussion:

The selected SQUIG alternative for RCS inventory control is the addition of water using injection from the HPI System through the RCP seals. Should additional makeup capacity be required, the HPI normal and emergency makeup paths have been selected. The single active failure criterion is met by identifying two trains of HPI. The BWST does not need a backup since active failure is defined as the loss of functional capability, not structural integrity. The structural integrity of the HPI pump recirculation line is only required through the block orifices due to the sufficient supply of BWST water.

Preventing potential RCP seal degradation is accomplished by maintaining normal HPI seal injection. The RCP seal return path is assumed to be isolated since IA may not be available during a seismic event. If IA were available and the seal return pathway was desired to be isolated, 1/2/3 HP-20 and 1/2/3 HP-21 could be closed by the operator. Unit 1 also requires taking credit for the closure of 1HP-275 and 1HP-276 to isolate the RCP seal return path due to the different arrangement of Unit 1's RCP seals. Component Cooling (CC) supply to the RCP seal coolers is assumed to be unavailable. For this arrangement with an isolated seal return path and no CC cooling, RCP seal degradation is not expected to occur as long as HPI seal injection is maintained, and the RCP is secured (stopped).

Two active valves have been selected to secure the normal letdown paths, the RCS sample paths, PORV path, and RCS vent paths.

Support System Requirements:

The Low Pressure Service Water (LPSW) System is designed to supply cooling water throughout the plant during normal and emergency conditions. The Unit 1 and 2 LPSW Systems share three LPSW pumps which take suction off the CCW crossover header. The Unit 3 LPSW System has two LPSW pumps which take suction off the CCW crossover header. Separate flowpaths and redundant components ensure that no single active failure will prohibit the system from performing its safety function. For the inventory control function, the LPSW System provides cooling to the HPI pump motor bearing coolers.

Support Systems:

- LPSW - Cooling to HPI pumps

- CCW - Support for LPSW

- AC Power

- DC Power

- ESFAS

Decay Heat Removal - Following the reactor shutdown, the plant must be able to reject decay heat generated within the core for at least 72 hours.

Primary Success Path

Alternate Success Path

Short Term:

MD EFW Pumps feeding SG(s)
from UST and Hotwell

TDEFWP feeding SG(s)
from UST and Hotwell

HPI System feed-and-bleed
through PORV with suction from
(i) BWST
(ii) RB Emergency Sump via LPI

Long Term:

LPI System in Residual Heat
Removal (RHR) mode

ASW System
through SG atmospheric dump valves

HPI System feed-and-bleed
through PORV with suction from
the RB Emergency Sump via LPI

Discussion:

The selected SQUG alternative for short term decay heat removal involves establishing natural circulation conditions and steaming the steam generators (SGs) via the main steam relief valves. The main steam relief valves are adequate for maintaining hot shutdown conditions. The atmospheric dump valves would be opened by the operator to establish a plant cooldown. The turbine bypass valves are assumed to be unavailable since plant instrument air may not be available following a seismic event. It is assumed the RCPs are not available. Adequate feedwater supply to the SGs is provided by either motor-driven (MD) Emergency Feedwater (EFW) pump. The Turbine Driven (TD) EFW pump and associated flow path is included as the short term backup method because current operating procedures allow for much flexibility in the operation of the EFW system (i.e., any of the three pumps may be used based on plant conditions). The EFW water sources include the Upper Surge Tanks and Condenser Hotwell (up to elevation 784' 7"). These water supplies ensure sufficient capacity while cooling down to LPI entry conditions. The combined normal inventory of the two sources of water for EFW is approximately 160,000 gal. However, these water supplies cannot provide long-term decay heat removal for the full 72 hr. since no credit is taken for recirculation of the steam cycle to the condenser. Therefore, methods for ensuring long-term (up to 72 hr) decay heat removal must be identified.

Long-term decay heat removal can be accomplished by either (i) performing a natural circulation cool-down using the main steam atmospheric dump valves to LPI entry conditions and maintaining the plant in cold shutdown condition, or (ii) establishing natural circulation in the RCS and steaming the steam generators utilizing the ASW System and the main steam atmospheric dump valves. Since neither choice of long-term decay heat removal is single-failure proof, equipment to ensure both methods are available has been selected.

Another alternative available to the operators would be opening the pressurizer PORV and establishing HPI "feed-and-bleed" core cooling. The equipment necessary for the feed-and-bleed method of decay heat removal has already been identified in the SQUG SSEL.

For a natural circulation cool-down, the operators are directed to open the RV head vent valves to prevent a void from forming in the upper head region during the cool-down. The RV Head Vents discharge to the outlet of the Reactor Building Cooling Units (RBCUs) so that the steam/water mixture can be cooled/condensed by the cool air discharging from the RBCUs. The core exit thermocouples will be relied upon to ensure adequate heat removal is occurring.

Support System Requirements:

The Low Pressure Service Water (LPSW) System is designed to supply cooling water throughout the plant during normal and emergency conditions. The Unit 1 and 2 LPSW Systems share three LPSW pumps which take suction off the CCW crossover header. The Unit 3 LPSW System has two LPSW pumps which take suction off the CCW crossover header. Separate flow paths and redundant components ensure that no single active failure will prohibit the system from performing its safety function. For the decay heat removal function, the LPSW System provides cooling to the HPI pump motor bearing coolers, the MD EFW pump motor air coolers, the TD EFW pump bearing jacket, LPI Coolers, and RBCUs.

The Condenser Circulating Water (CCW) System is designed to supply cooling water to the TDEFW pump turbine oil cooler. CCW is the normal supply.

Support Systems:

- LPSW - Cooling to HPI pumps, EFW pumps, LPI coolers, RBCU's

- CCW - Supply for LPSW, ASW pump; cooling to TDEFWP turbine oil cooler

- AC Power

- DC Power

4.1.2 Supporting Systems

The following sections describe the supporting systems necessary to ensure that the basic safe shutdown functions described above will be achieved. These systems do not directly perform a safe shutdown function, but must operate in order to support the safe shutdown systems.

Electrical Distribution - The station distribution system consists of various electrical systems designed to provide reliable electrical power during all modes of station operation and shutdown conditions. The systems are designed with sufficient power sources, redundant buses, and required switching to accomplish this. Engineered safeguards equipment for each unit is arranged onto three load group buses such that the loss of a single bus section for any reason results in only the loss of equipment fed from that bus leaving redundant equipment to perform the same function. In general, the equipment related to unit operation is connected to its respective unit auxiliary electrical buses, whereas equipment common to and serving all units is distributed between the three unit auxiliary electrical buses. The control of power sources and switching for Unit 1 and 2 is accomplished from the Unit 1 and 2 control room while control of power sources and switching for Unit 3 is from the Unit 3 control room. Each unit's 600 volt auxiliary system is similar and arranged into multiple bus sections. Each bus section is fed from a separate load center transformer which is connected to one of the three 4160 volt switchgear bus sections. Various 600 volt non-engineered safeguards motor control centers are located throughout the station to supply power to equipment within the related area. The three engineered safeguards load centers and associated motor control are redundant and are supplied independently from the three 4160 volt engineered safeguards load buses. Load center X8 and X9 have an alternate feeder with manual transfer to be used when the normal source of power is not available. Each engineered safeguards motor control center has an alternate feeder with manual transfer to be utilized only for maintenance. No common failure mode exists for this system. For each unit, a system is provided to supply instrumentation, control, and power loads requiring unregulated 208V/120 volt ac power. It consists of motor control centers, distribution panels, and transformers fed from 600 volt motor control centers. Each of these motor control centers have redundant supply feeders from separate transformers and redundant 600 volt motor control centers. The feeder breakers have mechanical interlocks and manual transfers.

The 208 volt auxiliary system is similar in arrangement for each of the three units. The 125 volt dc instrumentation and control power system batteries of a unit are physically separated in individual enclosures from batteries of another unit to minimize their exposure to any damage. The battery chargers and associated dc bus sections and switchgear of a unit are located in separate rooms from battery chargers and associated dc bus sections of another unit in the auxiliary building and physical separation is maintained between redundant equipment.

For each unit, a separate 125/250 volt dc power system is supplied. Each system consists of three 125/250 volt dc power supply battery chargers, a three conductor, metalclad distribution center assembly, and two 125 volt dc batteries. This arrangement provides 125 volts from "P" bus to "PN" bus, 125 volts dc from "PN" bus to "N" bus, and 250 volt dc from "P" bus to "N" bus. Loads on this system are basically the 250 volt dc power loads of units. Each 125 volt dc half of a bus section normally is supplied from one of the 125 volt dc power supply battery

chargers with the associated 125 volt dc battery floating on the bus. The batteries supply the load without interruption should the battery charger or the ac source fail. A bus tie with normally open double breakers is provided between the three units' distribution center bus sections to backup a battery when it is removed for servicing. One standby 125 volt dc power supply battery charger is provided between each pair of the 125 volt dc batteries for servicing and to "backup" the normal power supply battery chargers.

For each unit, four redundant 120 volt ac vital instrument power buses are provided to supply power in a predetermined arrangement to vital power, instrumentation, and control loads under all operating conditions. Each bus is supplied separately from a static inverter connected to one of four 125 volt dc control power panelboards. Upon loss of power from 125 volt dc bus DCA or DCB, the affected inverter is supplied power from a 125 volt dc bus of another unit through dc control power panelboards and transfer diodes of the affected 125 volt dc panelboard. A tie with breakers is provided to each of the 120 volt vital ac buses from the alternate 120 volt ac regulated bus to provide backup for each vital bus and to permit servicing of the inverters. Each inverter has the synchronizing capability to permit synchronization with the regulated buses.

For each unit, each of the four redundant channels of the nuclear instrumentation and reactor protective system equipment is supplied from a separate bus of the four redundant buses. Also for each unit, each of the three redundant channels of the engineered safeguards protective system is supplied from a separate bus of the four redundant buses. The two engineered safeguards actuation power buses are supplied from separate vital power buses.

For each unit, four uninterruptible power systems are available to supply power.

They are:

1. The unit's Integrated Control System (ICS) power system, which is 120 volt ac, single phase.
2. The unit's Auxiliary Power System (APS) which is 120 volt ac, single phase.
3. The unit's original design Computer Power System (CPS), which is 240/120 volt ac, single phase.
4. The units' new Computer Power System (KOAC), which is 240/120 volt ac, single phase.

Each of these first three systems consist of a static inverter, with redundant 125 volt dc supplies from separate 125 volt dc buses, circuit breakers and distribution panelboards. The fourth system consists of a static inverter with a 250 volt dc supply from a single 250 volt dc bus, circuit breaker, and distribution panelboard. Also, a static transfer switch is provided in each system as a means for automatic transfer of system loads to the alternate ac regulated power system should the inverter become unavailable. The output of each inverter is synchronized with the ac regulated power system through the static switch in order to minimize transfer time from inverter to the regulated supply. In addition, an automatic transfer switch is provided in the ICS

power system as a means for automatic transfer of system loads to the alternate ac regulated power system should the static transfer switch become unavailable.

For each unit, a system is provided to supply instrumentation, control, and power loads requiring regulated ac power. It also serves as an alternate power source to both the vital power panelboards and to the uninterruptible power panel boards. The system consists of two distribution panels, two regulators, and two transformers fed from separate motor control centers.

Service Water

The Low Pressure Service Water (LPSW) System is designed to supply cooling water throughout the plant during normal and emergency conditions. The Unit 3 LPSW System has two LPSW pumps which take suction off the CCW crossover header. Separate flow paths and redundant components ensure that no single active failure will prohibit the system from performing its safety function. For the decay heat removal function, the LPSW System provides cooling to the HPI pump motor bearing coolers, the MD EFW pump motor air coolers, the TD EFW pump bearing jacket, LPI Coolers, and RBCUs.

The Condenser Circulating Water (CCW) System is designed to supply (as the normal supply) LPSW, ASW pumps and cooling water to the TDEFW pump turbine oil cooler.

Engineered Safety Feature Actuation System (ESFAS)

The 4160 volt auxiliary system for each unit is arranged into a double bus-double circuit breaker switching arrangement. The three power sources, (1) the unit's auxiliary transformer, (2) the startup transformer and (3) the standby power buses, feed each of the main feeder buses by this double circuit breaker arrangement. Each of the two redundant main feeder buses provide power to each of the three redundant engineered safeguards switchgear bus sections that serve the engineered safeguards auxiliaries. The engineered safeguards auxiliaries are arranged so that a failure of any single bus section does not prevent the respective systems from fulfilling their protective functions.

Emergency Power Support

The Keowee Hydro Station contains two units rated 87,500 kVA each, which generate at 13.8 kV. Upon loss of power from the Oconee generating unit and 230 kV switchyard, power is supplied from both Keowee units through two separate and independent routes. One route is a 4000 ft. underground 13.8 kV cable feeder to 12/16/20 MVA Transformer CT4 which supplies the redundant 4160 volt standby power buses. The underground emergency power feeder is arranged with double air circuit breakers so that it can be connected to either Keowee generator bus. The connection to the generator bus is made with metal-enclosed bus. This underground feeder is connected at all times to one hydroelectric generator on a predetermined basis and is energized along with Transformer CT4 whenever that generator is in service in either emergency or normal mode. The underground feeder and associated transformer are sized to carry full engineered safeguards auxiliaries of one unit plus auxiliaries for safe shutdown of the other two units.

The second route is a 230 kV transmission line to the 230 kV switching station at Oconee which supplies each unit's startup transformer. Each Keowee generator is connected to a common 230 kV step-up transformer through a 13.8 kV metal-enclosed bus and synchronizing air circuit breaker.

Each Keowee unit is provided with its own automatic startup equipment located in separate cubicles within the Keowee control room. The initiation of emergency startup is accomplished by control signals from either Oconee Control Room. Normal startup of either unit is by operator action - while emergency startup is automatic. Both units are started automatically and simultaneously and run on standby on either of three conditions: 1) external grid trouble protection system actuation, 2) engineered safeguards actuation or 3) main feeder bus monitor undervoltage actuation. If the Keowee units are already operating when either of the above conditions occur, they are separated from the network and continue to run on standby until needed. Each unit's voltage regulator is equipped with a volts-per-cycle limiting feature which permits it to accept full emergency power load as it accelerates from zero to full speed within 23 seconds from receipt of the emergency startup initiation signal.

On normal automatic startup, each unit is automatically connected and supplies power to the Oconee 230 kV switching station through the step-up transformer by its respective generator circuit breaker. This is accomplished by the automatic synchronizing equipment of each unit. On emergency automatic startup, both units are started; the unit with the underground feeder connected to it supplies that feeder and the other unit is available to supply the 230 kV switching. If there is a system disturbance, this unit is connected automatically to the 230 kV Yellow Bus only after the 230 kV Yellow Bus is isolated automatically from the system and the preset time delay has elapsed. Redundant External Grid Trouble Protective Systems are provided to isolate the 230 kV switching station on failure of the external transmission network. Therefore, on loss of the external transmission network, both of the Keowee hydro units can provide emergency power to any of the Oconee units through either the 230 kV switching station to the unit's respective startup transformer or the underground feeder and Transformer CT4.

For additional details regarding Keowee, refer to the USI A-46 EMERGENCY POWER SYSTEM REPORT.

HVAC

Oconee HVAC System

Based on the assumption that all normal functioning HVAC is lost during a SQUG event, an ambient temperature analysis was conducted by a team of consultants to determine the maximum temperatures in the Turbine and Auxiliary Buildings at the end of the 72 hour period. The consultants utilized a computer model for their temperature analysis and calculated the heat loads on an area/room basis. Initial temperatures used in the analysis were derived from peak summertime temperature readings taken by Oconee Engineering. Assumptions used in the control complex portion of the analysis included: 1) Selected doors in the equipment room, cable room and control room shall be opened to provide a method of heat dissipation during the time that ventilation is lost, and 2) the operation of the Control Room Ventilation System Booster Fans. (Only one fan will be operating for the Units 1 and 2 Control Room as well as the Unit 3 Control Room to allow for single active failure.) The results of the ambient temperature analysis were then compared with the SSEL equipment

temperature operating limits. Per engineering review, it was determined that the equipment temperature limits will not be significantly challenged to compromise the functionality of the equipment and that operator action will not be required to open electrical cabinet doors.

In addition to the mechanical equipment required to support the CRVS Booster Fans which is included in the SSEL, the following actions will be required to assist in maintaining temperatures within the Control, Cable, and Equipment Rooms. These actions are addressed in the appropriate procedure.

- a) Load Stripping: Unnecessary lighting in the Control Room area including OAC, office, and kitchen areas should be turned off following a loss of ventilation. Attachment #11 of OSC-6667 assumes that $\frac{1}{2}$ of the Control Room overhead lighting load is removed. This will reduce heat load in the Control Room. In addition the TSC and OSC should relocate to their backup location in the Oconee Office Building. This will also reduce heat load in the Control Room.
- b) Doors: Selected doors within the Control, Cable and Electrical Equipment Rooms should be blocked open to allow heat generated to dissipate into other areas of the plant if cooling to the room is lost. Although some of the doors are either pressure type or special purpose (ie security) the SQUG scenario does not require that a security or high energy line break event be assumed to occur during the 72-hour period following the initiation of the SQUG event. Therefore there are no postulated events which would prevent the doors from being blocked open.
- c) CRVS Booster Fans: CRVS Booster Fans should be operated if Control Room temperatures exceed outdoor air temperatures to provide cooling to the Control Room.

An inventory of spare fans and motors is also being maintained in case of single active failure. Power is not required for 1-AHU-11, 1-AHU-12, 3-AHU-13, and 3-AHU-14 since they function only as a passive device to provide an air flow pathway.

The CRVS walkdown consisted of an extensive review of the ducts, duct supports, and related attached equipment such as dampers and filters. The duct layout includes the outside air supply duct to the booster fans as well as the supply and return ducts to and from the Control Rooms. The review of the supply duct in the Control Rooms was limited to the first air register within the control room. Areas of the plant which contained the ductwork are the Ventilation Rooms (El. 838'+0"), Control Rooms (El. 822'+0"), and the connecting duct shafts. Refer to Chapter 7 for a more detailed description of the equipment mounting and ductwork.

Unit 1 & 2 Block House

The CT4 Ventilation Fans A & B in the Unit 1/2 Blockhouse are included in the SSEL to provide ventilation to transformer CT4. The fans are thermostatically controlled power supply is provided from a non-load shed source.

4.2 OPERATIONS DEPARTMENT REVIEW OF SSEL

Once the Mechanical Systems Group completed generation of the SSEL per the GIP criteria, the ONS Operations group performed its independent review of the SSEL. The Oconee Operations Group's review included the SSELs for ONS Unit 1, 2 and 3, and common equipment.

During the generation of the SSEL, the Mechanical Systems Group reviewed station procedures to anticipate the actions of the Operations group in selecting the systems and equipment to meet the conditions and criteria of the GIP. The Operations review focused primarily on the necessary mechanical equipment per the desired system function. Miscellaneous support equipment was also reviewed in detail in the Operations group.

The method used involved analysis of the described equipment lists and defined pathways to ensure Operations procedures included all listed pathways, and no listed pathway ended without accomplishing the Safe Shutdown objective. Normal, emergency, and abnormal procedures were used by the "Desk Top" method for this review. Pathways selected during the generation of the SSEL were not always the first choice of the Operation's procedures; However, all pathways were included or made available in the currently approved Operation's procedures. The Operation's review concluded the listing to be both adequate and complete.

The procedures listed in Table 4-1 were considered in evaluating the completeness of the SSEL.

4.3 COMPOSITE SAFE SHUTDOWN EQUIPMENT LIST AND SUBSETS

A printout of the Composite SSEL for Oconee is included in Appendix B.

Table 4-1
List of Procedures Used for
Safe Shutdown Equipment List Review

Emergency Operating Procedures: EP/1/A/1800/01 EP/2/A/1800/01 EP/3/A/1800/01
Low Pressure Service Water Procedures: AP/1/A/1700/24 AP/2/A/1700/24 AP/3/A/1700/24
Following a reactor trip, the operators are directed to swap the Auxiliary Steam supply to another unit using the following procedures: OP/1/A/1106/22 OP/2/A/1106/22 OP/3/A/1106/22
The following procedures are used to align LPI system during unit cooldown: OP/1/A/1104/04 OP/2/A/1104/04 OP/3/A/1104/04
Loss of Main Feedwater Abnormal Procedure: AP/1/A/1700/19 AP/2/A/1700/19 AP/3/A/1700/19

MECHANICAL AND ELECTRICAL EQUIPMENT REVIEW

5.1 SUMMARY OF REVIEW

This section of the report presents information used in completing the walkdown assessment, general processes/procedures used, and the results of the walkdown for the equipment included within the scope of the GIP. Tanks and Heat Exchangers are evaluated in Section 6 of this report. Cable Tray and HVAC Review are evaluated in Section 7 of this report.

The review of the seismic adequacy of mechanical and electrical equipment on the Oconee Nuclear Station's Safe Shutdown Equipment List (SSEL) was performed in accordance with Section II.4 of the Generic Implementation Procedure (GIP) (Reference #1). Duke Power Company management made the decision in 1992 that resolution of USI-A46 (SQUG) would be performed primarily by Duke's in-house engineering staff. A dedicated on-site SQUG team consisting of Seismic Capability Engineers (SCE) and Relay Evaluation Personnel was established to address plant walkdowns, verification of seismic adequacy of equipment and cable/conduit raceway systems, and completion of relay screening and evaluation. SQUG team members average approximately 18 years of service with Duke Power Company in nuclear power plant work. Each SCE was individually selected by management and exceeds the minimum requirements as described in Section 2 of the GIP (ref: Section 3 and Appendix A of this report). As discussed in section 4.0 of this submittal, selection of the Safe Shutdown Equipment List (SSEL) was performed by a team of ONS mechanical system engineers. These systems engineers were readily available to the SCEs at any time.

A. Equipment Screening Verification and Walkdown

The Equipment Screening Verification and Walkdowns were performed by Seismic Review Teams (SRT) which consisted of a minimum of two Seismic Capability Engineers (SCE). All equipment walkdowns were performed between early 1993 and 1997. Nineteen of the twenty SRT members were registered professional civil engineers and possessed an average of 18 years of experience in nuclear plant design and walkdown. As a result of this experience, each SCE was familiar with nuclear design standards and seismic analysis/design. Each SCE completed the SQUG developed training course on seismic adequacy verification of nuclear power plant equipment.

B. Relay Functionality Review

The relay evaluations were performed by a group of electrical engineers who were all members of the core SQUG project team. These engineers possessed an average of 15 years experience in electrical design and qualification of nuclear power plants. The Lead Relay Reviewer completed the SQUG developed relay

evaluation training course, as well as several of the relay reviewers within the relay review group.

5.1.1 Seismic Capacity vs. Demand

There are two primary means for comparing seismic capacity to seismic demand using the SQUG methodology. The method for comparing equipment seismic capacity to seismic demand is discussed in detail in GIP Section 4.2. The application of these methods was performed as follows:

5.1.1.1 Method A: Comparison of Seismic Capacity to SSE Ground Response Spectra

The SSE ground response spectrum can be used for comparison to the Bounding Spectrum or the GERS when:

- Equipment is mounted below about 40 feet above effective grade, and
- Equipment has a natural frequency greater than about 8 Hz.

The Oconee Nuclear Station site ground response spectra, for structures founded on both soil and rock, is fully enveloped by the bounding spectrum. Primarily due to lack of available seismic testing information, GERS were used on a very limited basis for comparison of seismic capacity to seismic demand.

Effective Grade Determination:

Effective grade was determined based on the definition provided in GIP, Section 4.2.3. Effective grade for each building which contains SSE equipment was conservatively determined and is provided below:

<u>BUILDING</u>	<u>EFFECTIVE GRADE</u>
Auxiliary Building	Elev. 771' (Basement)
Intake Structure	Elev. 760' (Bedrock)
<u>Reactor Building</u>	
A. Shell Wall	Elev. 777'+6" (Basement --- Conservative)
B. Internal Structure (Shield Wall)	Elev. 777'+6" (Basement)
Rad Waste Facility	Elev. 796' - Founded on Overburden.
Safe Shutdown Facility (SSF)	Elev. 796' (Yard)
Transformer and Switchgear Enclosure	Elev. 796' (Yard)
Turbine Building	Elev. 775' (Basement)
Yard	Elev. 796' (Yard)

Natural Frequency Determination:

The Seismic Review Teams relied on experience and accepted methodology provided in SQUG training, various EPRI and engineering texts, and actual in-situ field testing to estimate equipment natural frequency. All equipment was evaluated on a case-by-case basis due to large number of variables which can affect equipment natural frequency.

Mechanical Equipment: In general, the natural frequency of mechanical equipment was determined to be greater than 8 Hz. This assumption is confirmed by available SQUG training materials and EPRI documentation. Special attention was made to any unusual equipment configurations which could affect equipment natural frequency.

Electrical Equipment: In general, the natural frequency of electrical equipment was determined to be less than 8 Hz. During initial equipment walkdowns, this assumption was based on available SQUG training materials, various EPRI and engineering texts. Actual in-situ field testing was performed on approximately 15 "typical" floor-mounted electrical cabinets and the results confirmed the original assumption. The natural frequency of electrical equipment was only assumed to be greater than 8 Hz. for situations where the equipment was provided with significant top bracing, rigidly mounted to a structural wall or column, and selected chargers, regulators, and inverters.

The natural frequency determination for anchorage considered the overall structural mode. The SRTs recognized and made special note of situations where electrical components were mounted to a door or panel where the panel mode was significantly less than the overall structural mode. As directed by GIP Table 6-2, an in-cabinet amplification factor of 7 was applied in these situations.

5.1.1.2 Method B: Comparison of Seismic Capacity to In-Structure Response Spectra

As discussed in GIP, Table 4-1, Method B shall be used for comparison of capacity to demand if either of the following apply:

- Equipment is mounted above about 40 feet above the effective grade.
- Equipment has a natural frequency of less than about 8 hz.

The applicable in-structure response spectrum is compared to 1.5 x Bounding Spectrum (Reference Spectrum). The use of GERS is also an option in Method B, but was used only on a very limited basis.

The in-structure response spectra (IRS) for Oconee Nuclear Station were determined by the Nuclear Regulatory Commission in the evaluation of ONS response to generic letter 87-02 (Reference #5) to be median-centered in-structure response spectrum for the purposes of GIP implementation.

The ONS in-structure response spectra are fully bounded by the Reference spectra, at all frequencies, except as noted in Table 5.3. Table 5.3 provides detailed information relating to these specific exceedances.

5.1.2 Equipment Class Descriptions

Each SSEL item was evaluated to verify it was adequately represented in the earthquake experience equipment class as defined in GIP, Appendix B. Items that did not meet the GIP Bounding Spectrum Caveats (or intent) were classified as outliers, and are discussed further in Section 8 of this report. In accordance with Section 3.1.2.6 of the GIP, passive items (filters, strainers, etc.) were included on the Composite SSEL, but no seismic evaluation was performed.

Table 5.1 provides a listing of all equipment classifications (category - 0, 1-20 & Tanks and Heat Exchangers), the quantity of SSEL walkdown items within each classification, and the number of resulting outliers (both resolved and unresolved). All equipment that could not meet equipment class descriptions for inclusion in categories 1-20 & Tanks and Heat Exchangers were classified as Category 0 and considered outliers.

5.1.3 Equipment Anchorage

Equipment anchorage was verified in accordance with the methodology provided in GIP, Section 4.4 and Appendix C. As directed by the GIP, the screening approach for verifying the seismic adequacy of equipment anchorage is based upon a combination of inspections, analyses, and engineering judgment. The USI A-46 program was combined with the IPEEE effort. The accelerations from USI A-46 and IPEEE were enveloped and the maximum used for the anchorage evaluations.

Anchorage of all SSEL items was physically inspected. As directed by the GIP, Section 4.4, no anchorage evaluations were performed for in-line valves or temperature sensors.

Typical types of anchors used for different equipment were:

<u>Equipment Class</u>	<u>Anchorage Types</u>
Motor Control Centers	Expansion anchors, welds to embedded steel
Low Voltage Switchgear	Expansion anchors, welds to embedded steel
Medium Voltage Switchgear	Expansion anchors, welds to embedded steel
Transformers	Expansion anchors, welds to embedded steel, bolts to structural frame
Horizontal Pumps	Cast-in-place bolts, grouted-in-place bolts
Vertical pumps	Cast-in-place bolts
Distribution panels	Expansion anchors, welds to embedded steel, bolts to structural frame
Batteries on Racks	Expansion anchors
Battery Chargers and Inverters	Expansion anchors, through-bolts
Instruments on Racks	Expansion anchors
Instrumentation \ Control Panels and Cabinets	Expansion anchors
Tanks and Heat Exchangers	Expansion anchors, cast-in-place bolts, bolts to structural steel

Field surveillance of equipment anchorage was performed in accordance with GIP, Section II.4.4.1. The following provides additional details:

1. Equipment mass and location of center of gravity were determined from plant documentation or conservatively estimated in accordance with GIP Section C.1 of Appendix C. Weight of piping attached to pumps, tanks and heat exchangers was considered in the equipment mass. Natural frequency was generally assumed to coincide with the applicable peak spectral acceleration. Natural frequency is further discussed below.
2. Expansion anchors-shell and nonshell types, cast-in-place bolts, cast-in-place J-bolts, through-bolts, grouted-in-place bolts, and welds to embedded and exposed steel were encountered and addressed in accordance with the GIP.

3. Sizes and locations of anchors were verified based on field inspections.
4. Evaluation of anchorage installation and connection to base of equipment was performed by visual checks and measurements along with reviews of plant documentation and drawings, where necessary. All accessible anchorages were visually inspected. All accessible expansion anchors were also tested for tightness in accordance with GIP, Section C.2.3. Inaccessible anchorages or those obstructed from view which were needed for strength to secure the item of equipment were verified through engineering judgment based on tightness checks on similar anchors elsewhere in the plant which showed consistently tight installation. This method of verification was used after all other means to access the anchor had been exhausted. Methods of verification and anchorage types outside the GIP were considered outliers, and are discussed at the end of this section.
5. Embedment lengths of cast-in-place and grouted-in-place anchors were verified from reviews of as-built drawings. Nonshell-type expansion anchor embedment was determined by subtracting the anchor projection from the anchor length. The majority of nonshell-type anchors installed are Phillips Sleeve anchors and the anchor lengths are "stamped" into the end of these anchors. Shell-type anchors were visually spot-checked to assure the shell did not protrude above the concrete surface nor touch the base of the equipment being anchored. Questionable anchors were excluded from the anchorage capacity calculation. Capacity reduction factors determined in accordance with Appendix C of the GIP were applied to anchors not meeting minimum embedment requirements.
6. The presence and size of any gaps between the base and the item being anchored was determined by field inspections. Gaps greater than about 1/4 inch in the vicinity of threaded anchors were considered outliers. Shims in the vicinity of the anchors with inverted channel bases were considered to meet the intent of the GIP.
7. Anchor to anchor spacing was measured during field walkdowns. For anchors not meeting minimum spacing requirements given in Appendix C of the GIP, appropriate capacity reduction factors were applied.
8. The edge distance from anchor centerline to all free edges were measured during field walkdowns. For anchors not meeting minimum edge distances given in Appendix C of the GIP, appropriate capacity reduction factors were applied.
9. Concrete compressive strength (f'_c) was determined based on plant documentation (e.g. construction drawings). Based on this information, nominal anchor capacities given in Table C.2-1 of Appendix C of the GIP were used. Higher concrete compressive strength was not used to justify greater anchor capacities. Any anchorage in concrete block walls was considered an outlier.
10. Checks for significant structural cracks in the concrete in the vicinity of installed anchors were performed during field walkdowns of equipment. Where "significant" structural cracks were found, appropriate capacity reduction factors as given in Appendix C of the GIP Section C.2.8 were applied.

11. Essential relays were initially assumed to be present in all electrical equipment. Therefore, a capacity reduction factor of 0.75 for expansion anchors was used in accordance with GIP Section II 4.4.1 and Appendix C Section C.2.9. Where other reduction factors were required (gaps greater than 1/4 inch, etc.), and the composite reductions resulted in calculated anchorage capacity less than the seismic demand, further investigation of the equipment was performed to determine whether essential relays were, in fact, present. If essential relays were found to be present, the equipment was considered to be an outlier due to unacceptable anchor margin. If essential relays were not found or if the subject relays were later determined to be chatter acceptable, the capacity reduction factor for essential relays was removed and a revised anchorage capacity was calculated.
12. The base and anchorage load path of the equipment was inspected during field walkdowns of equipment. Since peak spectral floor or ground response was generally assumed to determine seismic demand, the consequential effects of varying anchorage stiffness and the associated frequency dependent accelerations presented no new concerns. Equipment having essential relays was evaluated to demonstrate analytically that no uplift, and consequential impact, occurred during a seismic event. Where anchorage and load path could produce significant prying action, an analysis was performed in accordance with EPRI Document TR.-103960, "Recommended Approaches for Resolving Anchorage Outliers".
13. Equipment bases and the structural load paths of equipment were inspected during field walkdowns. Also, a review of manufacturer's drawings was frequently performed. Analyses were performed to demonstrate seismic adequacy when the Seismic Capability Engineer determined judgment to be insufficient for proper documentation.
14. All load path considerations for equipment welded to embedded steel or mounted on grout pads or large concrete pads were evaluated. Embedments with headed studs were evaluated using the criteria in GIP Section 4.4.1 and GIP Appendix C, Section C.3. Where anchorage extended only into the large concrete pad or partially into the structural concrete beneath, construction drawings and photographs were consulted to verify monolithic behavior of the concrete. Anchorage for equipment installed on grout pads was investigated to ensure the minimum embedment was achieved in the structural concrete beneath.

Individual anchor capacity was determined in accordance with GIP Section II 4.4.2 and Appendix C by multiplying the nominal allowable capacities by the applicable capacity reduction factors. The nominal capacities and reduction factors were obtained from GIP, Appendix C, based on the anchorage installation checks described above, and with consideration given to prying action as appropriate.

The NRC declared the Oconee Nuclear Station in-structure response spectrum to be a realistic, median-centered, in-structure response spectra for the implementation of the GIP (Reference #5). As directed by GIP, Section 4.4.3, Table 4-3, the appropriate in-structure acceleration values were increased by a factor of conservatism of 1.25 for anchorage evaluations. GIP, Section 4.4.3, required that the vertical component of acceleration to be taken as either 2/3 of the largest

horizontal component of acceleration, or 2/3 of the horizontal zero period acceleration (ZPA) if the equipment fundamental frequency in the vertical direction is determined to be in the rigid range. Vertical accelerations used for equipment anchorage qualification equaled or exceeded this required value.

Equipment whose natural frequency was estimated to be below about 20 Hz, was generally assumed to have a frequency which coincided with the peak spectral acceleration for the spectra of interest. For equipment whose lowest natural frequency clearly exceeded about 20 Hz, when peak spectral acceleration yielded overly conservative results, the applicable ZPA was used. The center of rotation and damping were estimated based on guidance provided in Table C.1-1 of the GIP, with rigid equipment bases considered to rotate about its outer edge, and flexible equipment bases considered to rotate about the equipment base centerline.

Unbroadened response spectra were used for determining input accelerations. As stated above, the peak spectral acceleration (or ZPA when justified) was typically used for determining seismic demand accelerations. In those cases, broadening of spectra is not an issue. When calculated frequencies were used to determine seismic demand accelerations, the calculated frequency was shifted +/- 5%.

Equipment damping ratio was taken as 5% for most of the anchorage evaluations addressed in this report. Vertical immersion and deep well pumps and motors were assumed to have a damping ratio of 3%. For locations where in-structure spectra at 5% damping were not available (i.e. Unit 3 Auxiliary Building, and the Turbine Building), 5% damped peak spectral accelerations were estimated by using the relationship:

$$Sa_D = Sa_A \sqrt{\frac{\beta_A}{\beta_D}}$$

Where :

- Sa_D = Peak spectral acceleration at the desired damping ratio
- Sa_A = Peak spectral acceleration at the available damping ratio
- β_A = damping ratio of available response spectrum
- β_D = damping ratio of desired response spectrum

ZPA accelerations at 5% critical damping were assumed to be equal to those at 2% critical damping.

Alternatively, acceleration at the desired damping value was determined using power spectral density methods.

Seismic inertial equipment loads for each of the three directions of motion were computed using the equivalent static load method. In this method, the seismic analysis is performed statically by applying the inertial load at the center of gravity of the equipment. The inertial load in each direction is equal to the input seismic accelerations, times an equivalent static coefficient, times the mass of the equipment. An equivalent static coefficient of 1.0 was used for this analysis in accordance with the GIP. The location of the center of gravity was taken as the geometric center of the equipment if the equipment was of uniform density, or was taken from manufacturer's

drawings, if available. If the SCE considered the mass of the equipment to be off-center, appropriate adjustments were made to the center of gravity location.

Anchor loads considered were:

- a) Shear due to the lateral component of force caused by the seismic inertial equipment loads, including shear loads due to torsion.
- b) Pullout due to overturning moment caused by the seismic inertial equipment loads.
- c) Pullout due to seismic inertial equipment loads in line with the axes of the anchors.

The anchor loads caused by the equipment's overturning-moment was based on the assumption that plane sections remain plane during loading and that the material in the equipment and the anchors behave in a linear-elastic manner.

Combined seismic loads on the anchorage were computed in accordance with Section 4.4.3 of the GIP. The seismic adequacy of anchorage was determined by comparing the seismic capacity of the anchors to the total applied anchor loads using the shear-tension interaction formulations given in Appendix C of the GIP for each of the anchor types covered by this procedure.

Bounding calculations were performed for equipment of similar geometry and weight, using the higher accelerations for multi-unit applications, and the least capable anchorage where capacity reduction factors or anchorage sizes differed. When bounding calculations resulted in equipment not meeting seismic demand, separate calculations were performed on case-by-case bases using equipment specific parameters. Any equipment determined to be inadequate based on equipment specific parameters was determined to be an outlier based on anchorage.

Electrical equipment was typically evaluated using the EPRI/Blume Anchorage Computer Program (EBAC) described in EPRI report NP-5228-SL, Volume 3, Rev 1, the ANCHOR computer program, and less typically by hand calculations. Anchorage for tanks and heat exchangers was evaluated exclusively by hand calculations.

Horizontal pumps and motors on a common steel skid were evaluated using the screening criteria in EPRI Report NP-5228-SL, Vol 1, Rev 1, "Seismic Verification of Nuclear Plant Equipment Anchorage."

5.1.4 Seismic Interaction

A seismic interaction evaluation is the fourth and final SQUG screening criterion which must be satisfied to verify seismic adequacy of SSEL equipment. The purpose of this investigation is to verify that there are no adverse seismic interactions with nearby equipment, systems, or structures which could cause the equipment to fail to perform its intended safe shutdown function.

Each Seismic Review Team evaluated seismic interaction possibilities during the field walkdowns. As directed by GIP, Appendix D, interaction effects which were included and evaluated during SSEL equipment walkdowns included the following:

- a) Proximity
- b) Structural Failure and Falling
- c) Flexibility of Attached Line and Cables

Proximity Evaluation:

The Seismic Review Teams (SRTs), following guidance provided in GIP, Section 4.5, identified only those items which were determined to be "credible and significant". The definition of "credible and significant" was determined based on SRT engineering judgment and the past earthquake experience discussed during the USI-A46 Walkdown Training. Also, the SRTs recognized that interaction concerns determined to be "credible and significant" for a fragile instrument might not be "credible and significant" for a large mechanical item. Hence, these items were not identified as interaction concerns within the SEWS forms. Mechanical items are generally considered rugged, with special attention provided to any "soft targets".

The SRTs paid special attention to electrical cabinets which were all assumed to contain "chatter not acceptable" electrical contact devices. The SRTs adopted the broad, generic definition of electrical contact devices (i.e. relays, motor starters and/or switches). The SRTs adhered to the GIP philosophy that impact to any electrical cabinet is considered an unacceptable seismic interaction and cause for identifying the electrical cabinet as a potential outlier. In these cases, the lead relay reviewer was consulted to determine if contact devices present were considered to be "rugged" or "chatter acceptable". If the contact devices were determined by lead relay reviewer to be "rugged" or "chatter acceptable", and the electrical cabinet would not sustain significant structural damage or become inoperable, the interaction concern was reclassified as acceptable. If the cabinet would sustain significant damage or be rendered inoperable, item remained as an outlier due to interaction concern.

The SRTs were careful to verify that all adjacent electrical cabinets containing contact devices were bolted together to prevent impact due to seismic motion. The SRTs also noted and performed special deflection evaluations for those SSEL items located in the vicinity of seismically qualified masonry walls or other stationary items. Any housekeeping issues discovered were noted on the SEWS form and further evaluation as described in the previous paragraph was performed.

Structural Failure and Falling

Equipment included in the ONS SSEL are all housed in either Category 1 or 2 structures, or are located outside. All major structures are considered rugged and no problems were noted with major structures. With limited exceptions, the adjacent and surrounding non-safety items are well constructed, adequately spaced and anchored to preclude impact with Safe Shutdown Equipment List (SSEL) equipment.

GIP Appendix D, section D.3.3, states that "unreinforced, masonry block walls should be evaluated for possible failure and potential seismic interaction with safe shutdown equipment unless the wall has been seismically qualified as part of the IE Bulletin 80-11 program". Each block wall located near SSEL items was evaluated to verify that it was included in the IEB 80-11, masonry wall evaluation program. Approximately 75 masonry walls were located which needed a detailed review, primarily since these walls were not included in the IEB 80-11 block wall review program. These were not originally required to be included in the IEB 80-11 review since the subject walls were not located near any safety related items.

As of 11/1/97, the preliminary engineering wall review is approximately 50% complete. Approximately 50% of the original 75 walls have been seismically qualified, either by comparison to an existing calculation or a unique calculation. The remaining walls must now be addressed due to their proximity to non-safety related SSEL items or electrical cables which are all assumed to control an SSEL item. Three options exist to resolve these concerns:

- 1) Relocate the existing SSEL item to a "safe" area. (May involve cable and/or equipment relocation).
- 2) Install a protective structure around the SSEL item.
- 3) Seismically qualify the wall.
- 4) In the case of electrical cable, trace the cable and verify cable actually controls an SSEL item. (Original, conservative assumption was that all cables controlled an SSEL item.)

In an effort to address potential seismic interaction, inspection teams noted all SSEL items which are within 2 inches of a wall which was previously seismically qualified. A block wall deflection calculation was subsequently performed and included with the calculations for the particular SSEL item. If seismic interaction was determined to be a potential problem, further evaluation was performed to verify that the equipment can withstand minor impact (chatter acceptable). In summary, there were no interaction concerns due to deflection of an existing seismically qualified block wall. The wall deflection was 1) determined to be minimal and impact would not occur (existing gap exceeds calculated wall deflection) or 2) minor impact on the SSEL item was determined to be acceptable (chatter acceptable).

Any special seismic interaction concerns are noted with the SEWS forms and in the outlier tables, as applicable.

Flexibility of Attached Line and Cables.

The flexibility of attached lines and cables was evaluated for each SSEL item during the field walkdowns. Considerable attention was given to items which could be affected by differential building movements, equipment deflection, and/or cable tray support deflection. The SRTs also evaluated electrical leads for motor operated valves to verify that sufficient flexibility is available to accommodate any significant piping movements.

5.1.5 RELAY WALKDOWN

The field walkdown portion of the Relay Functionality review was performed in conjunction with the Seismic walkdowns by the Seismic Review Teams. All SSEL relays found in a cabinet were assumed to be essential. Relay type, cabinet location and mounting were spot checked by the walkdown team with no discrepancies noted. Relay mountings were reviewed for proper mounting. Relay amplification factors were determined based on the equipment classification and the assumption that all relays were mounted at the highest point of the cabinet unless verified otherwise. Equipment classes were selected based on the guidance provided in the GIP and EPRI NP-7148-SL (Appendix I) & EPRI NP-7149-D.

5.2 INSTANCES OF INTENT BUT NOT LETTER OF CAVEAT MET

In some cases, the SRTs may have determined that the Bounding Spectrum or GERS caveats met the intent (and not the specific wording) of the caveat(s). The basis for the SRTs conclusion that the caveat intent is met is documented in the memo field of the SEWS form. Instances of intent but not letter of caveat met are identified in Table 5.2.

5.3 SUMMARY OF OUTLIERS

All SQUG outliers were evaluated to determine if the existing station Licensing Basis was challenged. In the event an Outlier finding did potentially challenge the Licensing Basis, the associated equipment/item/concern was logged into the appropriate station process for evaluation. Operability and compliance was addressed within the station's established procedures for such evaluations.

A total of 395 pieces of equipment were identified as outliers out of the 1487 ONS SSEL walkdown items. Some items are outliers for more than one reason (i.e. a single outlier may be due to capacity vs. demand, caveats, anchorage and interaction). Section 8.1 provides a breakdown of individual outlier issues. Tables 8.1 & 8.2 provide a list of equipment outliers, identified as seismic capacity vs. demand, bounding spectrum caveat, anchorage, and seismic interaction outliers. These tables also include a short description of each equipment outlier and its proposed resolution. Additionally, the results are summarized on the SVDS forms found in Appendix D.

Table 5.1

EQUIPMENT WALKDOWN CATEGORY SUMMARY

**Oconee Nuclear Station
Units 1,2, & 3**

Table 5-1
Equipment Walkdown Category Summary

Category	Number of Items Walked Down	Number of Outliers	Number of Outliers Resolved	Number of Outliers Unresolved
0 - Other	33	33	15	18
1 - Motor Control Centers	69	58	14	44
2 - Low Voltage Switchgear	28	19	14	5
3 - Medium Voltage Switchgear	14	9	0	9
4 - Transformers	62	22	7	15
5 - Horizontal Pumps	55	0	0	0
6 - Vertical Pumps	30	15	15	0
7 - Fluid Operated Valves	186	32	24	8
8A - Motor Operated Valves	213	14	0	14
8B - Solenoid Operated valves	33	5	0	5
9 - Fans	17	8	0	8
10 - Air Handelters	31	8	0	8
11 - Chillers	0	0	0	0
12 - Air Compressors	0	0	0	0
13 - Motor Generators	0	0	0	0
14 - Distribution Panels	141	52	29	23
15 - Batteries on Racks	12	4	0	4
16 - Battery Chargers and Inverters	33	7	6	1
17 - Engine - Generators	0	0	0	0
18 - Instruments on Racks	259	24	1	23
19 - Temperature Sensors	31	0	0	0
20 - Instrumentation and Control Panels and cabinets	162	43	1	42
21 - Tanks and Heat Exchangers	76	42	39	3
Total	1487	395	165	230

Table 5.2

INTENT BUT NOT LETTER OF CAVEAT SUMMARY

Oconee Nuclear Station
Units 1,2, & 3

Table 5-2

12/03/97

Intent but not letter of Caveat Summary

EQUIPMENT ID	BLDG. FL_EL	LETTER OF CAVEAT NOT MET	REASON INTENT OF CAVEAT MET
1A/1B/SW, 1A/MCB, 1B/MCB, 1KI/SW/BP, 1KU/SW/BP, 1KX/SW/BP, 2A/2B/SW, 2A/MCB, 2B/MCB, 2KI/SW/BP, 2KU/SW/BP, 2KX/SW/BP, 3A/3B/SW, 3A/MCB, 3B/MCB, 3KI/SW/BP, 3KU/SW/BP, 3KX/SW/BP	AB 796'+6"	Panels are mounted on a unistrut frame.	Frame is judged to be sufficiently rigid to meet the intent of a wall mounting.
1ADB	AB 796'+6"	A 3/8" gap exist under the cabinet base.	A analytical review was performed and the 3/8" gap was found to be acceptable.
1AHCC	AB 838'+0"	Equipment differs from standard Instrument rack in that it has a door closure.	Door is securely fastened. Frame consist of aluminum structure with acrylic inserts. Frame is considered to be at least as rugged as standard Instrument Rack.
0VSMN0001, CD-05A, CD-05B, CD-06A, CD-06B, CD-10A, CD-10B	AB 838'+0"	Demand spectrum at 838'+0" exceeds Reference Spectrum between 9 Hz & 12.5 Hz.	Capacity is judged to exceed Demand due to lack of relay chatter concerns and rugged construction and mounting of equipment.. See EQE HVAC equipment calculation.
1CRDACBKRCAB, 2CRDACBKRCAB, 3CRDACBKRCAB	AB 809'+0"	Cabinets exceeds bounding height by 1 - 1/2" and is less than minimum width by 4".	Height dimension exceedance is < 2%.
CT4FSC, SGFSC	BH 796'+6"	Panels contain relay and temperature switches.	Relays and temperature switches will be evaluated separately during relay review.
1D	RB 818'+0"	Door latch is damaged.	Only non-vulnerable breakers are contained in this cabinet and no significant impact would result due to the door swinging.
3DL2/PPB	AB 796'+6"	Cabinet appears to be "shop built" from galvanized sheet steel.	Cabinet is well constructed with quality welds and material.
1XC, 2XC, 3XC	TB 775'+0"	MCC depth = 14.5" < 18" GIP minimum for equipment class	Analytical review of shear flow in bolts verifies that individual shear loads per back to back bolt are very small. The MCC is determined to act effectively as a 29" MCC.
1DP, 1XA, 1XA-A, 1XGA, 1XGB, 2DP, 2XA, 2XGA, 2XGB, 3DP, 3XA, 3XA-A, 3XGA, 3XGB	TB	MCC depth = 14.5" < 18" GIP minimum for equipment class	Analytical review of shear flow in bolts verifies that individual shear loads per back to back bolt are very

Table 5-2

12/03/97

Intent but not letter of Caveat Summary

EQUIPMENT ID "Continued from previous page"	BLDG. FL_EL	LETTER OF CAVEAT NOT MET "Continued from previous page"	REASON INTENT OF CAVEAT MET "Continued from previous page"
	796'+6"		small. The MCC is determined to act effectively as a 29" MCC.
1XO, 1XP, 1XS1, 1XS2, 2XO, 2XP, 2XS1, 2XS2, 3XO, 3XP, 3XS1, 3XS2	AB 796'+6"	MCC depth = 14.5" < 18" GIP minimum for equipment class	Analytical review of shear flow in bolts verifies that individual shear loads per back to back bolt are very small. The MCC is determined to act effectively as a 29" MCC.
XOD1	YD 796'+6"	MCC depth = 14.5" < 18" GIP minimum for equipment class	Analytical review of shear flow in bolts verifies that individual shear loads per back to back bolt are very small. The MCC is determined to act effectively as a 29" MCC.
1FDWPS0300, 2FDWPS0300, 3FDWPS0300	TB 775'+0"	Mounted to side of TDEFWP oil tank.	Oil tank is judged to be sufficiently rigid to approximate wall mounting.
1FDWVA0086, 1FDWVA0087, 2FDWVA0086, 2FDWVA0087, 3FDWVA0086, 3FDWVA0087, 1FDWVA0129, 1FDWVA0218, 1LPSVA0175, 1LPSVA0182, 1LPSVA0189, 2FDWVA0129, 2FDWVA0218, 3FDWVA0129, 3FDWVA0218, 3LPSVA0196, 3LPSVA0203	TB 775'+0"	Valve body is Cast Iron.	Due to the extremely small weight of the valve, the routing and the support of the pipe and the low seismic input at this elevation, stresses in the valve are deemed to be very small.
1VVA0186, 2VVA0186, 3VVA0186	TB 796'+6"	Valve body is Cast Iron.	Stress calculation verifies that stresses are low.
3FDWVA0108	AB 809'+0"	Pipe and valve supported from separate structures.	Judged to be acceptable due to pipe flexibility.
1FDWVA0106, 2FDWVA0106, 3FDWVA0106, 3RCVA0179, 1RCVA0007, 2RCVA0007, 3RCVA0007	AB 809'+0"	Valve is mounted on 1/2" pipe.	Piping analysis verifies acceptable stresses.
1RCVA0179, 2RCVA0179	AB 758'+0"	Valve is installed in 1/2" tubing.	Tubing is well supported and valve is extremely light (4#).
1TOVA0059, 2TOVA0059, 3TOVA0059	TB 775'+0"	Diameter of pipe < 1"	Valve determined to be very light. No concern for pipe strss.

Table 5-2

12/03/97

Intent but not letter of Caveat Summary

EQUIPMENT ID	BLDG. FL_EL	LETTER OF CAVEAT NOT MET	REASON INTENT OF CAVEAT MET
1FDWVA0105, 1FDWVA0107, 2FDWVA0105, 2FDWVA0107, 3FDWVA0105, 3FDWVA0107, 1RCVA0005, 1RCVA0006	RB 797'+0"	Pipe diameter is < 1"	Piping and valves were determined to be well supported.
2HPVA0426	RB 777'+0"	The valve yoke is supported by a spring can support.	Judged not to impose excessive loads on yoke.
3KA	TB 775'+0"	Panel marginally exceeds equipment class size.	Due to similiar construction with panels included in the equipment class, this is considered to meet the intent.
1KG, 3KG	AB 838'+0"	Panel exceeds bounding height by 12".	Dimensions judged to be represented by experience database due to small weight of cabinet.
3KC	TB 796'+6"	Depth dimension exceeds bounding limit of 12" by 2".	Dimensions judged to be represented by experience database due to small weight of cabinet.
3KTH1	AB 771'+0"	Panel exceeds max depth by 2"	Dimensions judged to be represented by experience database due to small weight of cabinet.
1LPSVA0004	AB 783'+0"	The valve stem is supported by two small spring cans.	Spring support on operator will not significantly stress yoke because adjacent piping adequately supported.
1LPVA0012, 1LPVA0014, 2LPVA0012, 2LPVA0014	AB 771'+0"	The valve operator is supported by a spring support.	Spring support on operator will not significantly stress yoke because adjacent piping adequately supported.
1RSC-1CCW-287/ENCL, 2RSC-2CCW-287/ENCL, 3RSC-3CCW-287/ENCL	SSF 758'+0"	Panels contain Motor Starters which are considered relays.	Motor Starters will be evaluated seperatly in relay review.
1RSC-1FDW-368/ENCL, 1RSC-1FDW-369/ENCL, 1RSC-1FDW-372/ENCL, 1RSC-1FDW-374/ENCL, 1RSC-1FDW-382/ENCL, 1RSC-1FDW-384/ENCL, 1RSC-1PR-59/ENCL, 1RSC-1PR-60/ENCL, 2RSC-2FDW-368/ENCL, 2RSC-2FDW-369/ENCL, 2RSC-2FDW-372/ENCL,	AB 809'+0"	Panels contain Motor Starters which are considered relays.	Motor starter will be evaluated separately during relay review.

Table 5-2

12/03/97

Intent but not letter of Caveat Summary

EQUIPMENT ID	BLDG. FL_EL	LETTER OF CAVEAT NOT MET	REASON INTENT OF CAVEAT MET
"Continued from previous page"		"Continued from previous page"	"Continued from previous page"
2RSC-2FDW-374/ENCL, 2RSC-2FDW-382/ENCL, 2RSC-2FDW-384/ENCL, 2RSC-2PR-59/ENCL, 2RSC-2PR-60/ENCL, 3RSC-3FDW-368/ENCL, 3RSC-3FDW-369/ENCL, 3RSC-3FDW-372/ENCL, 3RSC-3FDW-374/ENCL, 3RSC-3FDW-382/ENCL, 3RSC-3FDW-384/ENCL, 3RSC-3PR-59/ENCL, 3RSC-3PR-60/ENCL			
1RSC-1HP-409/ENCL, 1RSC-1HP-410/ENCL, 1RSC-1LPSW-565/ENCL, 1RSC-1LPSW-566/ENCL, 2RSC-2HP-409/ENCL, 2RSC-2HP-410/ENCL, 2RSC-2LPSW-565/ENCL, 2RSC-2LPSW-566/ENCL, 3RSC-3HP-409/ENCL, 3RSC-3HP-410/ENCL, 3RSC-3LPSW-565/ENCL, 3RSC-3LPSW-566/ENCL	AB 796'+6"	Panels contain Motor Starters which are considered relays.	Motor starter will be evaluated separately during relay review.
3RSC-3LP-126/ENCL	AB 771'+0"	Panel contains motor starters which are considered to be relays.	Motor starter will be evaluated separately during relay review.
RSC-1KSG-01/ENCL	BH 796'+6"	Panel contains motor starter which are considered to be relays.	Motor starter will be evaluated separately during relay review.
1TB-111	YD 796'+6"	Type of anchorage not covered by GIP	Judged acceptable due to light weight of cabinet and rigidity of mounting
1VSAH0026, 1VSAH0027	AB 838'+0"	Capacity is judged to exceed Demand due to use of vibration isolators and rugged configuration of equipment. See EQE HVAC equipment calculation.	Demand spectrum at 838'+0" exceeds Reference Spectrum between 9 Hz & 12.5 Hz.
3X05, 3X06	AB 796'+6"	3 anchors turned ~1 turn during tightness check.	Anchors are Phillips Self Drill. Setting force is independent of torque. Quality of installation determined to be acceptable.

Table 5.3

Response Spectrum Exceedances for Building Elevations Containing SSEL Equipment

Building	Floor Elevation	Frequency Range where in-structure response spectrum <u>exceeds</u> 1.5 x Bounding Spectrum. (See Notes)
Aux. Building (Unit 1 & 2)	838'	8.5Hz. - 13hz. (1)
Turbine Building	796'	5.5Hz - 6.5Hz.(2)
	822'	1.8Hz - 2.4 Hz.(3)
Reactor Building NSSS Loop	849	9.5Hz - 15Hz. (4)
Safe Shutdown Facility (SSF)	817' - E/W (along Col.#9)	5Hz - 25+Hz. (Note 5)
	817' - N/S	11Hz. - 16Hz. (Note 5)

Notes:

1. All equipment located at elevation 838' in the auxiliary building is considered an outlier for "capacity vs. demand".
2. All items with natural frequency less than approximately 8 hertz are considered an outlier. Resolution for these items discussed in ONS calculation OSC-5085.
3. There are no SSEL items receiving seismic input from elevation 822' which have a fundamental frequency less than 3Hz.-4Hz. As a result, capacity will always exceed demand (ref.: GIP, page 4-9, table 4-1, "method B").
4. This affects only valves which will all be considered outliers, pending further analytical review.
5. Existing seismic testing documentation exists for equipment at this elevation. This information was compared to the in-structure seismic response to evaluate capacity vs. demand.

Section 6

TANKS AND HEAT EXCHANGER REVIEW

6.1 SUMMARY OF REVIEW

The tanks and heat exchangers on the Oconee SSEL were evaluated in accordance with Section II.7 of the GIP [Reference #1].

The majority of tank and heat exchanger outliers were due to support configurations considered not to be within the scope of the GIP. Table 6-1 lists tanks and heat exchangers which were within the scope of the GIP and the seismic capacity of the tank exceeded the demand.

Table 6-1 Tanks and Heat Exchangers Meeting the GIP				
EQUIPMENT ID NAME	BLDG.	FLOOR ELEV.	SIZE (Dia. x L)	SUPPORT/ANCHORAGE
1CFTK000A CORE FLOOD TANK 1A	RB	797'+6"	9'-8 3/8" x 22'-5"	J-BOLTS
2CFTK000A CORE FLOOD TANK 2A	RB	797'+6"	9'-8 3/8" x 22'-5"	J-BOLTS
3CFTK000A CORE FLOOD TANK 3A	RB	797'+6"	9'-8 3/8" x 22'-5"	J-BOLTS
1CFTK000B CORE FLOOD TANK 1B	RB	818'+0"	9'-8 3/8" x 22'-5"	J-BOLTS
2CFTK000B CORE FLOOD TANK 2B	RB	818'+0"	9'-8 3/8" x 22'-5"	J-BOLTS
3CFTK000B CORE FLOOD TANK 3B	RB	818'+0"	9'-8 3/8" x 22'-5"	J-BOLTS
0DJWHX000A SSF DJW HEAT EXCHANGER A	SSF	777'+0"	1'-2" x 12'-2 1/4"	SADDLES/STRUCTURAL BOLTS
0DJWHX000B SSF DJW HEAT EXCHANGER B	SSF	777'+0"	1'-2" x 12'-2 1/4"	SADDLES/STRUCTURAL BOLTS
1HPIHX000A LETDOWN COOLER 1A	RB	777'+6"	4'-0 1/2" x 2'-7 5/16"	SADDLES/CIP BOLTS
2HPIHX000A LETDOWN COOLER 2A	RB	777'+6"	4'-0 1/2" x 2'-7 5/16"	SADDLES/CIP BOLTS

**Table 6-1
Tanks and Heat Exchangers Meeting the GIP**

EQUIPMENT ID NAME	BLDG.	FLOOR ELEV.	SIZE (Dia. x L)	SUPPORT/ANCHORAGE
3HPIHX000A LETDOWN COOLER 3A	RB	777'+6"	4'-0 1/2" x 2'-7 5/16"	SADDLES/CIP BOLTS
1HPIHX000B LETDOWN COOLER 1B	RB	777'+6"	4'-0 1/2" x 2'-7 5/16"	SADDLES/CIP BOLTS
2HPIHX000B LETDOWN COOLER 2B	RB	777'+6"	4'-0 1/2" x 2'-7 5/16"	SADDLES/CIP BOLTS
3HPIHX000B LETDOWN COOLER 3B	RB	777'+6"	4'-0 1/2" x 2'-7 5/16"	SADDLES/CIP BOLTS
1LPIHX000A LPI COOLER 3A	AB	771'+0"	3'-11" x 19'-9 1/4"	SADDLES/CIP BOLTS
2LPIHX000A LPI COOLER 2A	AB	771'+0"	3'-11" x 19'-9 1/4"	SADDLES/CIP BOLTS
3LPIHX000A LPI COOLER 3A	AB	771'+0"	3'-11" x 19'-9 1/4"	SADDLES/CIP BOLTS
1LPIHX000B LPI COOLER 3B	AB	771'+0"	3'-11" x 19'-9 1/4"	SADDLES/CIP BOLTS
2LPIHX000B LPI COOLER 2B	AB	771'+0"	3'-11" x 19'-9 1/4"	SADDLES/CIP BOLTS
3LPIHX000B LPI COOLER 3B	AB	771'+0"	3'-11" x 19'-9 1/4"	SADDLES/CIP BOLTS
1LPITK0001 BWST	YD	796'+6"	36' x 51'	CONCRETE PAD/CIP BOLTS
2LPITK0001 BWST	YD	796'+6"	36' x 51'	CONCRETE PAD/CIP BOLTS
3LPITK0001 BWST	YD	796'+6"	36' x 51'	CONCRETE PAD/CIP BOLTS
1LPSFL000A LPSW PUMP A STRAINER	TB	775'+0"	4'-1 1/4" x 7'-3 1/2"	CONCRETE PAD/CIP BOLTS
3LPSFL000A LPSW PUMP A STRAINER	TB	775'+0"	4'-1 1/4" x 7'-3 1/2"	CONCRETE PAD/CIP BOLTS
1LPSFL000B LPSW PUMP B STRAINER	TB	775'+0"	4'-1 1/4" x 7'-3 1/2"	CONCRETE PAD/CIP BOLTS
3LPSFL000B LPSW PUMP B STRAINER	TB	775'+0"	4'-1 1/4" x 7'-3 1/2"	CONCRETE PAD/CIP BOLTS
1LPSFL000C LPSW PUMP C STRAINER	TB	775'+0"	4'-1 1/4" x 7'-3 1/2"	CONCRETE PAD/CIP BOLTS

Table 6-1 Tanks and Heat Exchangers Meeting the GIP				
EQUIPMENT ID NAME	BLDG	FLOOR ELEV.	SIZE (Dia. x L)	SUPPORT/ANCHORAGE
1SCHX000A GENERATOR WATER COOLER 1A	TB	775'+0"	1'-10" x 12'-3 5/8"	WELDS & ANCHOR BOLTS
2SCHX000A GENERATOR WATER COOLER 2A	TB	775'+0"	1'-10" x 12'-3 5/8"	WELDS & ANCHOR BOLTS
3SCHX000A GENERATOR WATER COOLER 3A	TB	775'+0"	1'-10" x 12'-3 5/8"	WELDS & ANCHOR BOLTS
1SCHX000B GENERATOR WATER COOLER 1B	TB	775'+0"	1'-10" x 12'-3 5/8"	WELDS & ANCHOR BOLTS
2SCHX000B GENERATOR WATER COOLER 2B	TB	775'+0"	1'-10" x 12'-3 5/8"	WELDS & ANCHOR BOLTS
3SCHX000B GENERATOR WATER COOLER 3B	TB	775'+0"	1'-10" x 12'-3 5/8"	WELDS & ANCHOR BOLTS

6.2 SUMMARY OF OUTLIERS

Tanks and heat exchangers supported on legs, vertical tanks not supported continuously over their bottoms and tanks not cylindrical in shape are considered outliers since these types of supports and shapes are not addressed within the scope of the GIP. For these tanks and heat exchangers, engineering analysis was performed using an approach similar to that described in Section 7 of the GIP. The six Upper Surge Tanks were found to have seismic capacities less than demand and will be upgraded. The three Upper Surge Tank Dome Tanks are outliers due to column supports and will be analytically qualified or upgraded as described in section 8.3 of this report. Table 6-2 lists tanks and heat exchangers which are outliers due to support configuration and/or whose seismic capacity is less than the demand

Table 6-2 Tank and Heat Exchanger Outlier Description and Resolution Summary				
EQUIPMENT ID NAME	BLDG.	FLOOR ELEV.	OUTLIER TYPE	OUTLIER RESOLUTION
1,2,3CTK000C Upper Surge Tank Dome Tanks	TB	838'+0"	TANKS ARE OUTLIERS DUE TO COLUMN SUPPORTS.	DETAILED EVALUATION OF TANK SUPPORTS TO BE PERFORMED.
1,2,3 CTK0003 SLURRY TANKS	TB	775'+0"	NOT CONTINUOUSLY SUPPORTED ON BOTTOM	CALCULATION VERIFIED SEISMIC ADEQUACY
1,2,3SFTK0002 INCORE INSTRUMENTATIO N TANKS	RB	816'+0"	NOT CONTINUOUSLY SUPPORTED ON BOTTOM	CALCULATION VERIFIED SEISMIC ADEQUACY
1,2,3CHX0002A,2B CONDENSATE COOLERS	TB	775'+0"	STACKED HEAT EXCHANGERS	CALCULATION VERIFIED SEISMIC ADEQUACY
1,2,3HPITK0001 LETDOWN STORAGE TANKS	TB	775'+0"	VERTICAL TANKS ON LEGS	CALCULATION VERIFIED SEISMIC ADEQUACY
1,2,3CTK000A,B UPPER SURGE TANKS	TB	775'+0"	HORIZONTAL TANKS ON LEGS	MODIFICATION REQUIRED MM OE-9270 INITIATED
1,2,3TOTK0002 EFW PUMP TURBINE OIL TANK	TB	775'+0"	BOX SHAPED TANK	SEISMIC ADEQUACY BASED ON ENGINEERING JUDGEMENT
ICDM000B POLISHING DEMINERALIZER TANK	TB	775'+0"	VERTICAL TANK ON LEGS	CALCULATION VERIFIED SEISMIC ADEQUACY
ICDM000C POLISHING DEMINERALIZER TANK	TB	775'+0"	VERTICAL TANK ON LEGS	CALCULATION VERIFIED SEISMIC ADEQUACY

Table 6-2 Tank and Heat Exchanger Outlier Description and Resolution Summary				
EQUIPMENT ID NAME	BLDG	FLOOR ELEV.	OUTLIER TYPE	OUTLIER RESOLUTION
1CDM000E POLISHING DEMINERALIZER TANK	TB	775'+0"	VERTICAL TANK ON LEGS	CALCULATION VERIFIED SEISMIC ADEQUACY
2CDM000A POLISHING DEMINERALIZER TANK	TB	775'+0"	VERTICAL TANK ON LEGS	CALCULATION VERIFIED SEISMIC ADEQUACY
2CDM000B POLISHING DEMINERALIZER TANK	TB	775'+0"	VERTICAL TANK ON LEGS	CALCULATION VERIFIED SEISMIC ADEQUACY
2CDM000C POLISHING DEMINERALIZER TANK	TB	775'+0"	VERTICAL TANK ON LEGS	CALCULATION VERIFIED SEISMIC ADEQUACY
2CDM000D POLISHING DEMINERALIZER TANK	TB	775'+0"	VERTICAL TANK ON LEGS	CALCULATION VERIFIED SEISMIC ADEQUACY
2CDM000E POLISHING DEMINERALIZER TANK	TB	775'+0"	VERTICAL TANK ON LEGS	CALCULATION VERIFIED SEISMIC ADEQUACY
3CDM000A POLISHING DEMINERALIZER TANK	TB	775'+0"	VERTICAL TANK ON LEGS	CALCULATION VERIFIED SEISMIC ADEQUACY
3CDM000B POLISHING DEMINERALIZER TANK	TB	775'+0"	VERTICAL TANK ON LEGS	CALCULATION VERIFIED SEISMIC ADEQUACY
3CDM000C POLISHING DEMINERALIZER TANK	TB	775'+0"	VERTICAL TANK ON LEGS	CALCULATION VERIFIED SEISMIC ADEQUACY
3CDM000D POLISHING DEMINERALIZER TANK	TB	775'+0"	VERTICAL TANK ON LEGS	CALCULATION VERIFIED SEISMIC ADEQUACY
3CDM000E POLISHING DEMINERALIZER TANK	TB	775'+0"	VERTICAL TANK ON LEGS	CALCULATION VERIFIED SEISMIC ADEQUACY

CABLE TRAY, CABLE TRENCH, CONDUIT, AND HVAC REVIEW

7.1 CABLE AND CONDUIT RACEWAY REVIEW

7.1.1 SUMMARY OF RACEWAY REVIEW

The reviews of cable tray and conduit systems at Oconee Nuclear Station were performed per the guidelines of Section II.8 of the Generic Implementation Procedure (GIP) (Reference #1).

The cable support systems in the Auxiliary Buildings, Turbine Buildings, Block Houses, Standby Shutdown Facility, and Intake Structure for Units 1,2 & 3, hereinafter referred to as "Plant Tray System", were reviewed during March and April 1995 by an EQE consultant team of two SCEs, Mr. Jim White and Mr. Basilio Sumodabilia, both licensed Professional Engineers. The Unit 1,2 & 3 Reactor Buildings were reviewed during December 1995, April 1996, and November 1994, respectively, by Mr. R.V. Hester and Mr. L. B. Elrod, both of whom are SCEs and Professional Engineers. Tech support was provided on all walkdowns by Mr. Tony Hathcock of the ONS USI A-46 site team. The decision was made to review all of the cable trays in the plant rather than determine which trays carried SSEL related cables. The cable support system walkdown consisted of an extensive review of each cable tray, electray, and conduit support in the respective buildings with the exception of a few electray supports located in high radiation areas in the Auxiliary Building and Reactor Building basements. It was determined that these supports would consist of electray and/or conduit supports that would be enveloped by other similar supports. The cable tray system in the Radwaste Facility was not included in this review since all of the equipment is considered passive and does not require power or relay review.

7.1.1.1 SUMMARY OF INSTALLATIONS AT OCONEE

The cable tray and conduit installations at Oconee are well designed and constructed. All of the cable trays at Oconee were of the "ladder-type" design and utilized galvanized steel construction. Supports were generally braced laterally and axially providing a rigid tray support system. Most of the system was reviewed from floor levels. In instances requiring a closer inspection, access was available via ladders and scaffolding. Some of the more typical support configurations along with a description of various cable tray types are provided below.

7.1.1.1.1 PLANT TRAY SYSTEM

Typical cable tray runs in Units 1 & 2 are the Kurlock type manufactured by Unistrut and are 24 inches wide by 5 inches deep with an effective depth of 4 inches. The cable tray typically used in Unit 3 was manufactured by Husky-Burndy and is 24 inches wide by 6 inches deep with an effective depth of 5 inches. Field-run trays consist of 3, 4, and 6 inch wide Electray channel sections. Cables are generally the metallic armored type and were assumed to be heavier than the cable types addressed in the GIP. Therefore, a weight of 35 pounds per square foot was used for a standard 24 inches tray with 100% fill instead of the 25 pounds per square foot as estimated in the GIP. This value resulted in 70 pounds per linear foot for a standard 24 inch Kurlock tray.

Cable tray and conduit spans were generally between 5 feet and 6 feet with isolated spans of 7 feet or more and were generally attached at every support. No spans greater than the GIP allowable of 10 feet were found with the exception of one 4 inch electray. The Kurlock trays were attached to supports with hold down clips, while the Husky-Burndy trays are normally attached with bolts. The widely used spring nuts were the Unistrut type and have teeth stamped into the nut. Considering the ruggedness of armored cable, conduit was generally used on a limited basis primarily for cable support from the overhead raceways down to electrical equipment where maximum unsupported distances for the cable type exceeded the design criteria.

The majority of tray supports were the trapeze type and constructed from Unistrut channel material. A small number of trays in the Unit 3 Auxiliary Building Trench Area were supported from the floor and several supports in the Cable Rooms spanned from floor to ceiling. Cantilever type supports were mainly used in the Cable Shafts and for electray and conduit supports throughout the plant. Structural steel angles and light tube steel members were also used, primarily for bracing, and in a limited number of supports. Friction type beam clamps were not used except in some areas above the turbine operating floor. In all cases the clamps were oriented so that dead load was not resisted by the friction force. Rigid boot connection details, as discussed in GIP Section 8.2.2, were not used in any of the areas.

Supports were usually anchored to concrete using Phillips Red-Head shell anchors or Unistrut concrete inserts. Turbine building supports also connected to structural steel building members using welded steel angle connections. Single runs of conduit and cable were typically anchored directly to structural elements by finger clamps. Groups of conduit were typically clamped to a Unistrut section which was bolted directly to the structure.

7.1.1.1.2 REACTOR BUILDINGS

Typical cable tray runs in Units 1, 2 and 3 were the Kurlock type manufactured by Unistrut and were 18 or 24 inches wide by 5 inches deep with an effective depth of 4 inches. Field-run trays consisted of 3, 4, and 6 inch wide Electray channel sections. Cables were generally the metallic armored type that are assumed to be heavier than the cable types addressed in the GIP. Therefore, a weight of 35 pounds per square foot was used for 100% fill instead of the 25 pounds per square foot as estimated in the GIP. This value resulted in 53 pounds per linear foot for a standard 18 inch Kurlock tray and 70 pounds per linear foot for a standard 24 inch Kurlock tray. Cable tray and conduit spans were generally between 5 feet and 6 feet with isolated spans of 7 feet or more and were generally attached at every support. No spans greater than the GIP allowable of 10 feet were found. The cable trays were attached to supports with hold down clips. The widely used spring nuts were the Unistrut type and have teeth stamped into the nut. Considering the ruggedness of armored cable, conduit was generally used on a limited basis primarily for cable support from the overhead raceways down to electrical equipment where maximum unsupported distances for the cable type exceeded the design criteria.

Tray supports consisted of trapeze, cantilever, cantilever bracket and floor supported types constructed primarily from Unistrut channel material and Unistrut fittings. Structural steel angles and light tube steel members were used in limited applications. Use of friction type beam clamps

was limited and where used was oriented so that dead load was not resisted by the friction force. Rigid boot connection details, as discussed in GIP Section 8.2.2, was not used in any of the areas.

Reactor Building supports were either welded to the liner plate or internal structures, or anchored to concrete using Phillips Red-Head shell anchors. Single runs of conduit and cable were typically anchored directly to structural elements by "finger clamps". Groups of conduit were typically clamped to a Unistrut section which was bolted directly to the structure.

7.1.1.2 EVALUATION METHODOLOGY

The general approach taken in the raceway evaluation was based on the guidelines contained in Reference #1. The methodology implemented for Oconee was broken down into the following steps:

1. Visually review the general raceway configurations and develop an understanding of the installation.
2. Visually review the type of hardware used to construct the raceways, including support and anchorage hardware, to ensure general conformance with the seismic experience database.
3. Walkdown the raceway installations to evaluate against the inclusion rules and other seismic performance concerns, check for interaction problems; and identify potential outliers.
4. Select representative worst cast bounding samples.
5. Perform Limited Analytical Reviews.

7.1.2 EVALUATION OF BOUNDING SAMPLES

7.1.2.1 PLANT TRAY SYSTEM

Forty-five cable tray bounding samples were selected to encompass the diversity of the plant tray system's existing raceway support system. Supports were initially evaluated assuming cable trays are 100% filled with cable. If the supports did not pass, they were then evaluated for the actual fill weights. However, all Plant Tray System supports will be modified to meet 100% loading requirements. The conduit installations at Oconee were obviously adequate from the walkdown. Therefore, selection of a bounding sample for conduit was not warranted.

7.1.2.2 REACTOR BUILDINGS

Five hundred and thirty nine cable tray bounding samples were selected to encompass the diversity of the existing raceway support system. Supports were evaluated using actual tray fill. Modifications will be required for those supports not meeting the actual loading requirements. The conduit installations at Oconee were obviously adequate from the walkdown. Therefore, selection of a bounding sample for conduit was not warranted.

7.1.3 SUMMARY OF OUTLIERS

7.1.3.1 PLANT TRAY SYSTEM ANALYTICAL REVIEW OUTLIERS:

A summary of the analytical review outliers R1 through R18 is provided in Table 7-1. Of the 45 supports selected for analytical review, 18 did not pass the review process and are considered Analytical Review Outliers per the GIP. A total of 7 of the 18 analytical review outliers were resolved by EQE Calculation OC-05-01 to meet the GIP criteria. The remaining 11 analytical review selections involving 51 supports require field modifications to upgrade the supports in order to pass the GIP criteria.

7.1.3.2 REACTOR BUILDING ANALYTICAL REVIEW OUTLIERS:

A summary of the analytical review outliers R19 through R22 is also provided in Table 7-1. Of the 539 supports selected for analytical review, 4 supports did not pass the review process and will require modifications in order to pass the GIP criteria.

7.1.3.3 PLANT TRAY SYSTEM AND REACTOR BUILDING WALKDOWN OUTLIERS:

A summary of the walkdown outliers is provided in table 7-2. There were 75 outliers discovered during the walkdowns that displayed obvious problems such as those listed in the GIP Section 8.2 and were documented on Outlier Seismic Verification Sheets. Thirty-two of the 75 walkdown outliers have been resolved by minor field modifications or were judged to be structurally adequate in their present state per the GIP. The majority of the outliers (22) apply to masonry block walls and anchorage into masonry block walls. The remaining 21 raceway outliers involving 37 supports include instances of missing components, improperly installed hardware, overfilling of trays, potentially inadequate cable ties, raceways adversely affected by differential deflections, and broken or sagging components. All walkdown outliers were cases affecting isolated raceways and are not typical of other raceways or supports beyond the areas identified.

7.1.4 CONCLUSION FOR REACTOR BUILDING AND PLANT TRAY SYSTEM:

Of the 584 supports that were selected for the Analytical Review process, 22 did not pass the GIP criteria and were documented on OSVS forms. Seven of those were resolved by analysis. It is recommended that the remaining 15 outliers involving 55 supports be resolved by performing support modifications. Of the 75 walkdown outliers: 1) 32 are resolved, 2) 22 involve block walls, and 3) 21 unresolved raceway outliers involving thirty seven supports require modification.

Table 7-1

Cable Tray Analytical Review Outlier Description and Proposed Resolution Summary

Outlier No./ Anal. Rev.#	Location	Description	Proposed Resolution
R-1 AB771-1 Unresolved	Aux Bldg EL. 771' Valve Galley	Lower Support Bracket - fails D.L. check from GIP Section 8.3.1	Modify the support to resolve the overstress
R-2 AB771-2	Aux Bldg EL. 771' Valve Galley	Anchorage - fails the vertical capacity (3XDL) check from GIP Section 8.3.2	Observed condition shown to be adequate by calculation for existing fill. Modify the support to meet vertical capacity for 100% tray fill.
R-3 AB796-4 Unresolved	Aux Bldg El. 796'6" Cable Shaft	Cantilever Support - fails D.L. check from GIP Section 8.3.1	Modify the support to resolve the overstress.
R-4 AB796-10 Unresolved	Aux Bldg El. 796'6" Load Center Area	Horizontal P1000 member, Lateral Stability - fails D.L. check from GIP Section 8.3.1 and fails lateral load check from GIP Section 8.3.4	Modify the support to resolve the overstress and provide lateral bracing.
R-5 AB796-11 Unresolved	Aux Bldg El. 796'6" Load Center Area	Horizontal P1000 member, Lateral Stability - fails D.L. check from GIP Section 8.3.1 and fails lateral load check from GIP Section 8.3.4	Modify the support to resolve the overstress and provide lateral bracing.
R-6 AB809-9 Unresolved	Aux Bldg El. 809'3" Cable Room	Overhead P1000 Member, Strut between HC-18 & HC-28 - fails D.L. check from GIP Section 8.3.1 and fails the vertical capacity (3xDL) check from GIP Section 8.3.2	Modify the support by adding anchorage and removing connecting strut

Table 7-1

Cable Tray Analytical Review Outlier Description and Proposed Resolution Summary

Outlier No./ Anal. Rev.#	Location	Description	Proposed Resolution
R-7 AB809-11	Aux Bldg El. 809'3" East Pen. Room	Anchorage - fails the vertical capacity (3xDL) check from GIP Section 8.3.2	Observed condition shown to be adequate by calculation for existing fill. Modify the support to meet vertical capacity for 100% tray fill.
R-8 AB809-12	Aux Bldg El. 809'3" West Pen. Room	Anchorage - fails the vertical capacity (3xDL) check from GIP Section 8.3.2	Observed condition shown to be adequate by calculation for existing fill. Modify the support to meet vertical capacity for 100% tray fill.
R-9 AB809-13 Unresolved	Aux Bldg El. 809'3" East Pen. Room	Anchorage - fails D.L. check from GIP Section 8.3.1.	Modify the support to resolve the overstress.
R-10 AB809-14	Aux Bldg El. 809'3" East Pen. Room	Anchorage - fails the vertical capacity (3xDL) check from GIP Section 8.3.2.	Outlier is resolved by EQE calc. Support passes Lateral Load Check and is acceptable for 100% fill.
R-11 AB838-4	Aux Bldg El. 838' Vent. Room	Anchorage - fails the vertical capacity (3xDL) check from GIP Section 8.3.2.	Outlier is resolved by EQE calc. Support passes Lateral Load Check and is acceptable for 100% fill.
R-12 TB796-1	Turb Bldg El. 796'6" Mezz Floor	Anchorage - fails the vertical capacity (3xDL) check from GIP Section 8.3.2.	Outlier is resolved by EQE calc. Support passes Lateral Load Check and is acceptable for 100% fill.
R-13 TB796-2 Unresolved	Turb Bldg El. 796'6" Mezz Floor	Horizontal P1001 Member - fails D.L. check from GIP Section 8.3.1.	Modify the support to resolve the overstress.

Table 7-1

Cable Tray Analytical Review Outlier Description and Proposed Resolution Summary

Outlier No./ Anal. Rev.#	Location	Description	Proposed Resolution
R-14 TB796-4	Turb Bldg El. 796'6" Mezz Floor	Anchorage - fails the vertical capacity (3xDL) check from GIP Section 8.3.2.	Observed condition shown to be adequate by calculation for existing fill. Modify the support to meet vertical capacity for 100% tray fill.
R-15 TB796-5 Unresolved	Turb Bldg El. 796'6" Mezz Floor	Anchorage of Brace - fails the vertical capacity (3xDL) check from GIP Section 8.3.2 and fails the lateral load check from GIP Section 8.3.4.	Modify the support to resolve the overstress.
R-16 TB796-6 Unresolved	Turb Bldg El. 796'6" Mezz Floor	Horizontal P1001 Member - fails D.L. check from GIP Section 8.3.1.	Modify the support to resolve the overstress.
R-17 TB796-7 Unresolved	Turb Bldg El. 796'6" Mezz Floor	P1000 Ceiling Beam - fails D.L. check from GIP Section 8.3.1.	Modify the support to resolve the overstress.
R-18 TB796-8 Unresolved	Turb Bldg El. 796'6" Mezz Floor	Truss Members Overstressed - fails D.L. check from GIP Section 8.3.1 and fails lateral load check from GIP Section 8.3.4.	Modify the supports by removing pipe support and re-supporting pipe using a different structure.
R-19 1SI1E2 Unresolved	Unit 1 RB 150 DEG EL. 825	Fails Dead Load Check from GIP Section 8.3.1	Modify the support to resolve overstress
R-20 2SI1E2 Unresolved	Unit 2 RB 160 DEG EL. 825	Fails Dead Load Check from GIP Section 8.3.1	Modify the support to resolve overstress
R-21 3SI1E2 Unresolved	Unit 3 RB 160 DEG EL. 825	Fails Dead Load Check from GIP Section 8.3.1	Modify the support to resolve overstress
R-22 3SO4E Unresolved	Unit 3 RB 270 DEG EL. 844+6	Fails Dead Load Check from GIP Section 8.3.1	Modify the support to resolve overstress

Table 7-2

Cable Tray Walkdown Outlier Description and Proposed Resolution Summary

Outlier No.	Location	Description	Proposed Resolution
AB-1 Unit 1,2	Aux Bldg El. 838' Rm. 602,603, 604,605	Block walls around room are non-seismic.	Analyze walls or confirm that affected raceways do not carry cable for SSEL equipment.
AB-2 Unit 2	Aux Bldg El. 809'3" Rm. 404	Isolated cases of missing anchor bolts exists - spts HC-12.	Install missing components
AB-3 Unit 3	Aux Bldg El. 838' Rm. 650,651,652	Block walls around room are non-seismic	Analyze walls or confirm that affected raceways do not carry cable for SSEL equipment.
AB-4 Unit 2 RESOLVED	Aux Bldg El. 796'6" Rm. 311	Armored Cable is supported with metal bands-"Panduit" 3/16" wide for 2" cable.	Analyze capacity vs. Demand Observed condition judged to be adequate.
AB-5 Unit 2 RESOLVED	Aux Bldg El. 796'6" Rm. 311	Armored Cable is supported with plastic ties off the underside of cable trays.	Replace plastic tie with metal band or cable clamp
AB-6 Unit 2	Aux Bldg El. 809'3" Rm. 404	Block wall at stair enclosure is non-seismic.	Analyze walls or confirm that affected raceways do not carry cable for SSEL equipment.
AB-7 Unit 2 RESOLVED	Aux Bldg El. 809'3" Rm. 410	Cables on tray L-231 are not adequately tied down and could fall during an earthquake.	Provide adequate cable ties to tie cable to trays
AB-8 Unit 3 RESOLVED	Aux Bldg El. 809'3" Rm. 432	Support HA3-306 has an anchor bolt with a spacing violation	Modify to correct spacing violation.
AB-9 Unit 1 RESOLVED	Aux Bldg El. 809'3" Rm. 402	Conduit from cabinet next to PZR heater cabinet has overspan.	Modify by adding supports or bracing
AB-10 Unit 1 RESOLVED	Aux Bldg El. 809'3" Rm. 400	Block wall along column line 18 is non-seismic.	Analyze walls or confirm that affected raceways do not carry cable for SSEL equipment. Observed condition judged to be adequate.
AB-11 Unit 2 RESOLVED	Aux Bldg El. 809'3" Rm. 408	Block walls are non-seismic	Analyze walls or confirm that affected raceways do not carry cable for SSEL equipment. Observed condition judged to be adequate.

Table 7-2

Cable Tray Walkdown Outlier Description and Proposed Resolution Summary

Outlier No.	Location	Description	Proposed Resolution
AB-12 Unit 3	Aux Bldg El. 796'6" Load Center Area	Cantilever tray supports HAS-12 & HAS-13 are sagging. Judged inadequate due to connection detail.	Modify support and/or anchorage.
AB-13 Unit 2 RESOLVED	Aux Bldg El. 796'6" Rm. 349	Several supports anchored to north wall are deflected with anchors pulling out of wall.	Modify support and/or anchorage.
AB-14 Unit 3 RESOLVED	Aux Bldg El. 796'6" Rm. 376	Anchor for cantilever support 8'6" west of V90 on north wall is pulling out of block wall.	Modify support and/or anchorage.
AB-15 Unit 3	Aux Bldg El. 838' Rm. 669	Block walls are non-seismic.	Analyze walls or confirm that affected raceways do not carry cable for SSEL equipment.
AB-16 Unit 3	Aux Bldg El. 838' Rm. 669	4" electray from column W91 has an overspan.	Modify by adding supports of bracing.
AB-17 Unit 3	Aux Bldg El. 838' Rm. 657	Block walls are non-seismic.	Analyze walls or confirm that affected raceways do not carry cable for SSEL equipment.
AB-18 Unit 2	Aux Bldg El. 838' Rm. 610	Block walls are non-seismic.	Analyze walls or confirm that affected raceways do not carry cable for SSEL equipment.
AB-19 Unit 1	Aux Bldg El. 796'6" Corridors	Block walls are non-seismic. Raceways are supported on block walls or in falling path.	Analyze walls or confirm that affected raceways do not carry cable for SSEL equipment.
AB-20 Unit 2	Aux Bldg El. 796'6" Corridors	Block walls in corridors 312, 328, 346, & 347 are non-seismic.	Analyze walls or confirm that affected raceways do not carry cable for SSEL equipment.
AB-21 Unit 3	Aux Bldg El. 796'6" Corridors	Block walls in corridors 356, 368, & 377A are non-seismic.	Analyze walls or confirm that affected raceways do not carry cable for SSEL equipment.
AB-22 Unit 1	Aux Bldg El. 838' Rm. 600	Raceway attached to non-seismic block wall.	Analyze walls or confirm that affected raceways do not carry cable for SSEL equipment.
AB-23 Unit 2	Aux Bldg El. 838' Rm. 618	Raceway attached to non-seismic block wall.	Analyze walls or confirm that affected raceways do not carry cable for SSEL equipment.
AB-24 Unit 3	Aux Bldg El. 838' Rm. 666	Raceway attached to non-seismic block wall.	Analyze walls or confirm that affected raceways do not carry cable for SSEL equipment.
AB-25 Unit 1 RESOLVED	Aux Bldg El. 838' Rm. 600	Cable bundle from east end of tray J107 spans in excess of 15' without support.	Modify by adding supports or bracing

Table 7-2**Cable Tray Walkdown Outlier Description and Proposed Resolution Summary**

Outlier No.	Location	Description	Proposed Resolution
AB-26 Unit 3 RESOLVED	Aux Bldg El. 809'3" Rm.455	Horizontal P1000 support member has a P1026 clip which has deflected or slipped down.	Modify support and/or anchorage
AB-27 Unit 1,2,3	Aux Bldg El. 796'6" Corridors	Block wall raceway support anchors have a potential of high tensile load. Capacity is unknown, anchor not covered by the GIP.	Determine anchor type and evaluate for adequacy or confirm that affected raceways to not carry cable for SSEL equipment.
AB-28 Unit 3	Aux Bldg El. 771' HPI/LPI Pump Hatch Area	Shell anchors for cable tray support are pulling out of wall causing tray to sag.	Modify support and/or anchorage.
AB-29 Unit 3	Aux Bldg El. 771' LPI/RBS Hatch Area	Support above MCC 3XN for tray @ junction point 3876 inadequate due to small spot weld & long cantilever.	Modify support and/or anchorage.
AB-30 Unit 1 RESOLVED	Aux Bldg El. 771' Rm. 111	Cable in electray on NE wall is not tied to tray.	Provide adequate cable ties to tie cable to trays
AB-31 Unit 3 RESOLVED	Aux Bldg El. 838' Rm. 666	Overspan exists for 4" electray.	Modify by adding supports
TB-1 Unit 1	Turb Bldg El. 775' Basement Fl.	Cantilever tray supports on N. wall have deficient or failed anchor bolts.	Modify support and/or anchorage.
TB-2 Unit 1 RESOLVED	Turb Bldg El. 775' Basement Fl.	Several electrays are overfilled	Provide adequate cable ties to tie cable to trays
TB-3 Unit 1	Turb Bldg El. 775' Basement Fl.	Existing supports do not adequately support tray A102A.	Modify support and/or anchorage or add supports if needed.
TB-4 Unit 1	Turb Bldg El. 775' Basement Fl.	Tray is bent down and adjacent support is rotated.	Modify support and/or anchorage.
TB-5 Unit 2	Turb Bldg El. 775' Basement Fl.	Bottom P1000 is not horizontal and tray is sagging. P1026 fitting may have slipped.	Modify support and/or anchorage.
TB-6 Unit 3 RESOLVED	Turb Bldg El. 775' Basement Fl.	Anchors for cantilever support have pulled out of wall.	Modify support and/or anchorage

Table 7-2

Cable Tray Walkdown Outlier Description and Proposed Resolution Summary

Outlier No.	Location	Description	Proposed Resolution
TB-7 Unit 3	Turb Bldg El. 775' Basement Fl.	Support is ineffective due to disconnected or cut end. Tray overspan exists.	Modify support and/or anchorage.
TB-8 Unit 3 RESOLVED	Turb Bldg El. 775' Basement Fl.	Tray is bent or has buckled, and is missing at least two rungs.	Observed condition judged to be adequate.
TB-9 Unit 1,2,3	Turb Bldg El. 796'6" Mezz Fl.	Cable Trays are attached to block walls with unknown anchor type.	Determine anchor type and evaluate for adequacy or confirm that affected raceways do not carry cable for SSEL equipment.
TB-10 Unit 1 RESOLVED	Turb Bldg El. 796'6" Mezz Fl.	Vertical tray at column F-14 is overfilled.	Provide adequate cable ties to tie cable to trays
TB-11 Unit 1 RESOLVED	Turb Bldg El. 796'6" Mezz Fl.	Tray above MCC 1XGA is missing tray rail & hold down clips. P1026 clip has slipped.	Install missing components and modify support and/or anchorage
TB-12 Unit 1	Turb Bldg El. 796'6" Mezz Fl.	Floor mounted hanger has low lateral resistance, potential instability due to p-delta effect.	Modify by adding supports or bracing.
TB-13 Unit 1 RESOLVED	Turb Bldg El. 796'6" Mezz Fl.	Vertical tray above MCC 1XGC has cables not tied to the tray.	Provide adequate cables ties to tie cable to trays
TB-14 Unit 1,2,3	Turb Bldg El. 796'6" Mezz Fl.	Raceways cross seismic joints. Displacement could damage supports where insufficient strength/flexibility exists.	Determine realistic deflections and evaluate effects on raceways/supports.
TB-15 Unit 2 RESOLVED	Turb Bldg El. 796'6" Mezz Fl.	Vertical tray above MCC 2XGC has cables not tied to the tray.	Provide adequate cables ties to tie cable to trays.
TB-16 Unit 2 RESOLVED	Turb Bldg El. 796'6" Mezz Fl.	Vertical tray at col. K-31 is overfilled, tied with brittle plastic ties.	Provide adequate cables ties to tie cable to trays.
TB-17 Unit 2	Turb Bldg El. 796'6" Mezz Fl.	Floor mounted hanger has low lateral resistance, potential instability due to p-delta effect.	Modify by adding supports or bracing.
TB-18 Unit 1,2,3	Turb Bldg El. 796'6" Mezz Fl.	Block walls along col. M are non-seismic.	Analyze walls or confirm that affected raceways do not carry cable for SSEL equipment.

Table 7-2**Cable Tray Walkdown Outlier Description and Proposed Resolution Summary**

Outlier No.	Location	Description	Proposed Resolution
TB-19 Unit 1,2,3	Turb Bldg El. 796'6" Mezz Fl.	Cable trays attached to non-seismic walls. Unknown anchor type.	Analyze walls or confirm that affected raceways do not carry cable for SSEL equipment and determine anchor type and evaluate for adequacy.
TB-20 Unit 1	Turb Bldg El. 822' Oper. Fl.	Block walls on col. 16 near M-16 have unknown seismic capacity.	Analyze walls or confirm that affected raceways do not carry cable for SSEL equipment.
TB-21 Unit 2	Turb Bldg El. 822' Oper. Fl.	E-W block walls between J40 - M40 and J41 - M41 have unknown seismic capacity.	Analyze walls or confirm that affected raceways do not carry cable for SSEL equipment.
TB-22 Unit 3	Turb Bldg El. 822' Oper. Fl.	Block walls on col. 55 have unknown seismic capacity.	Analyze walls or confirm that affected raceways do not carry cable for SSEL equipment.
TB-23 Unit 1	Turb Bldg El. 822' Oper. Fl.	Anchors for raceway supports with potential high loading are attached to block walls (near col. M22). Unknown anchor capacity. Anchors not covered by GIP.	Determine anchor type and evaluate for adequacy or confirm that affected raceways do not carry cable for SSEL equipment.
TB-24 Unit 2	Turb Bldg El. 822' Oper. Fl.	Anchors for raceway supports with potential high loading are attached to block walls (near col. M22). Unknown anchor capacity. Anchors not covered by GIP.	Determine anchor type and evaluate for adequacy or confirm that affected raceways do not carry cable for SSEL equipment.
TB-25 Unit 3	Turb Bldg El. 822' Oper. Fl.	Anchors for raceway supports with potential high loading are attached to block walls (near col. M22). Unknown anchor capacity. Anchors not covered by GIP.	Determine anchor type and evaluate for adequacy or confirm that affected raceways do not carry cable for SSEL equipment.
TB-26 Unit 1	Turb Bldg El. 822' Oper. Fl.	3" cable is between two hard spots behind col. M22. Differential deflection could damage cable.	Relocate cable.
TB-27 Unit 3	Turb Bldg El. 822' Oper. Fl.	Vertical trays at col. M47 do not have enough flexibility to accommodate differential deflection.	Modify support and/or anchorage, determine if item is necessary for safe shutdown (if not, accept as is), determine realistic deflections and evaluate effects on raceways / supports.
BH-1 Units 1,2	Block House El. 796'6"	Two supports on top of switchgear have questionable lateral adequacy and stability.	Modify supports and /or anchorage.
1RB-1 Unit 1 RESOLVED	Reactor Bldg El. 777' 90 deg	Loose cable hanging unsupported over a pipe.	Field to properly support the cable as required

Table 7-2**Cable Tray Walkdown Outlier Description and Proposed Resolution Summary**

Outlier No.	Location	Description	Proposed Resolution
1RB-2 Unit 1 RESOLVED	Reactor Bldg El. 797'6" C-14	Cables not tied down in trays T-RBE-6,7, & 8 along East side of Secondary Shield Wall.	Provide adequate cable ties to tie cables to tray
1RB-3 Unit 1 RESOLVED	Reactor Bldg El. 797'6" C-14	Cables not tied down in electray along North side of Secondary Shield Wall.	Provide adequate cable ties to tie cables to tray
1RB-4 Unit 1 RESOLVED	Reactor Bldg El. 797'6" 60 deg	Due to an overhead leak, there is a corrosion problem on an existing electray.	Observed condition judged to be adequate.
1RB-5 Unit 1	Reactor Bldg El. 797'6" C-22	Cantilever cable tray support is sagging.	Modify supports and replace hardware as required per Minor Mod.
1RB-6 Unit 1 RESOLVED	Reactor Bldg El. 797'6" C-13	Cables not tied down in a long vertical run of tray T-RBE-3.	Provide adequate cable ties to tie cables to tray
1RB-7 Unit 1	Reactor Bldg El. 825'+0" Az. 180	Cable Tray cantilever type support 1S11E2 is sagging.	Modify support and/or anchorage per Minor Mod
1RB-8 Unit 1	Reactor Bldg. El. 777'+6" Az. 300	Cable Tray cantilever type support 1SB8C is missing an anchor.	Modify support and/or anchorage per Minor Mod
1RB-9 Unit 1 RESOLVED	Reactor Bldg. El. 777'+6" Az. 300	Cable Tray cantilever type support 1SB11E is sagging.	Modify support and/or anchorage
2RB-1 Unit 2	Reactor Bldg. El. 844'+6" C-15A	Cable Tray cantilever type support # 2S02E is sagging.	Modify support to correct sagging problem per Minor Mod
2RB-2 Unit 2 RESOLVED	Reactor Bldg. El. 825'+0" C-16, Az. 270	Cable Tray T-RBE-2 is missing hold down clips.	Replace missing hardware
2RB-3 Unit 2 RESOLVED	Reactor Bldg. El. 797'+6" C-14, Az. 270	Cables in trays T-RBE-6,7,&8 are not tied securely to trays.	Provide adequate cable ties to tie cables to tray
2RB-4 Unit 2 RESOLVED	Reactor Bldg. El. 797'+6" C-17, Az. 270	Corrosion on unistrut hanger material, cable tray, and armored cables.	Observed condition judged to be adequate.
2RB-5 Unit 2 RESOLVED	Reactor Bldg. El. 797'+6" Az. 60	Corrosion on unistrut hanger material, 12" cable tray, and armored cables.	Observed condition judged to be adequate.
2RB-6 Unit 2 RESOLVED	Reactor Bldg. El. 777'+6" C-14, Az. 270	Cables in electray are not tied securely to trays.	Provide adequate cable ties to tie cables to tray.

Table 7-2

Cable Tray Walkdown Outlier Description and Proposed Resolution Summary

Outlier No.	Location	Description	Proposed Resolution
2RB-7 Unit 2	Reactor Bldg. El. 817+0 B Cav @ Pzr	Cable Tray Support 2SG6E1 has broken hardware and is sagging	Modify support to correct sagging problem per Minor Mod

7.2 CABLE TRENCH REVIEW

7.2.1 SUMMARY OF CABLE TRENCH REVIEW

The cable trenches at Oconee were reviewed during July 1995 by a team of EQE engineers. The review consisted of evaluating the impact of a IPEEE seismic event on essential control and power cables. The IPEEE demand seismic curve grossly envelopes the USI A-46 demand curve at all frequencies. The scope of the evaluation included the following:

1. Cables in covered trenches from the Standby Shutdown Facility to the various Reactor Buildings and the Security Building.
2. Cables in covered trenches from the intake structure to the intersection with the Standby Shutdown Facility trenches at a point north of the Steam Warehouse.
3. Cables in covered trenches from the 115 kV switchyard to the Unit 3 Auxiliary Building.

7.2.2 SUMMARY OF CABLE TRENCH INSTALLATIONS

Trenches are cast-in place concrete and constructed in sections as long as 40 feet. Cable trenches are flush with the ground surface and are rectangular in cross section. Trenches are typically 3 feet to 4 feet wide and 4 feet deep. Side walls are a minimum of 7 inches thick and the bottom slabs are a minimum of 8 inches thick. Trench covers are generally shorter than 12 feet and are constructed from concrete or steel. Power cables are attached to unistrut racks which mount to embedded unistrut channels in the sidewalls of trenches while control cables are laid on the cable trench floor.

7.2.3 METHODOLOGY

The seismic evaluation of the control and power cables involved assessing the potential magnitude of deformations caused by incoherence in seismic wave propagation. Simple upper-bound estimates were made of the maximum ground strain that can be produced by wave propagation.

7.2.4 CONCLUSION

Cable trenches exceed the estimated strain associated with seismic wave propagation by factors of approximately 8 to 20. Therefore, seismic wave propagation is judged to have no impact on the performance of the instrumentation / control cables or power cables.

7.3 CONTROL ROOM VENTILATION SYSTEM (CRVS) REVIEW

7.3.1 SUMMARY OF CRVS REVIEW

The review of the Control Room Ventilation System (CRVS) at Oconee Nuclear Station, Units 1, 2 & 3 was performed as part of the resolution to USI A-46. Even though the duct system is not explicitly required to be reviewed under USI A-46, it was included to ensure system integrity. The review was conducted during July, 1996 by an EQE consultant team of two SCEs, Mr. John Dizon and Mr. Farzin Beigi. Technical support was provided on all walkdowns by Mr. Tony Hathcock of the ONS USI A-46 site team. With the assumption that all plant cooling capabilities are lost during a SQUG event, the ambient temperature rise of the control rooms during the 72 hour scenario is such that outside air circulation would be required in these areas. The CRVS walkdown consisted of an extensive review of the ducts, duct supports, and related attached equipment such as dampers and filters. The duct layout includes the outside air supply duct to the booster fans as well as the supply and return ducts to and from the Control Room. The review of the supply duct in the Control Room was limited to the first air register within the control room. Areas of the plant which contained the ductwork are the Ventilation Rooms (El. 838'+0"), Control Rooms (El. 822'+0"), and the connecting duct shafts. Refer to Section 8 of the report for the CRVS equipment outliers.

7.3.1.1 SUMMARY OF INSTALLATIONS AT OCONEE

The duct system at Oconee was installed during the 1970s and was built to SMACNA standards. The majority of the duct is rectangular in shape with sizes ranging from 15 inches x 15 inches to 52 inches x 30 inches. There are a few sections of round duct in sizes ranging from 8 inches to 16 inches in diameter. The wall thickness of duct varied from 18 gauge for the round duct and from 20 gauge to 24 gauge for the rectangular duct. The majority of joints for the rectangular duct are the "pocket lock" type along with a few "flat-slip" and "flanged" type joints. Spacing was typically 48 inches on center. Joints for the round duct consisted of "bolted flange connections" and were spaced 40 inches on center. The insulation in the supply ducts was manufactured by Certa with a weight of 6 pounds per cubic foot. The majority of duct supports are the trapeze type and constructed with 3/8 inch diameter threaded rods. Supports were anchored to concrete with via shell anchors or attached to P3200 series Unistrut inserts and proved to be adequate for spans up to 20 feet. Support spans for both the rectangular and round ducts are typically 6 feet to 8 feet apart with the maximum noted being 11 feet.

7.3.1.2 EVALUATION METHODOLOGY

The method used in determining the seismic adequacy verification of the CRVS HVAC ducting and supports is consistent with the Generic Implementation Procedure (GIP) as developed by the Seismic qualification Utility Group (SQUG), and consisted of the following tasks:

1. Development of walkdown screening and analytical evaluation criteria based on industry codes and standards, past earthquake performance data, and test results;
2. Comprehensive walkdown of in-scope HVAC duct systems and supports;
3. Identification of potential outliers not meeting the walkdown screening guidelines;
4. Selection and evaluation of bounding configuration; and
5. Resolution of outliers.

7.3.2 EVALUATION OF BOUNDING SAMPLES

As part of the in-plant review, five worst-case bounding samples of ductwork and duct supports were selected for further analytical reviews. Bounding samples were selected to encompass the various sizes of duct and duct supports. The following table 7-3 presents a brief description of the selected bounding cases and the respective evaluation results.

Table 7-3
HVAC Duct System Bounding Analysis Candidates and Evaluation Results

No.	Bounding Case Category	Proposed Bounding Analysis	Evaluation Results
1	Stiffener Stress Validation with SMACNA	Verify duct and stiffener stresses (Pocket Lock configuration @ 48" spacing) of a 46 x 27 duct section from the Unit 3 Return ducting system against the SMACNA requirements.	As-installed stiffener configuration meets the SMACNA requirements.
2	Stiffener Stress Validation with SMACNA	Verify duct and stiffener stresses (Pocket Lock configuration @ 40" spacing) of a 52 x 30 duct section from the Units 1&2 Return ducting system against the SMACNA requirements.	As-installed stiffener configuration meets the SMACNA requirements.
3	Overall Duct Stress Verification	Verify the seismic adequacy of the long horizontal Supply header duct (Units 1&2) for the combined effects of gravity and seismic loads.	The resulting duct stresses meet the SMACNA requirements.
4	Support Adequacy Verification	Verify the seismic adequacy of the heavily loaded support configurations with multiple tiers of large ducts (Support R2) on Unit 2 Supply ducting.	Anchorage capacity (per GIP, Appendix C) exceeds the demand.
5	Support Adequacy Verification	Verify the seismic adequacy of the heavily loaded support configuration taking into consideration overhead anchor edge distance violations (Support R5). Support is located above the Unit 3 duct shaft (common support for Intake, Supply, and Return ducting systems).	Anchorage capacity (per GIP, Appendix C) exceeds the demand.

7.3.3 SUMMARY OF OUTLIERS AND CONCLUSIONS

Since the Walkdown and Analytical Review selections are identical, only the Analytical Review Outliers and Resolutions are listed in the summary provided in Table 7-4. Of the twenty-two ducts and duct supports selected, nine were resolved by EQE Calculation, six of the outliers involve block wall interaction, three were resolved by Ocone Engineering, and four require further analysis or modifications. The table shows the recommended resolutions that when implemented, would render the corresponding HVAC systems to be seismically adequate.

Table 7-4

Duct and Duct Support Outlier Description and Proposed Resolution Summary				
Pkg. No.	System Description	Outlier No.	Outlier Description	Proposed Resolution
1	Units 1&2 CRVS Outside Air Intake	1-1	Stiffener spacing on a duct section not within the screening guidelines.	Acceptable by analysis
		1-2	Potential bolt bending due to missing grout at in-line filters 1A and 1B anchorage	Acceptable by analysis
		1-3	Breaker equipment on wheels parked close to duct creates proximity interaction concern.	ISSUE WORK REQUEST- provide restraint to or relocate the breaker equipment.
		1-4	Stiffener spacing at the 15"x15" duct not within the screening guidelines	FURTHER EVALUATION- engineering to verify that the actual negative pressure at the critical locations is - 3" water gauge or less. RESOLVED - Ocone Mechanical Engineering determined the actual negative pressure is less than 3" water gauge.

Table 7-4

Duct and Duct Support Outlier Description and Proposed Resolution Summary

Pkg. No.	System Description	Outlier No.	Outlier Description	Proposed Resolution
		1-5	Blockwall nearby is a potential interaction concern with the ducting system.	FURTHER EVALUATION-seismic adequacy of the blockwall will be verified by Oconee Civil Engineering
2	Units 1&2 CRVS Supply	2-1	Differential movement between the header duct and the AHU's 1-11 & 1-12 at the flexible connection could be excessive especially that there is almost no slack at the flex joint	MODIFICATION REQUIRED - provide new flexible connections at the AHU interfaces with a minimum slack of 2"
		2-2	Blockwall nearby is a potential interaction concern with the ducting system	FURTHER EVALUATION-seismic adequacy of the blockwall will be verified by Oconee Civil Engineering
3	Units 1&2 CRVS Return	3-1	Stiffener spacing on 118x34 duct section is not within the screening guidelines	Acceptable by analysis
		3-2	Differential movement between the header duct and the fans F-22 & F-23 at the flexible connection need to be verified	Acceptable by analysis
		3-3	In-line plenum is unanchored	MODIFICATION REQUIRED - provide positive anchorage or seismic stops to the filter plenum.

Table 7-4

Duct and Duct Support Outlier Description and Proposed Resolution Summary

Pkg. No.	System Description	Outlier No.	Outlier Description	Proposed Resolution
		3-4	Hard spot at the connection of the flexible header duct to the in-line screening guidelines	Acceptable by analysis
		3-5	Blockwall nearby is a potential interaction concern with the ducting system	FURTHER EVALUATION-seismic adequacy of the blockwall will be verified by Oconee Civil Engineering
4	Units 3 CRVS Outside Air Intake	4-1	Stiffener spacing on a duct section not within the screening guidelines	Acceptable by analysis
		4-2	Stiffener spacing at the 15"x15" duct not within the screening guidelines	FURTHER EVALUATION-engineering to verify that the actual negative pressure at the critical locations is - 3"water gauge or less. RESOLVED - Oconee Mechanical Engineering determined the actual negative pressure is less than 3" water gauge.
		4-3	Blockwall nearby is a potential interaction concern with the ducting system	FURTHER EVALUATION-seismic adequacy of the blockwall will be verified by Oconee Civil Engineering
5	Unit 3 CRVS Supply	5-1		Acceptable by analysis

Table 7-4

Duct and Duct Support Outlier Description and Proposed Resolution Summary

Pkg. No.	System Description	Outlier No.	Outlier Description	Proposed Resolution
		5-2	Blockwall nearby is a potential interaction concern with the ducting system	FURTHER EVALUATION-seismic adequacy of the blockwall will be verified by Oconee Civil Engineering
6	Unit 3 CRVS Supply	6-1	Stiffener spacing on 96x18 duct section is not within the screening guidelines	FURTHER EVALUATION-engineering to verify that the actual negative pressure at the critical locations is - 1"water gauge or less. RESOLVED - Oconee Mechanical Engineering determined the actual negative pressure is less than 1"water gauge.
		6-2	Differential movement between the header duct and the fans F3-8 & F3-9 at the flexible connection need to be verified	Acceptable by analysis
		6-3	In-line plenum is unanchored	MODIFICATION REQUIRED - provide positive anchorage or seismic stops to the filter plenum
		6-4	Hard spot at the connection of the flexible header duct to the in-line plenum	Acceptable by analysis
		6-5	Blockwall nearby is a potential interaction concern with the ducting system.	FURTHER EVALUATION-seismic adequacy of the blockwall will be verified by Oconee Civil Engineering

Section 8

DISPOSITIONING OF OUTLIERS

8.1 INTRODUCTION/SUMMARY

"An Outlier is an item of equipment which does not comply with all of the screening guidelines provided in the Generic Implementation Procedure (GIP). The GIP screening guidelines are intended to be used as a generic basis for evaluating the seismic adequacy of equipment. If an item of equipment fails to pass these generic screens, it may still be shown to be adequate for seismic loading by additional evaluation". [Reference #1, section 5.0]

All items not meeting the GIP are to be classified as Outliers. Therefore, any item in Class 0 according to the GIP, and any item not having "Seismically Adequate" on its respective SEWs form is classified as an Outlier. All Outliers from the Cable Tray, Cable Trench, Conduit and HVAC Duct Review are addressed in Section 7 of this report. Tank and Heat Exchanger Outliers are addressed in Section 6 of this report.

An item on the SSEL can be an Outlier for more than one cause. Shown below above is a summation of all the issues contributing to items on the SSEL being classified as an Outlier. (The sum total of causes will exceed the total number of Outliers). The reason for such a presentation is that no item can or will meet the GIP until each and every issue relating to its Outlier status is resolved. An Outlier can often have more than one cause contributing to the Outlier status.

Of the 1487 items evaluated during the SQUG review of Oconee Units 1,2 & 3 , 395 of these were Outliers. The Outliers can be collectively grouped for review as shown below.

Outlier Issues for equipment Classes 0 - 21

	<u>Total Outlier Issues</u>	<u>Resolved</u>	<u>Unresolved</u>
Outliers due to Class 0 Description	33	15	18
Outliers due to:			
Capacity vs. Demand	100	22	78
Bounding Spectrum Caveats	187	55	132
Anchorage	175	69	106
Seismic Interaction	62	0	62
TOTAL	557	161	396

For the purpose of this report, the Outliers and their current associated status will be presented in two distinct groupings, Resolved Outliers and Unresolved Outliers:

RESOLVED OUTLIERS

The Resolved Outliers are ones that did not meet the GIP, but through alternate or rigorous analytical methods, the Outlier was deemed to be seismically adequate, in compliance with the intents and concerns for which the GIP was generated. However, an Outlier is considered resolved only when each and every Outlier concern identified has been resolved by either analytical efforts or physical repairs.

All the Resolved Outliers are described in table Table 8-1.

UNRESOLVED OUTLIERS

Unresolved Outliers are ones that do not meet the GIP, and currently completed analytical efforts may not have sufficiently demonstrated seismic adequacy to meet the intent of the GIP. Additionally, an Unresolved Outlier is one where physical repairs may be necessary to meet the GIP criteria. This group may include items needing test data, intensive analytical methods, physical repairs, seismic interactions removed or restrained, etc.. Each item in this grouping of Outliers does have a proposed resolution involving some future effort.

All the Unresolved Outliers are described in table Table 8-2.

All Outliers were assigned a Outlier Reference Number. This reference number can be found in the Composite SSEL which is indexed by equipment ID and in the Outlier tables which are indexed by SRT signature groups.

8.2 OUTLIER TABLES

Table 8-1 Equipment Outlier Description and Resolution

Table 8-2 Equipment Outlier Description and Proposed Resolution

Tables 8-1 & 8-2 address the Outliers as discussed above. Both tables are constructed the same. Like equipment with similar outliers are grouped together. The Outliers are indexed by their Outlier Reference Number. Then the Outliers are listed in a progressive equipment ID order similar to the SSEL Composite and Walkdown Lists.

A description of issues associated with each Outlier and its proposed resolution, where it applies, is contained in the columns "Resolution" and "Proposed Resolution", respectively. Equipment was considered an Outlier if it did not meet one of the SEWS sections or was considered to be equipment Class 0 (Other). An asterisk (*) in the column of any these five screening criteria

indicates the cause category for the Outlier. It is important to remember that equipment can be an Outlier for more than one issue and this table addresses every issue as described on the corresponding SEWs form. This multiple issue also applies to Class 0 equipment if another GIP issues applies in addition to the equipment being outside the scope of the GIP's experience database. (e.g. a Class 0 item having seismic interactions concerns).

8.3 OUTLIER RESOLUTION ACTIONS

Resolution Efforts

Each Outlier is planned to be resolved to meet the intents and concerns for which the GIP is founded. Equipment adequacy will be demonstrated by such methods as: testing, analytical efforts, demonstration of similarity to existing experience data beyond the SQUG Experience Data base of equipment and events, and other methods deemed appropriate for Outlier resolution per the GIP.

Examples of anchorage resolution efforts may include, but not be limited to: Testing of non-GIP anchorage, in-field testing of anchorage embedment/installation, detailed analytical assessment of current anchorage, anchorage replacement, additional anchorage installed, and bracing or additional supports installed in addition to current anchorage.

Seismic interaction resolutions will primarily be physical in-field modifications. Other options may include re-assessment of credibility and consequences of impact.

Schedule

An individual schedule for the resolution of each Outlier will not be included within the text of this report. The transmittal letter for this report addresses the planned completion date for the overall outlier resolution effort and the submittal of the final completion letter. The actual schedule for each repair/replacement will be determined based on several factors including: 1) accessibility, 2) required engineering and procurement time, 3) PRA risk significance, and 4) associated or dependent modification projects.

Table 8-1

Equipment Outlier Description and Resolution

Oconee Nuclear Station
Units 1,2 & 3

Table 8-1
Equipment Outlier Description & Resolution
Oconee Units 1,2 & 3

NAME EQUIPMENT ID'S EQUIPMENT CLASS	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE						RESOLUTION
		C a p a c i t y	B S C a v e a t s	A n c h o r a g e	I n t e r a c t i o n			
CCW PUMPS 1CCWPU0001, 2CCWPU0001, 3CCWPU0001, 1CCWPU0002, 2CCWPU0002, 3CCWPU0002, 1CCWPU0003, 2CCWPU0003, 3CCWPU0003, 1CCWPU0004, 2CCWPU0004, 3CCWPU0004 06 - Vertical Pumps	IS 810'+0" 5		*	*				Capacity > Demand and anchorage verified per EQE calculation.
HOTWELL PUMPS 1CPU0010, 1CPU0011, 1CPU0012 06 - Vertical Pumps	TB 775'+0" 9		*	*				Anchorage evaluated per EQE calculation.
CONTROL ROOM EMERGENCY LIGHTS 1CREL, 2CREL, 3CREL 00 - Generic Input Form	AB 822'+0" 11					*		Seismic evaluation contained within SEWS.
250 VDC MCC 1MVC3 1MVC3 01 - Motor Control Centers	TB 775'+0" 15	*	*					Existing test report to be used to verify Capacity > Demand. See 14" MCC outlier resolution calculation contained in Miscellaneous section of A-46/IPEEE calculation.
POWER BATTERY CHARGERS 1PA/BC, 2PA/BC, 1PB/BC, 2PB/BC 16 - Battery Chargers & Invertors	TB 796'+6" 16	*						Exceedance of Reference Spectrum by Instructure Response Spectrum resolved in Duke calculation.
MOTOR STARTER PANELS	AB			*				Anchorage acceptibility verified by methods outside of the GIP. "Tug Test" performed in

Table 8-1
Equipment Oulier Description & Resolution
Oconee Units 1,2 & 3

NAME EQUIPMENT ID'S EQUIPMENT CLASS	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE					RESOLUTION
		C a p a c i t y	B S C a v e a t s	A n c h o r a g e	I n t e r a c t i o n	C a t e g o r y	
"Continued from previous page"							"Continued from previous page"
1RSC-1FDW-372/ENCL, 1RSC-1FDW-368/ENCL, 1RSC-1FDW-369/ENCL, 1RSC-1FDW-374/ENCL, 1RSC-1FDW-382/ENCL, 1RSC-1FDW-384/ENCL, 1RSC-1PR-59/ENCL, 1RSC-1PR-60/ENCL, 2RSC-2FDW-368/ENCL, 2RSC-2FDW-369/ENCL, 2RSC-2FDW-372/ENCL, 2RSC-2FDW-374/ENCL, 2RSC-2FDW-382/ENCL, 2RSC-2FDW-384/ENCL, 2RSC-2PR-59/ENCL, 2RSC-2PR-60/ENCL, 3RSC-3FDW-368/ENCL, 3RSC-3FDW-369/ENCL, 3RSC-3FDW-372/ENCL, 3RSC-3FDW-374/ENCL, 3RSC-3FDW-382/ENCL, 3RSC-3FDW-384/ENCL, 3RSC-3PR-59/ENCL, 3RSC-3PR-60/ENCL 14 - Distribution Panels	809'+0" 22					field verifies seismic acceptability of as found anchorage.	
125/250 VDC DISTRIBUTION CENTERS "DP" 1DP, 2DP 01 - Motor Control Centers	TB 796'+6" 25	*					Exceedance of Reference Spectrum by Instructure Response Sectrum resolved in Duke calculation.
PPB 1KG 1KG 14 - Distribution Panels	AB 838'+0" 37	*		*			Anchorage acceptibilty verified by methods outside of the GIP. "Tug Test" performed in field verifies seismic acceptability of as found anchorage.
POWER PANEL BOARD 1L2 1L2 14 - Distribution Panels	AB 771'+0" 38			*			Anchorage acceptibilty verified by methods outside of the GIP. "Tug Test" performed in field verifies seismic acceptability of as found anchorage.

**Table 8-1
Equipment Outlier Description & Resolution
Oconee Units 1,2 & 3**

NAME EQUIPMENT ID'S EQUIPMENT CLASS	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE						RESOLUTION
		C a p a c i t y	B S C a v e a t s	A n c h o r a g e	I n t e r a c t i o n	C a t e g o r y	0	
"Continued from previous page"								"Continued from previous page"
MCC 1XS3 1XS3 01 - Motor Control Centers	AB 796'+6" 52	*	*					Existing test report to be used to verify Capacity > Demand. See 14" MCC outlier resolution calculation contained in Miscellaneous section of A-46/IPEEE calculation.
600V TO 208V TRANSFORMERS 1XS3A/XFMR, 2XS3A/XFMR 04 - Transformers	AB 796'+6" 53			*				Anchorage acceptability resolved within SEWS.
CONDENSER HOTWELLS (Unit 2) 2CCD000A, 2CCD000B, 2CCD000C 00 - Generic Input Form	TB 775'+0" 60					*		Seismic adequacy verified per EQE calculation.
MISC. PANELS 2KD, 2KC 14 - Distribution Panels	AB 809'+0" 71			*				Anchorage acceptability verified by methods outside of the GIP. "Tug Test" performed in field verifies seismic acceptability of as found anchorage.
MCC'S XB 1XB, 2XB, 3XB 01 - Motor Control Centers	TB 775'+0" 86	*	*					Existing test report to be used to verify Capacity > Demand. See 14" MCC outlier resolution calculation contained in Miscellaneous section of A-46/IPEEE calculation.
MCC 2XS3 2XS3	AB 	*	*					Existing test report to be used to verify Capacity > Demand. See 14" MCC outlier resolution calculation contained in

**Table 8-1
Equipment Outlier Description & Resolution
Ocone Units 1,2 & 3**

NAME EQUIPMENT ID'S EQUIPMENT CLASS "Continued from previous page"	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE						RESOLUTION "Continued from previous page"
		C a p a c i t y	B S C a v e a t s	A n c h o r a g e	I n t e r a c t i o n	C a t e g o r y	0	
01 - Motor Control Centers	796'+6" 96							Miscellaneous section of A-46/IPEEE calculation.
ATWS CONTROL PANEL 3ATWSCP 20 - I & C Panels & Cabinets	AB 838'+0" 104			*				Adequacy of anchorage verified per calculation. Outlier due to embedment less than GIP minimum.
DISTRIBUTION CENTER 3DCA 3DCA 01 - Motor Control Centers	AB 796'+6" 113	*	*					Existing test report to be used to verify Capacity > Demand. See 14" MCC outlier resolution calculation contained in Miscellaneous section of A-46/IPEEE calculation.
DISTRIBUTION CENTER 3DCB 3DCB 01 - Motor Control Centers	AB 796'+6" 114	*	*					Existing test report to be used to verify Capacity > Demand. See 14" MCC outlier resolution calculation contained in Miscellaneous section of A-46/IPEEE calculation.
125/250 VDC DISTRIBUTION CENTER 3DP 3DP 01 - Motor Control Centers	TB 796'+6" 115	*						Exceedance of Reference Spectrum by Instructure Response Sectrum resolved in Duke calculation.
PPB 3KG 3KG 14 - Distribution Panels	AB 838'+0"			*				Anchorage acceptibilty verified by methods outside of the GIP. "Tug Test" performed in field verifies seismic acceptability of as found anchorage.

**Table 8-1
Equipment Oulier Description & Resolution
Oconee Units 1,2 & 3**

NAME EQUIPMENT ID'S EQUIPMENT CLASS "Continued from previous page"	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE						RESOLUTION "Continued from previous page"
		C a p a c i t y	B S C a v e a t s	A n c h o r a g e	I n t e r a c t i o n	C a t e g o r y	0	
	121							
PPB 3KTH1 3KTH1 14 - Distribution Panels	AB 771'+0" 122			*				Anchorage acceptibilty verified by methods outside of the GIP. "Tug Test" performed in field verifies seismic acceptability of as found anchorage.
PPB 3KU & 3KI 3KU, 3KI 14 - Distribution Panels	AB 809'+0" 123			*				Anchorage acceptibilty verified by methods outside of the GIP. "Tug Test" performed in field verifies seismic acceptability of as found anchorage.
TURBINE STOP VALVES 3MSVA0102, 1MSVA0102, 2MSVA0102, 1MSVA0103, 2MSVA0103, 3MSVA0103, 1MSVA0104, 2MSVA0104, 3MSVA0104, 1MSVA0105, 2MSVA0105, 3MSVA0105 07 - Fluid-Operated Valves	TB 796'+6" 125		*					Capacity > Demand verified per EQE calculation .
MAIN STEAM CONTROL VALVES 3MSVA0106, 1MSVA0106, 2MSVA0106, 1MSVA0107, 2MSVA0107, 3MSVA0107, 1MSVA0108, 2MSVA0108, 3MSVA0108, 1MSVA0109, 2MSVA0109, 3MSVA0109 07 - Fluid-Operated Valves	TB 796'+6" 126		*					Capacity > Demand verified per EQE calculation .
POWER BATTERY CHARGERS 3PA/BC, 3PB/BC 16 - Battery Chargers & Invertors	TB 796'+6" 128	*						Exceedance of Reference Spectrum by Instructure Response Sectrum resolved in Duke calculation.

**Table 8-1
Equipment Outlier Description & Resolution
Oconee Units 1,2 & 3**

NAME EQUIPMENT ID'S EQUIPMENT CLASS "Continued from previous page"	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE						RESOLUTION "Continued from previous page"
		C a p a c i t y	B S C a v e a t s	A n c h o r a g e	I n t e r a c t i o n	C a t e g o r y	0	
REMOTE STARTER ENCLOSURES 3RSC-3HP-409/ENCL, 3RSC-3HP-410/ENCL 14 - Distribution Panels	AB 796'+6" 131			*				Anchors are less than GIP minimum. Panel judged to be acceptable in SEWS.
REMOTE STARTER ENCLOSURE FOR 3LP-126 3RSC-3LP-126/ENCL 14 - Distribution Panels	AB 771'+0" 132			*				Anchorage acceptibility verified by methods outside of the GIP. "Tug Test" performed in field verifies seismic acceptability of as found anchorage.
LOAD CENTER 3X4 3X04 02 - Low Voltage Switchgear	TB 796'+6" 143			*				Embedded studs are A108 instead of A307. Stud capacity verified per calculation.
MCC 3XL & 3XN 3XL, 3XN 01 - Motor Control Centers	AB 771'+0" 150	*	*					Existing test report to be used to verify Capacity > Demand. See 14" MCC outlier resolution calculation contained in Miscellaneous section of A-46/IPEEE calculation.
MCC 3XS3 3XS3 01 - Motor Control Centers	AB 796'+6" 154	*	*	*				Existing test report to be used to verify Capacity > Demand. See 14" MCC outlier resolution calculation contained in Miscellaneous section of A-46/IPEEE calculation. Gap > 1/4" resolved in anchorage calculation for 3XS3.
TRANSFORMER CT1,CT2,CT3,CT4 & CT5	YD(EPS report)		*					Outlier resolved in EQE calculation.

Table 8-1
Equipment Outlier Description & Resolution
Oconee Units 1,2 & 3

NAME EQUIPMENT ID'S EQUIPMENT CLASS "Continued from previous page"	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE					RESOLUTION "Continued from previous page"
		C a p a c i t y	B S C a v e a t s	A n c h o r a g e	I n t e r a c t i o n	C a t e g o r y	
CT1, CT2, CT3, CT4, CT5 04 - Transformers	796'+6" 157						
OCONEE ISOLATED PHASE BUS IPB2 00 - Generic Input Form	TB(EPS report) 702' 158	*				*	Capacity > Demand verified per EQE calculation .
N2 SUPPLY BOTTLES FOR FDW315,316,MS87,12 N2_AOV_BOTTLES 00 - Generic Input Form	TB 796'+6" 159					*	Seismic adequacy resolved within SEWS.
CONDENSER HOTWELLS (Unit 1) 1CCD000A, 1CCD000B, 1CCD000C 00 - Generic Input Form	TB 775'+0" 162					*	Seismic adequacy verified per EQE calculation.
AIR HANDLING UNITS 11 & 12 CONTROL PANEL IAHCC 18 - Instruments on Racks	AB 838'+0" 165			*			Anchorage acceptibility verified by methods outside of the GIP. "Tug Test" performed in field verifies seismic acceptability of as found anchorage. Panel attaches to non-seismic blockwall. Seismic qualification of blockwall required.
EMER. STEAM AIR EJECTORS 1VAE0001, 2VAE0001 00 - Generic Input Form	TB 775'+0"					*	Capacity > Demand verified within SEWS.

**Table 8-1
Equipment Outlier Description & Resolution
Oconee Units 1,2 & 3**

NAME EQUIPMENT ID'S EQUIPMENT CLASS "Continued from previous page"	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE						RESOLUTION "Continued from previous page"
		C a p a c i t y	B S C a v e a t s	A n c h o r a g e	I n t e r a c t i o n	C a t e g o r y	0	
	176							
LOAD CENTERS 1X01, 1X02, 1X05, 1X06, 1X07, 2X03, 2X05, 2X06, 3X01, 3X02, 3X03 02 - Low Voltage Switchgear	TB 796'+6" 179			*				Embedded studs are A108 instead of A307. Stud capacity verified per calculation.
LOAD CENTER 1X08 02 - Low Voltage Switchgear	AB 796'+6" 180			*				Calculation performed to verify acceptability of gap > 1/4".
DISTRIBUTION CENTER 2DCB 2DCB 01 - Motor Control Centers	AB 796'+6" 188	*	*					Existing test report to be used to verify Capacity > Demand. See 14" MCC outlier resolution calculation contained in Miscellaneous section of A-46/IPEEE calculation.

Table 8-2

Equipment Outlier Description and Proposed Resolution

Oconee Nuclear Station
Units 1,2 & 3

Table 8-2
Equipment Outlier Description & Proposed Resolution
Oconee Units 1,2 & 3

NAME EQUIPMENT ID'S EQUIPMENT CLASS	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE						PROPOSED RESOLUTION
		C a p a c i t y	B S C a v e a t s	A n c h o r a g e	I n t e r a c t i o n	C a t e g o r y	0	
AIR HANDLING UNITS 0.14 & 0.15 0VSAH0014, 0VSAH0015 10 - Air Handlers	TB 850'+0" 1		*	*				Add anchorage to AHUs 14 & 15
CONTROL BATTERIES 1CA/BB, 1CB/BB 15 - Batteries on Racks	AB 809'+0" 2		*					Develop seismic test data to verify capacity > demand. or replace batteries for 1CA/BB & 1CB/BB. Battery age concern is not considered by IPEEE. IPEEE criteria limited to electrical malfunction and anchorage.
REGULATOR OUTPUT BREAKERS & XFER SW 1A/1B/SW, 1A/MCB, 1B/MCB 14 - Distribution Panels	AB 796'+6" 3		*	*				Add bracing to unistrut frame supporting 1A/1B/SW, 1A/MCB, 1B/MCB, 1A/REG, 1B/REG, 1A/XFMR & 1B/XFMR. Add washers to bolts which bolt 2A/MCB & 2B/MCB panel to unistrut frame.
REGULATED POWER SUPPLY REGULATORS 1A/REG, 1B/REG 00 - Generic Input Form	AB 796'+6" 4			*		*		Capacity > Demand evaluation required for 1A/REG & 1B/REG. Add bracing to unistrut frame supporting 1A/1B/SW, 1A/MCB, 1B/MCB, 1A/REG, 1B/REG, 1A/XFMR & 1B/XFMR. Capacity vs Demand applies to A-46 only per Table 2-4 EPRI NP-6041.
UST LEVEL CONTROLS & TRANSMITTERS 1,2,3CLT0015A; 1,2,3CLT0036; 1,2,3CPS0015; 1,2,3CPS0036 18 - Instruments on Racks	TB 838'+0" 8	*						Analytically resolve Demand exceedance at El. 838' in TB. Capacity vs Demand applies to A-46 only per Table 2-4 EPRI NP-6041.
MAIN STEAM INSTRUMENTS 1MSPY0042, 2MSPY0042, 3MSPY0042	AB 	*				*		Capacity > demand for 1MSPY0042, 2MSPY0042 to be verified per Duke calculation. Capacity vs Demand applies to

Table 8-2
Equipment Outlier Description & Proposed Resolution
Oconee Units 1,2 & 3

NAME EQUIPMENT ID'S EQUIPMENT CLASS "Continued from previous page"	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE					PROPOSED RESOLUTION "Continued from previous page"
		C a p a c i t y	B S C a v e a t s	A n c h o r a g e	I n t e r a c t i o n	C a t e g o r y	
00 - Generic Input Form	796'+6" 12						A-46 only per Table 2-4 EPRI NP-6041.
MS TO AS CONTROL VALVE 1MSVA0129 07 - Fluid-Operated Valves	TB 796'+6" 13		*				Remove the attached air line and support it from the wall per B31.1 requirements.
250 VDC MCC 1MVC2 1MVC2 01 - Motor Control Centers	TB 775'+0" 14	*	*		*		Existing test report to be used to verify Capacity > Demand. See 14" MCC outlier resolution calculation contained in Miscellaneous section of A-46/IPEEE calculation. Trim unistrut frame on top of 1MVC2.
LOW HYDRAULIC PRESSURE SWITCHES 1PS157AB/PS101 18 - Instruments on Racks	TB 775'+0" 18		*	*			Add bracing to instrument racks 1PS157AB/PS101
PRZ SPRAY ISOLATION VALVES 1RCVA0003, 2RCVA0003, 3RCVA0003, 1RCVA0004, 2RCVA0004, 3RCVA0004 08A - Motor-Operated Valves	RB 850'+0" 19	*					Outlier due to height and weight. Possible solutions for 1RCVA0003, 2RCVA0003, 3RCVA0003, 1RCVA0004, 2RCVA0004, 3RCVA0004 include locating valve stress report, hand stress analysis of yoke stresses, location of stress report for a similiar valve at another facility (CNS,MNS,TMI,Turkey Point etc). May need to investigate using GERS to qualify. Outlier due to ISRS > Ref. Spectra from 9.5 Hz - 15 Hz. Analytical review required. Valves are screened out per Table 2-4 EPRI NP-6041 for IPEEE.
PRESSURIZER RELIEF VALVES	RB	*					Outlier due to ISRS > Ref. Spectra from 9.5

Table 8-2
Equipment Outlier Description & Proposed Resolution
Oconee Units 1,2 & 3

NAME EQUIPMENT ID'S EQUIPMENT CLASS	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE					PROPOSED RESOLUTION
		C a p a c i t y	B S C a v e a t s	A n c h o r a g e	I n t e r a c t i o n	C a t e g o r y	
"Continued from previous page"							"Continued from previous page"
1RCVA0066, 2RCVA0066, 3RCVA0066 1RCVA0067, 2RCVA0067, 3RCVA0067 08B - Solenoid-Operated Valves	850'+0" 20						Hz - 15 Hz. Analytical review required for 1RCVA0066, 2RCVA0066, 3RCVA0066 1RCVA0067, 2RCVA0067, 3RCVA0067 . Valves are screened out per Table 2-4 EPRI NP-6041 for IPEEE.
PRZ CODE SAFETY VALVES 1RCVA0068, 2RCVA0068, 3RCVA0068 07 - Fluid-Operated Valves	RB 850'+0" 21	*					Outlier due to ISRS > Ref. Spectra from 9.5 Hz - 15 Hz. Analytical review required for 1RCVA0068, 2RCVA0068, 3RCVA0068 . Valves are screened out per Table 2-4 EPRI NP-6041 for IPEEE.
3RSC-3FDW-368,369,372,274,382 & 384/ENCL 14 - Distribution Panels	AB 809'+0" 22.1			*			Anchorage acceptibilty verified by methods outside of the GIP. "Tug Test" performed in field verifies seismic acceptability of as found anchorage. For Unit 3 RSC's FDW-368,369,372,374,382 & 384, the unistrut needs to be cut at the blockwall/concrete wall interface and additional anchorage added as needed.
DISTRIBUTION CENTER 1DCA 1DCA 01 - Motor Control Centers	AB 796'+6" 23	*	*	*			Existing test report to be used to verify Capacity > Demand. See 14" MCC outlier resolution calculation contained in Miscellaneous section of A-46/IPEEE calculation. Replace back right anchor for 1DCA.
DISTRIBUTION CENTER 1DCB 1DCB 01 - Motor Control Centers	AB 796'+6" 24	*	*				Existing test report to be used to verify Capacity > Demand. See 14" MCC outlier resolution calculation contained in Miscellaneous section of A-46/IPEEE calculation. Repair compartment latch on 4E.
UNIT 1 4160V SWITCHGEAR 1TC, 1TD, 1TE	TB	*			*		Exceedance of Reference Spectrum by Instructure Response Sectrum resolved in Duke calculation . Relocate ladder rack at

Table 8-2
Equipment Oulier Description & Proposed Resolution
Oconee Units 1,2 & 3

NAME EQUIPMENT ID'S EQUIPMENT CLASS "Continued from previous page"	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE					PROPOSED RESOLUTION "Continued from previous page"
		C a p a c i t y	B S C a v e a t s	A n c h o r a g e	I n t e r a c t i o n	C a t e g o r y	
03 - Medium Voltage Switchgear	796'+6" 26						column K26. Restrain fluorescent bulb fixture at XFMR 1X12. Restrain "Chemistry Spill Control Tanks" @ J26. Restrain fluorescent bulbs in overhead fixtures adjacent to 1TC, 1TD, 1TE.
ELECTRICAL BOARDS 1EB1-8,EF1-8 1EB1-8,EF1-8 20 - Instr. & Control Panels & Cabinets	AB 822'+0" 27		*		*		1EB8 needs to be rigidly attached to 1EB7 and a shock mounting system added to 1EB8 (OAC modification proposes gutting of 1EB8, alternative repair would be to remove 1EB8 and add side panel to 1EB7).
TURBINE TERMINAL CABINET 6 1TTC6 20 - Instr. & Control Panels & Cabinets	TB 796'+6" 28	*	*	*			Exceedance of Reference Spectrum by Instructure Response Sectrum resolved in Duke calculation . Enhance existing anchorage for 1TTC6 .
EHC CONTROL CABINET 1EHC1,2,3 1EHC1,2,3 20 - Instr. & Control Panels & Cabinets	AB 809'+0" 29		*	*			Repair loose anchor in 1EHC's. Add compressible material between EHC's and EHTC's and EHC's and MFBRP to prevent impact.
EHC TERMINAL CABINET 1EHTC1 1EHTC1 20 - I & C Panels & Cabinets	AB 809'+0" 30		*				Add compressible material between 1EHTC1 and adjacent EHC cabinets to prevent impact.
EPSLP NO.1 1EPSLP1 20 - Instr. & Control Panels & Cabinets	AB 809'+0"				*		Relocate 4" cable tray spanning between 1AT2 and 1EPSLP1

Table 8-2
Equipment Outlier Description & Proposed Resolution
Oconee Units 1,2 & 3

NAME EQUIPMENT ID'S EQUIPMENT CLASS "Continued from previous page"	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE						PROPOSED RESOLUTION "Continued from previous page"
		C a p a c i t y	B S C a v e a t s	A n c h o r a g e	I n t e r a c t i o n	C a t e g o r y	0	
	31							
UNIT 1 ESFAS, RPC, ICS CABINETS 1ESFAS, 1ICS, 1RPS 20 - Instr. & Control Panels & Cabinets	AB 822'+0" 32		*	*				Add hard washers to anchorage of all ESFAS, ICS, RPS & Auxilliary cabinets. Enhance existing anchorage capacity to meet IPEEE for 1RPS, 1ICS, & 1ES/AUX/ICS. Enhance existing anchorage capacity to meet A-46 for 1ICS. Add padding between ICS, ESFAS & ES/AUX/ICS cabinets and adjacent column and file cabinet.
ESFAS EVEN/ODD TERMINATION CABINET ESTC3 1ESTC3 20 - Instr. & Control Panels & Cabinets	AB 809'+0" 33		*					Bolt 1ESTC3 to adjacent IRCPIA cabinet.
RCP SEAL SUPPLY FILTERS 1HPIFL000A, 1HPIFL000B, 2HPIFL000A, 2HPIFL000B, 3HPIFL000A, 3HPIFL000B 00 - Generic Input Form	AB 783'+0" 34					*		Capacity > Demand to be verified per Duke calculation for 1HPIFL000A, 2HPIFL000A, 3HPIFL000A, 1HPIFL000B, 2HPIFL000B, 3HPIFL000B. Capacity vs Demand applies to A-46 only per Table 2-4 EPRI NP-6041.
ALT. LETDOWN PATH ISOLATION VALVES 1HPVA0426, 1HPVA0428, 2HPVA0428, 3HPVA0428 08A - Motor-Operated Valves	RB 777'+0" 36		*					Outlier due to height and weight. Possible solutions for 2HPVA0001, 2HPVA0002, 1HPVA0426, 1HPVA0428, 2HPVA0428, 3HPVA0428 include locating valve stress report, hand stress analysis of yoke stresses, location of stress report for a similiar valve at another facility (CNS, MNS, TMI, Turkey Point etc). May need to investigate using GERS to qualify. Valves are screened out per Table 2-4 EPRI NP-6041 for IPEEE.
3L21/PPB, 1L21/PPB, 2L21/PPB, 3L22/PPB	AB		*	*				3L21/PPB, 1L21/PPB, 2L21/PPB, 3L22/PPB panels are mounted in a plaster wall with metal studs. The wall is a non- seismic,

Table 8-2
Equipment Outlier Description & Proposed Resolution
Oconee Units 1,2 & 3

NAME EQUIPMENT ID'S EQUIPMENT CLASS "Continued from previous page"	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE						PROPOSED RESOLUTION "Continued from previous page"
		C a p a c i t y	B S C a v e a t s	A n c h o r a g e	I n t e r a c t i o n	C a t e g o r y		
14 - Distribution Panels	822'+0" 39							standard commercial partition. A detailed analysis of the wall stud system is required.
MCC 1XC 1XC 01 - Motor Control Centers	TB 775'+0" 40		*					Add back to back bolting to 1XC.
MCC 1XGA 1XGA 01 - Motor Control Centers	TB 796'+6" 41	*	*	*				Exceedance of Reference Spectrum by Instructure Response Sectrum resolved in Duke calculation. Enhance existing welds for 1XGA to meet A-46.
MCC 1XGB 1XGB 01 - Motor Control Centers	TB 796'+6" 42	*	*	*	*			Exceedance of Reference Spectrum by Instructure Response Sectrum resolved in Duke calculation . Add back to back bolting to the 3 South most bays of 1XGB. Enhance existing anchorage for 1XGB. Add restraint to fluorescent bulbs on West side of 1XGB. Add restraint to 55gal. trash can adjacent to 1XGB.
XFMR 1XGB 1XGB/XFMR 04 - Transformers	TB 796'+6" 43		*	*				Enhance existing anchorage of 1XGB/XFMR to meet A-46 requirments.
MCC'S XI & XJ 1XI, 1XJ 01 - Motor Control Centers	AB 809'+0"	*	*		*			Existing test report to be used to verify Capacity > Demand. See 14" MCC outlier resolution calculation contained in Miscellaneous section of A-46/IPEEE calculation. Add padding or brace 1XI, 1XJ

Table 8-2
Equipment Outlier Description & Proposed Resolution
Oconee Units 1,2 & 3

NAME EQUIPMENT ID'S EQUIPMENT CLASS "Continued from previous page"	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE					PROPOSED RESOLUTION "Continued from previous page"
		C a p a c i t y	B S C a v e a t s	A n c h o r a g e	I n t e r a c t i o n	C a t e g o r y	
	44						to block wall.
MCC 1XK 1XK 01 - Motor Control Centers	AB 809'+0" 45	*	*		*		Existing test report to be used to verify Capacity > Demand. See 14" MCC outlier resolution calculation contained in Miscellaneous section of A-46/IPEEE calculation. Add padding between brick wall and 1XK.
MCC'S 1XL & 1XN 1XL, 1XN 01 - Motor Control Centers	AB 771'+0" 46		*	*	*		Existing test report to be used to verify Capacity > Demand. Replace missing anchors in 1XL & 1XN. Trim cable tray above MCC's 1XN at cable shoe. Add rigid support to tray in E-W direction. Add padding between 1XL & 1XUB and 1XN & 1XUB. Bolt 1XL & 1XN back to back or add top bracing.
MCC 1XO 1XO 01 - Motor Control Centers	AB 796'+6" 47		*	*			Bolt 2 North bays of 1XO together. Replace 3/8" anchor with external clip angle and anchor.
MCC 1XP 1XP 01 - Motor Control Centers	AB 796'+6" 48				*		Add padding between 1XUA and 1XP.
600V MCC 1XR 1XR 01 - Motor Control Centers	AB 838'+0" 49	*	*	*			Existing test report to be used to verify Capacity > Demand. See 14" MCC outlier resolution calculation contained in Miscellaneous section of A-46/IPEEE calculation. Add top bracing or add washer plates to back row of anchors for 1XR.

Table 8-2
Equipment Oulier Description & Proposed Resolution
Oconee Units 1,2 & 3

NAME EQUIPMENT ID'S EQUIPMENT CLASS "Continued from previous page"	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE						PROPOSED RESOLUTION "Continued from previous page"
		C a p a c i t y	B s c a v e a t s	A n c h o r a g e	I n t e r a c t i o n	C a t e g o r y		
XFMR 1XR (4160V TO 600V) 1XR/XFMR 04 - Transformers	AB 838'+0" 50	*						Add bracing to 1XR/XFMR to increase Nat Freq. > 13.5 hz or analytically justify spectra exceedance.
MCC 1XS1 1XS1 01 - Motor Control Centers	AB 796'+6" 51				*			Add padding between 1XS1 and HVAC on East side.
REGULATOR OUTPUT BKRS & XFER SW 2A/1B/SW, 2A/MCB, 2B/MCB 14 - Distribution Panels	AB 796'+6" 54		*	*				Add bracing to unistrut frame supporting 2A/1B/SW,2A/MCB,2B/MCB,2A/REG,2B/REG, 2A/XFMR & 2B/XFMR . Add washers to bolts which bolt 2A/MCB & 2B/MCB panel to unistrut frame.
(600V TO 208V) TRANSFORMERS 2A/XFMR, 2B/XFMR 04 - Transformers	AB 796'+6" 56		*	*				Add bracing to unistrut frame supporting 2A/1B/SW,2A/MCB,2B/MCB,2A/REG,2B/REG, 2A/XFMR & 2B/XFMR . Add weld between 2B/XFMR and plate.
AREA TERMINATION CABINET 3 2AT3 20 - Instr. & Control Panels & Cabinets	AB 809'+0" 57				*			Remove eye bolt lifting piece from NW corner of 2AT1.
AREA TERMINATION CABINET 8 2AT8	AB				*			Trim cable tray adjacent to 2AT8.

Table 8-2
Equipment Oulier Description & Proposed Resolution
Oconee Units 1,2 & 3

NAME EQUIPMENT ID'S EQUIPMENT CLASS "Continued from previous page"	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE					PROPOSED RESOLUTION "Continued from previous page"
		C a p a c i t y	B S C a v e a t s	A n c h o r a g e	I n t e r a c t i o n	C a t e g o r y	
20 - I & C Panels & Cabinets	809'+0" 58						
REGULATED POWER SUPPLY REGULATORS 2A/REG, 2B/REG 00 - Generic Input Form	AB 796'+6" 59			*		*	Capacity > Demand evaluation required for 2A/REG & 2B/REG. Add bracing to unistrut frame supporting 2A/2B/SW, 2A/MCB, 2B/MCB, 2A/REG, 2B/R EG, 2A/XFMR & 2B/XFMR. Capacity vs Demand applies to A-46 only per Table 2-4 EPRI NP-6041.
ELECTRICAL BOARDS 2EB1-8, EF1-8 2EB1-8, EF1-8 20 - Instr. & Control Panels & Cabinets	AB 822'+0" 63		*		*		A partition wall is approximately 1/8" from 2EF8. This wall must be relocated or modified to prevent impact. 2EB8 needs to be rigidly attached to 2EB7 and a shock mounting system added to 2EB8 (OAC modification proposes gutting of 2EB8, alternative repair would be to remove 2EB8 and add side panel to 2EB7).
EHC CONTROL CABINETS 2EHC1,2,3 20 - I & C Panels & Cabinets	AB 809'+0" 64		*				Add compressible material between 2EHTC1&2 and 2EHC1 to prevent impact.
EHC TERMINAL CABINETS 2EHTC1, 2EHTC2 20 - I & C Panels & Cabinets	AB 809'+0" 65		*				Add compressible material between 2EHTC1&2 and 2EHC1 to prevent impact.
EPSLP CABINET 2EPSLP2	AB 809'+0"		*		*		Bolt 2EPSLP2 to adjacent SUPERVISORY PANEL and disable shock mounts on 2EPSLP2.

Table 8-2
Equipment Oulier Description & Proposed Resolution
Oconee Units 1,2 & 3

NAME EQUIPMENT ID'S EQUIPMENT CLASS "Continued from previous page"	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE						PROPOSED RESOLUTION "Continued from previous page"
		C a p a c i t y	B S C a v e a t s	A n c h o r a g e	I n t e r a c t i o n	C a t e g o r y	0	
20 - Instr. & Control Panels & Cabinets	66							
ESFAS,RPS,ICS CABINETS 2ESFAS,2ICS,2RPS 20 - Instr. & Control Panels & Cabinets	AB 822'+0" 67		*	*				Add hard washers to anchorage of all ESFAS,ICS,RPS & Auxilliary cabinets. Add padding between ICS,ESFAS & ES/AUX/ICS cabinets and adjacent column and file cabinet.
ESTC CABINETS 2ESTC1,2,3 20 - Instr. & Control Panels & Cabinets	AB 809'+0" 68				*			Conduit on North side of 2ESTC2 must be trimmed to clear cabinet. Conduit coming out of top of 2ESTC3 must be modified to relieve impact concern with cable tray above cabinets.
MD EFW PUMP 2B ISOLATION VALVE 2FDWVA0316 07 - Fluid-Operated Valves	AB 809'+0" 69		*					Remove hand wheel chain from 2FDWVA0316 and revise procedures as needed to ensure chaining of hand wheel will not reoccur.
LETDOWN INLET ISOLATION VALVES 2HPVA0001, 2HPVA0002 08A - Motor-Operated Valves	RB 777'+0" 70		*					Outlier due to height and weight. Possible solutions for 2HPVA0001 & 2HPVA0002 include locating valve stress report, hand stress analysis of yoke stresses, location of stress report for a similiar valve at another facility (CNS,MNS,TMI,Turkey Point etc). May need to investigate using GERS to qualify. Valves are screened out per Table 2-4 EPRI NP-6041 for IPEEE.
KEOWEE EMERGENCY START PANEL 2KESP	AB 809'+0"		*					Cabinet mounted on shock mounts. Calculation performed to verify seismic adequacy. Bolt to or add padding between RC Pump Motor Cabinet and 2KESP. If cabinets are bolted together, shock mounts

Table 8-2
Equipment Oulier Description & Proposed Resolution
Oconee Units 1,2 & 3

NAME EQUIPMENT ID'S EQUIPMENT CLASS "Continued from previous page"	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE					PROPOSED RESOLUTION "Continued from previous page"
		C a p a c i t y	B S C a v e a t s	A n c h o r a g e	I n t e r a c t i o n	C a t e g o r y	
20 - I & C Panels & Cabinets	72						on KESP must be disabled.
INSTRUMENT RACK 2MC-1 2MC-1 18 - Instruments on Racks	TB 775'+0" 73		*	*			Add top bracing to instrument racks.
INSTRUMENT RACK 2MC-12 2MC-12 18 - Instruments on Racks	TB 796'+6" 74	*		*			Exceedance of Reference Spectrum by Instructure Response Sectrum resolved in Duke calculation . Add top bracing to instrument rack.
MAIN FEEDER BUS MONITOR RELAY PANEL 2MFBMRP 20 - I & C Panels & Cabinets	AB 809'+0" 75				*		Remove conduit attaching to 2MFBMP.
LOW HYDRAULIC PRESSURE SWITCH 2PS157AB/PS101 18 - Instruments on Racks	TB 775'+0" 77		*	*			Add bracing to instrument racks 2PS157AB/PS101
UNIT 2 4160V SWITCHGEAR 2TC, 2TD, 2TE 03 - Medium Voltage Switchgear	TB 796'+6" 78	*			*		Exceedance of Reference Spectrum by Instructure Response Sectrum resolved in Duke calculation. Relocate ladder rack at column K30. Restrain fluorescent bulbs in overhead fixtures adjacent to 2TC, 2TD, 2TE. "I&E Battery Eq. Storage Cabinet" must be moved or restrained (located on south end of 2TC).

Table 8-2
Equipment Oulier Description & Proposed Resolution
Oconee Units 1,2 & 3

NAME EQUIPMENT ID'S EQUIPMENT CLASS	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE						PROPOSED RESOLUTION
		C a p a c i t y	B S C a v e a t s	A n c h o r a g e	I n t e r a c t i o n	C a t e g o r y		
"Continued from previous page"								"Continued from previous page"
FWPT 2A BEARING OIL PRESS LOW SWITCH 2TOPS0176B 18 - Instruments on Racks	TB 775'+0" 79		*	*				Replace missing bolts in 2TOPS0176B.
TURBINE TERMINAL CABINETS 2TTC4 20 - Instr. & Control Panels & Cabinets	TB 796'+6" 80	*	*	*				Exceedance of Reference Spectrum by Instructure Response Sectrum resolved in Duke calculation. Enhance existing anchorage for 2TTC4 .
CONTROL BOARDS 2UB1,2; 2AB1,2 20 - Instr. & Control Panels & Cabinets	AB 822'+0" 81				*			A free standing printer next to 2AB2 is being removed as part of the Operator Aid Computer NSM. Relocate drawing stick sets located behind 2UB2. 1/4" gaps are addressed in Duke calculation OSC-3942. Enhance existing anchorage or analytically qualify to meet IPEEE.
LOAD CENTERS 2X01, 2X02 02 - Low Voltage Switchgear	TB 796'+6" 82		*	*				Weld transformer section of Load Centers 2X01 & 2X02 to embedded angle. Embedded studs are A108 instead of A307. Stud capacity verified per calculation.
LOAD CENTER 2X10 2X10/XFMR 04 - Transformers	TB 796'+6" 83		*	*				Add clip angles to to restrain transformers 2X10.
MCC 2XA-A 2XA-A	TB		*	*				Exceedance of Reference Spectrum by Instructure Response Sectrum resolved in Duke calculation. Enhance existing

Table 8-2
Equipment Oulier Description & Proposed Resolution
Oconee Units 1,2 & 3

NAME EQUIPMENT ID'S EQUIPMENT CLASS "Continued from previous page"	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE						PROPOSED RESOLUTION "Continued from previous page"
		C a p a c i t y	B S C a v e a t s	A n c h o r a g e	I n t e r a c t i o n	C a t e g o r y	0	
01 - Motor Control Centers	796'+6" 85							anchorage of 2XA-A.
MCC 2XC 2XC 01 - Motor Control Centers	TB 775'+0" 87		*					Add back to back bolting to 2XC.
MCC 2XGA 2XGA 01 - Motor Control Centers	TB 796'+6" 88	*	*	*				Exceedance of Reference Spectrum by Instructure Response Sectrum resolved in Duke calculation. Enhance existing welds for 2XGA to meet A-46.
600V TO 208V TRANSFORMERS 2XGA/XFMR, 2XGB/XFMR 04 - Transformers	TB 796'+6" 89		*	*				Enhance existing anchorage for 2XGA/XFMR & 2XGB/XFMR .
MCC 2XGB 2XGB 01 - Motor Control Centers	TB 796'+6" 90	*	*	*	*			Exceedance of Reference Spectrum by Instructure Response Sectrum resolved in Duke calculation. Add back to back bolting to the bottom north end of 2XGB. Enhance existing anchorageof 2XGB. Add restraint to fluorescent bulbs on West side of 2XGB.
MCC 2XI & 2XJ 2XI, 2XJ 01 - Motor Control Centers	AB 809'+0"	*	*	*				Existing test report to be used to verify Capacity > Demand. See 14" MCC outlier resolution calculation contained in Miscellaneous section of A-46/IPEEE calculation. Add padding or brace 2XI, 2XJ to block wall(required for 2XJ, good

Table 8-2
Equipment Oulier Description & Proposed Resolution
Ocone Units 1,2 & 3

NAME EQUIPMENT ID'S EQUIPMENT CLASS "Continued from previous page"	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE						PROPOSED RESOLUTION "Continued from previous page"
		C a p a c i t y	B S C a v e a t s	A n c h o r a g e	I n t e r a c t i o n	C a t e g o r y	0	
	91							practice for 2XI).
MCC 2XL & 2XN 2XL, 2XN 01 - Motor Control Centers	AB 771'+0" 92		*					Bolt back to back with 2XN or add top bracing to MCC. Trim cable tray and restrain horizontally above MCC.
MCC 2XO 2XO 01 - Motor Control Centers	AB 796'+6" 93		*	*				Add washer plates, tighten loose bolts and add shims to 2XO.
MCC 2XP 2XP 01 - Motor Control Centers	AB 796'+6" 94		*	*				Add shims between inverted channel and concrete at all anchors were gaps exist for 2XP.
600V MCC 2XR & 3XR 2XR 01 - Motor Control Centers	AB 838'+0" 95	*	*		*			Existing test report to be used to verify Capacity > Demand. See 14" MCC outlier resolution calculation contained in Miscellaneous section of A-46/IPEEE calculation. Non-seismic block wall adjacent to 2XR to be braced or analytically qualified.
MCC 2XSF & 3XSF (208V) 2XSF(208V), 3XSF(208v) 01 - Motor Control Centers	SSF 817'+0" 97				*			Add padding between 2XSF(208v) and 3XSF(208v).

Table 8-2
Equipment Oulier Description & Proposed Resolution
Oconee Units 1,2 & 3

NAME EQUIPMENT ID'S EQUIPMENT CLASS	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE						PROPOSED RESOLUTION
		C a p a c i t y	B S C a v e a t s	A n c h o r a g e	I n t e r a c t i o n	C a t e g o r y	0	
MCC 2XSF & 3XSF (600V) 2XSF(600V), 3XSF(600v). 01 - Motor Control Centers	SSF 817'+0" 98				*			Add padding between 2XSF(600v) and 3XSF(600v).
UNIT 3 POWDEX PANEL 3POWDEXPANEL 20 - I & C Panels & Cabinets	TB 775'+0" 99				*			Remove misc. loose items from cabinet floor. Install clip restrains for flouresent lights inside of cabinet and mounted to front hood.
REGULATOR OUTPUT BKRS & XFER SW 3A/1B/SW, 3A/MCB, 3B/MCB 14 - Distribution Panels	AB 796'+6" 100		*	*				Add bracing to unistrut frame supporting 3A/1B/SW,3A/MCB,3B/MCB,3A/REG,3B/R EG, 3A/XFMR & 3B/XFMR. Add washers to bolts which bolt 3B/MCB panel to unistrut frame.
REGULATED POWER SUPPLY REGULATOR 3A 3A/REG, 3B/REG 00 - Generic Input Form	AB 796'+6" 101			*		*		Capacity > Demand evaluation required for 3A/REG & 3B/REG. Add bracing to unistrut frame supporting 3A/3B/SW,3A/MCB,3B/MCB,3A/REG,3B/R EG, 3A/XFMR & 3B/XFMR . Capacity vs Demand applies to A-46 only per Table 2-4 EPRI NP-6041.
(600V TO 208V) TRANSFORMERS 3A/XFMR, 3B/XFMR 04 - Transformers	AB 796'+6" 102		*	*				Add bracing to unistrut frame supporting 3A/1B/SW,3A/MCB,3B/MCB,3A/REG,3B/R EG, 3A/XFMR & 3B/XFMR .
U3 AIR HANDLING CONTROL CENTER	AB		*	*				A detailed evaluation of the rack/panel arrangement is required.

Table 8-2
Equipment Oulier Description & Proposed Resolution
Ocone Units 1,2 & 3

NAME EQUIPMENT ID'S EQUIPMENT CLASS "Continued from previous page"	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE						PROPOSED RESOLUTION "Continued from previous page"
		C a p a c i t y	B S P a c i v e a t s	A n c h o r a g e	I n t e r a c t i o n	C a t e g o r y	0	
3AHCC 18 - Instruments on Racks	838'+0" 103							
PPB 3C & 3D 3C, 3D 14 - Distribution Panels	RB 818'+0" 106		*	*				Add bracing to column supporting Pressurizer Heater Cabinet platform.
CONTROL BATTERIES 3CA/BB, 3CB/BB 15 - Batteries on Racks	AB 809'+0" 107				*			Add anchorage to AHU 3-31.
CONTROL BATTERY CHARGER 3CA 3CA/BC 16 - Battery Chargers & Invertors	AB 796'+6" 108		*	*				Add washer plate to NW anchor of 3CA/BC.
CONDENSER HOTWELLS (Unit 3) 3CCD000A, 3CCD000B, 3CCD000C 00 - Generic Input Form	TB 775'+0" 109					*		Capacity > Demand verified per EQE calculation. Perform calculation to verify adequacy of 4" line connecting to 3CCD000A.
CRD SYSTEM AC BREAKER CAB 3CRDACBKRCAB 02 - Low Voltage Switchgear	AB 809'+0"				*			Remove unistrut on south side of breaker panel.

Table 8-2
Equipment Oulier Description & Proposed Resolution
Ocone Units 1,2 & 3

NAME EQUIPMENT ID'S EQUIPMENT CLASS "Continued from previous page"	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE					PROPOSED RESOLUTION "Continued from previous page"
		C a p a c i t y	B S C a v e a t s	A n c h o r a g e	I n t e r a c t i o n	C a t e g o r y	
	111						
EHC CONTROL CABINETS 3EHC1,2,3 20 - I & C Panels & Cabinets	AB 809'+0" 116		*	*			Repair loose anchors on north side of 3EHC1. Add compressible material between EHTC cabinets and EHC cabinets to prevent impact.
EPSLP CABINETS 3EPSLP2 20 - Instr. & Control Panels & Cabinets	AB 809'+0" 117			*			Revise drawings to reflect as-found anchor configuration. Cabinet is adequate but drawing revision is required.
ESFAS,RPS,ICS CABINETS 3ESFAS,3ICS,3RPS 20 - Instr. & Control Panels & Cabinets	AB 822'+0" 118		*	*			Add hard washers to anchorage of all ESFAS,ICS,RPS & Auxilliary cabinets. Enhance existing anchorage capacity to meet IPEEE for 3RPS,3ICS,3ESFAS & 3ES/AUX/ICS. Add padding between ICS,ESFAS & ES/AUX/ICS cabinets and adjacent column and file cabinet. Relocate the following interaction concerns near ESFAS cabinets 8 & 9 -- 1) small table and trash can located on North end, and 2) emergency cart on wheels and OSC supply cabinet on South end.
ESFAS ODD CHANNEL CABINETS 3ESTC1 20 - I & C Panels & Cabinets	AB 809'+0" 119		*	*			Add plate washers to oversized holes for 3ESTC1.
PPB 3KD 3KD	AB 771'+0"		*	*			Anchorage acceptibilty verified by methods outside of the GIP. "Tug Test" performed in field verifies seismic acceptability of as found anchorage. Capacity vs Demand

Table 8-2
Equipment Outlier Description & Proposed Resolution
Oconee Units 1,2 & 3

NAME EQUIPMENT ID'S EQUIPMENT CLASS "Continued from previous page"	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE					PROPOSED RESOLUTION "Continued from previous page"
		C a p a c i t y	B S C a v e a t s	A n c h o r a g e	I n t e r a c t i o n	C a t e g o r y	
14 - Distribution Panels	120						determination required due to panel size exceeding GIP allowables. Capacity vs Demand applies to A-46 only per Table 2-4 EPRI NP-6041.
INSTRUMENT RACK 3MC-25 3MC-25 18 - Instruments on Racks	TB 796'+6" 124	*	*	*			Exceedance of Reference Spectrum by Instructure Response Spectrum resolved in Duke calculation. Add top bracing to instrument racks 3MC-25.
MISCELLANEOUS TERMINAL CABINETS 3MTC3,4 20 - I & C Panels & Cabinets	AB 809'+0" 127				*		Cut 1/4 inch off angle leg adjacent to 3MTC3 & 4 over the length of the angle.
LOW HYDRAULIC PRESSURE SWITCH 3PS157AB/PS101 18 - Instruments on Racks	TB 775'+0" 129		*	*			Add bracing to instrument racks 3PS157AB/PS101
REACTOR COOLANT PRESSURE SWITCH 3RCPS0364 18 - Instruments on Racks	RB 825'+0" 130				*		Add Vert. & Lateral support 1" Dia. pipe adjacent to 3RCPS0364.
UNIT 3 4160V SWITCHGEAR 3TC, 3TD, 3TE 03 - Medium Voltage Switchgear	TB 796'+6"	*			*		Exceedance of Reference Spectrum by Instructure Response Spectrum resolved in Duke calculation. Restrain fluorescent bulbs in overhead fixtures adjacent to 3TC, 3TD, 3TE.

Table 8-2
Equipment Oulier Description & Proposed Resolution
Oconee Units 1,2 & 3

NAME EQUIPMENT ID'S EQUIPMENT CLASS "Continued from previous page"	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE					PROPOSED RESOLUTION "Continued from previous page"
		C a p a c i t y	B S C a v e a t s	A n c h o r a g e	I n t e r a c t i o n	C a t e g o r y 0	
	133						
TERMINAL CABINET 3TCPA 20 - I & C Panels & Cabinets	TB 796'+6" 134				*		Remove or restrain loudspeaker mounted above 3TCPA..
MAIN TURB. OIL TANK OIL COOLERS 3TOHX000A, 3TOHX000B 00 - Generic Input Form	TB 796'+6" 135				*		Analytical analysis of piping required to verify pressure boundry intergity for 3TOHX000A, 3TOHX000B .
TURBINE TERMINAL CABINET 4 3TTC4 20 - I & C Panels & Cabinets	TB 796'+6" 136	*	*	*			Exceedance of Reference Spectrum by Instructure Response Sectrum resolved in Duke calculation. Enhance existing anchorage for 3TTC4.
CONTROL BOARDS 3UB1,2,3AB1,2,2A,3,3A,EB1-8 20 - Instr. & Control Panels & Cabinets	AB 822'+0" 137		*		*		Printer drawers in 3AB2 and 3AB2A are not restrained. These printers and drawers are being removed as part of the Operator Aid Computer NSM. Modify the cabinet column penetration for 3AB3 to provide greater clearance. Move or anchor file cabinets located opposite 3EB1-3EB8 . The light fixtures opposite 3EB1-3EB8 need to have safety cables installed. The 1/4" gap at the base channels is address in Duke calculations. Enhance existing anchorage or analytically qualify to meet IPEEE.
AIR HANDLING UNITS 13,14,26 & 27 3VSAH0013, 3VSAH0014	AB 838'+0"		*	*	*		Provide lateral & vertical seismic stops or bumpers to 3VSAH0013, 3VSAH0014. Resolve interaction concenrs associated with Unit 3 CRVS supply duct system.

Table 8-2
Equipment Oulier Description & Proposed Resolution
Oconee Units 1,2 & 3

NAME EQUIPMENT ID'S EQUIPMENT CLASS "Continued from previous page"	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE					PROPOSED RESOLUTION "Continued from previous page"
		C a p a c i t y	B S C a v e a t s	A n c h o r a g e	I n t e r a c t i o n	C a t e g o r y	
10 - Air Handlers	138						
BATTERY RM. AIR CONDITIONER 3VSAH0017 10 - Air Handlers	TB 822'+0" 139		*	*	*		Add anchorage to 3VSAH0017. Analytically qualify non-seismic blockwall adjacent to 3VSAH0017.
OUTSIDE AIR BOOSTER FANS 'A' & 'B' 3VSAH0026, 3VSAH0027 09 - Fans	AB 838'+0" 140		*	*	*		Provide lateral & vertical seismic stops or bumpers to 3VSAH0026, 3VSAH0027. Provide redundant power supply to either 3VSAH0026 or 3VSAH0027. Resolve interaction concerns associated with Unit 3 CRVS supply duct system.
ALTERREX CAB. COOLING COILS 3VSAH0029 10 - Air Handlers	TB 822'+0" 142		*	*			Add anchorage to 3VSAH0029.
MCC 3XA 3XA 01 - Motor Control Centers	TB 796'+6" 144	*	*	*	*		Exceedance of Reference Spectrum by Instructure Response Spectrum resolved in Duke calculation. Enhance existing anchorage of 3XA. Develop analytical analysis of ~36" pipe on North side of 3XA.
MCC 3XA-A 3XA-A 01 - Motor Control Centers	TB 796'+6" 145	*	*	*			Exceedance of Reference Spectrum by Instructure Response Spectrum resolved in Duke calculation. Replace missing bolt (back to back, bottom East) for 3XA-A. Enhance existing anchorage for 3XA-A.

Table 8-2
Equipment Outlier Description & Proposed Resolution
Oconee Units 1,2 & 3

NAME EQUIPMENT ID'S EQUIPMENT CLASS "Continued from previous page"	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE					PROPOSED RESOLUTION "Continued from previous page"
		C a p a c i t y	B S C a v e a t s	A n c h o r a g e	I n t e r a c t i o n	C a t e g o r y 0	
MCC 3XGA 3XGA 01 - Motor Control Centers	TB 796'+6" 146	*	*	*	*		Exceedance of Reference Spectrum by Instructure Response Sectrum resolved in Duke calculation. Enhance existing welds for 3XGA to meet A-46. Restrain fluorescent light bulbs near 3XGA.
600V TO 208V TRANSFORMERS 3XGA/XFMR, 3XGB/XFMR 04 - Transformers	TB 796'+6" 147		*	*			Enhance existing anchorage for 3XGA/XFMR & 3XGB/XFMR .
MCC 3XGB 3XGB 01 - Motor Control Centers	TB 796'+6" 148	*	*	*	*		Exceedance of Reference Spectrum by Instructure Response Sectrum resolved in Duke calculation. Enhance existing anchorage of 3XGB. Trim 1" from Main Steam pipe insulation above 3XGB.
MCC 3XI & 3XJ 3XI, 3XJ 01 - Motor Control Centers	AB 809'+0" 149	*	*		*		Existing test report to be used to verify Capacity > Demand. See 14" MCC outlier resolution calculation contained in Miscellaneous section of A-46/IPEEE calculation. Add padding or brace 3XI, 3XJ to block wall.
MCC 3XO 3XO 01 - Motor Control Centers	AB 796'+6" 151				*		Add padding or move cable tray member to prohibit impact between conduit and cable tray adjacent to 3XO. Remove loose angle from top of MCC.
600V MCC 3XR 3XR	AB 	*	*		*		Existing test report to be used to verify Capacity > Demand. See 14" MCC outlier resolution calculation contained in

Table 8-2
Equipment Oulier Description & Proposed Resolution
Oconee Units 1,2 & 3

NAME EQUIPMENT ID'S EQUIPMENT CLASS "Continued from previous page"	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE					PROPOSED RESOLUTION "Continued from previous page"
		C a p a c i t y	B S C a v e a t s	A n c h o r a g e	I n t e r a c t i o n	C a t e g o r y	
01 - Motor Control Centers	838'+0" 152						Miscellaneous section of A-46/IPEEE calculation. Non-seismic block wall adjacent to 3XR to be braced or analytically qualified.
MCC 3XS1 3XS1 01 - Motor Control Centers	AB 796'+6" 153		*	*			Repair latch to #4-D/E & Add washer plates for 3XS1.
MCC 3XT & XFMR 3XT (600V TO 208V) 3XT, 3XT/XFMR 01 - Motor Control Centers	AB 838'+0" 155		*		*		Existing test report to be used to verify Capacity > Demand. See 14" MCC outlier resolution calculation contained in Miscellaneous section of A-46/IPEEE calculation. Add bracing to block wall adjacent to 3XT and 3XT/XFMR.
AHU 11 & 12 INLET DAMPER CD-06A, CD-06B 08B - Solenoid-Operated Valves	AB 838'+0" 156		*		*		Evaluate adequacy of blockwall to which damper controls are mounted.
MCC XOD1 XOD1 01 - Motor Control Centers	YD 796'+6" 160		*	*	*		Replace existing clip angles on XOD1 with angles meeting minimum edge distance. Replace anchors with corrosion resistant anchors. Provide protection for XOD1 from vehicle or equipment impact. Add padding between XOD1 exterior enclosure and XOD1 cabinet.
MCC XSF-1 (UNITS 1,2 & 3) XSF-1(1,2,&3) 01 - Motor Control Centers	SSF 797'+0"		*		*		Equipment in the SSF must be evaluated to determine the need for Safety Related tagging. The equipment tray on the north side of XSF-1 must be moved. Ref. PIP 4-096-1723

Table 8-2
Equipment Oulier Description & Proposed Resolution
Oconee Units 1,2 & 3

NAME EQUIPMENT ID'S EQUIPMENT CLASS "Continued from previous page"	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE					PROPOSED RESOLUTION "Continued from previous page"
		C a p a c i t y	B S C a v e a t s	A n c h o r a g e	I n t e r a c t i o n	C a t e g o r y 0	
	161						
600V TO 240V TRANSFORMERS 1A/XFMR 04 - Transformers	AB 796'+6" 163		*	*			Add bracing to unistrut frame supporting 1A/1B/SW,1A/MCB,1B/MCB,1A/REG,1B/REG, 1A/XFMR & 1B/XFMR .
125V ISOLATING TRANSFER DIODE 1ADB 20 - Instr. & Control Panels & Cabinets	AB 796'+6" 164		*	*			Add washer plates to the three north anchors of 1ADB.
AREA TERMINATION CABINET 3 1AT3 20 - I & C Panels & Cabinets	AB 809'+0" 166		*				Bolt 1AT1,2,3 @ 4 together. Remove 4" cable tray spanning between 1EPSLP1 and 1AT2.
PPB 1B 1B,1A & 1D 14 - Distribution Panels	RB 818'+0" 167		*				Replace missing or broken door latch on PPB 1B and adjacent PPB 1A & 1D.
STEAM GEN. LOGIC CABINETS 1SGLC, 3SGLC 20 - Instr. & Control Panels & Cabinets	AB 809'+0" 172		*	*			Replace existing washer plates with thicker ones for 1SGLC & 3SGLC.

Table 8-2
Equipment Oulier Description & Proposed Resolution
Oconee Units 1,2 & 3

NAME EQUIPMENT ID'S EQUIPMENT CLASS	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE					PROPOSED RESOLUTION
		C a p a c i t y	B S C a v e a t s	A n c h o r a g e	I n t e r a c t i o n	C a t e g o r y	
TERMINAL BOX 111 1TB-111 20 - I & C Panels & Cabinets	YD 796'+6" 173		*				Replace faceplate on Terminal Box 111.
CONTROL BOARDS 1UB1,2,AB1 1UB1,2; 1AB1,2 20 - Instr. & Control Panels & Cabinets	AB 822'+0" 175				*		A free standing printer next to 1AB2 is not anchored and could impact the control boards. This printer is being removed as part of the Operator Aid Computer NSM. Drawing stick sets located behind 1UB2 need to be relocated. The 1/4" gap is addressed in Duke calculations. Enhance existing anchorage or analytically qualify to meet IPEEE.
B1T,B2T,CT4 ENCLOSURE VENT FANS 1VSAH-B1T-EV-A, 1VSAH-B1T-EV-B, 1VSAH-CT4-EV-A, 1VSAH-CT4-EV-B 09 - Fans	BH 796'+6" 177	*					Equipment was inaccessible to SRT. Need to inspect fan anchorage and base isolation systems if any are present. Due to inaccessibility of fans 1VSAH-B1T-EV-A, 1VSAH-B1T-EV-B, 1VSAH-CT4-EV-A, 1VSAH-CT4-EV-B, a scaffold or ladder will have to be brought into the Blockhouse. A long enough ladder will not fit through the normal personnel access door.
AIR HANDLING UNITS 11,12, 26 & 27 1VSAH0011, 1VSAH0012, 1VSAH0026, 1VSAH0027 10 - Air Handlers	AB 838'+0" 178		*	*			Provide lateral seismic stops or bumpers to 1VSAH0011, 1VSAH0012, 1VSAH0026, 1VSAH0027. Capacity VS Demand verification provided per EQE calculation.
LOAD CENTER 1X04 02 - Low Voltage Switchgear	TB 796'+6" 179		*	*			Weld transformer section of Load Centers 1X04 to embedded angle. Embedded studs are A108 instead of A307. Stud capacity verified per calculation.

Table 8-2
Equipment Oulier Description & Proposed Resolution
Oconee Units 1,2 & 3

NAME EQUIPMENT ID'S EQUIPMENT CLASS "Continued from previous page"	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE					PROPOSED RESOLUTION "Continued from previous page"
		C a p a c i t y	B S C a v e a t s	A n c h o r a g e	I n t e r a c t i o n	C a t e g o r y 0	
LOAD CENTER 1X09 02 - Low Voltage Switchgear	AB 796'+6" 181		*	*			Add shims under load center at anchors on North side. Calculation performed to verify acceptability of 9/16" gap.
LOAD CENTERS 1X10/XFMR 04 - Transformers	TB 796'+6" 182		*	*			Add clip angles to to restrain transformers 1X10.
MCC 1XA 1XA 01 - Motor Control Centers	TB 796'+6" 183	*	*	*			Exceedance of Reference Spectrum by Instructure Response Sectrum resolved in Duke calculation. Bolt 2 south bays of 1XA back to back.
MCC 1XA-A 1XA-A 01 - Motor Control Centers	TB 796'+6" 184	*	*	*			Exceedance of Reference Spectrum by Instructure Response Sectrum resolved in Duke calculation. Enhance existing anchorage of 1XA-A to meet A-46 requirements.
MCC 2XA 2XA 01 - Motor Control Centers	TB 796'+6" 185	*			*		Exceedance of Reference Spectrum by Instructure Response Sectrum resolved in Duke calculation. Develope analytical anaysis of ~36" pipe on North side of 2XA. Restrain fire hose rack on North side of 2XA.
UNITS 1 & 2 POWDEX PANEL 1&2POWDEXPANEL	TB				*		Remove misc. loose items from cabinet floor. Install clip restrains for flouresnt lights inside of cabinet and mounted to front hood.

Table 8-2
Equipment Outlier Description & Proposed Resolution
Oconee Units 1,2 & 3

NAME EQUIPMENT ID'S EQUIPMENT CLASS "Continued from previous page"	BLDG. FLOOR ELEV. OUTLIER REF. NO.	OUTLIER TYPE					PROPOSED RESOLUTION "Continued from previous page"
		C a p a c i t y	B S C a v e a t s	A n c h o r a g e	I n t e r a c t i o n	C a t e g o r y 0	
20 - I & C Panels & Cabinets	775'+0" 185						
TRANSFORMER 1B (600V TO 208V) 1B/XFMR 04 - Transformers	AB 796'+6" 187		*	*			Add bracing to unistrut frame supporting 1A/1B/SW,1A/MCB,1B/MCB,1A/REG,1B/REG, 1A/XFMR & 1B/XFMR .
DISTRIBUTION CENTER 2DCA 2DCA 01 - Motor Control Centers	AB 796'+6" 189	*	*				Existing test report to be used to verify Capacity > Demand. See 14" MCC outlier resolution calculation contained in Miscellaneous section of A-46/IPEEE calculation. Attach ground wire to bus bar.
UNWALKED ITEMS 2PAMLT0090, 2PAMLT0091 18	RB 777'+0" 190	*					Seismic Evaluation to be performed at earliest opportunity.
UNWALKED ITEMS 2RCVA0005,2RCVA0006 08A	RB 797'+0" 191	*					Seismic Evaluation to be performed at earliest opportunity. Valves are screened out per Table 2-4 EPRI NP-6041 for IPEEE.

Section 9

SIGNIFICANT OR PROGRAMMATIC DEVIATIONS FROM THE GIP

No significant or programmatic deviations from the GIP have been made in the Oconee Nuclear Station A-46 Program.

Section 10

THIRD-PARTY AUDIT SUMMARY

As required by Section I.2.2.7 of the GIP (Reference #1), a Third-Party Audit was performed by eight individuals who were not part of the Seismic Review Teams. Documentation of the Third-Party Audit close-out report is included in Appendix E of this report. A summary of peer review issues and respective resolutions is provided below.

The initial Third-Party Audit meeting began on June 6, 1995 and lasted for two consecutive days. All of the team members were present for both days. The second Third-Party Audit meeting began on October 8, 1996 and lasted for two consecutive days, also. All parties were present at the second meeting except for M. K. Ravindra whose primary role was more related to the IPEEE/PRA aspects of the combined A-46/IPEEE Peer Review Audit role. As explained in Section 3.3 of this report, the audit team for the A-46 also served as the audit team for IPEEE since many features of the two programs were implemented simultaneously with the same workforce.

The initial Audit meeting in June 1995 addressed the following USI A-46 Issues:

1. Input Spectra.
2. SSEL Generation.
3. Data Management, Overall program implementation.
4. Relay status, methods of evaluation and management of relay information.
5. Field Walkdowns, Review of Calculations and completed SEWs forms.

The second Audit meeting in October 1996 addressed the balance of the USI A-46 Issues:

1. Relay Circuit Analysis.
2. Relay Walkdown Issues.
3. Operator actions to support the SSEL/Outlier Resolution.
4. SSEL Generation/Supporting Systems needed.
5. Cable tray and blockwall scopes of review.

The final close-out of the Peer Review efforts was in October and November, 1997. Review of the project team's responses was done by Peer Review Team members. A brief review of the draft report was also done by the Peer Review Team members. The review and concurrence with all the actions taken by the project team was determined to be complete. In general, the role of the Peer Review Team for the Oconee Nuclear Station SQUG Project exceeded the requirements of the GIP.

In general, the Third-Party Audit team found the results of the project to be satisfactory by meeting or exceeding the expectations as set forth in the GIP. The strengths noted by the audit team included:

1. Excellent inter-group communication demonstrating a strong group effort.
2. Well qualified individuals for both Walkdowns and Relay Review.
3. Thorough and conservative applications of the GIP.
4. Good judgment demonstrated in field assessments.
5. Thorough data management and record keeping.
6. Strong familiarity with the equipment and plant layout/operation.

The majority of the overall peer review comments apply to the USI A-46 effort. Of these, certain ones apply to the Oconee Nuclear Station Submittal and others apply to the Emergency Power System portion of the USI A-46 effort. Items relating to this portion of the total USI A-46 project are highlighted below with their associated actions.

1. The issue of identifying relays in the vendor-supplied boxes was raised. The concern was how the relays are being identified and evaluated. Duke was aware of this concern and planned to look for poor performing relays and chatter consequences within a vendor supplied box.

Action:

The method of evaluation for relays in "black boxes" is summarized below.

The first step is to determine the function and chatter consequences of any relays located in the cabinet. If the chatter consequences are acceptable, then the "black box" screens out as 'ok'. If chatter consequences are unacceptable, then the relays located within the boundaries of the "black box" are evaluated per the vendor supplied drawings. From these drawings the project team gathers information such as the manufacturer and model number for the relay. The team then uses whatever evaluation techniques are available (capacity vs. demand, testing, etc.) to complete the USI A-46/IPEEE requirements.

2. Where relay chatter is acceptable, it is recommended that examples be given (perhaps five or six) explaining why relay chatter is acceptable.

Action:

The resolution was that each and every relay having a chatter acceptable status would have a brief explanation tied to it elaborating why the chattering and the associated consequence of chatter is acceptable for the circuits desired functions. This information is shown on the appropriate G4 forms.

3. Spot checks in the field were done to verify that the installed relays are the documented relays (i.e. what is there is as shown on the documents). This needs to be documented in the final report.

Action:

Section 5.1.5 of the final report has been documented with appropriate wording to address the relay walkdown assessment regarding relay type, cabinet location and mounting.

4. The relay reviewer was not physically present on the relay walkdown because the SRT was trained in relay considerations. The intent of the GIP was met. The same may apply to system selection considerations. These situations need to be documented in the report so that it is clear that the intent of the GIP was met.

Action:

Section 3.1 of the report states that the walkdown team included a retired electrical craft supervisor having in excess of 25 years experience. He was present during the seismic walkdown of each and every piece of equipment containing relays. Relay walkdowns were done simultaneously with the seismic walkdowns. His expertise was utilized in identifying and locating relays and relay types. Although he did not perform circuit analysis, he did function as a relay reviewer for the field work. Considering the GIP does not require a relay reviewer to have the same credentials as the Lead Relay Reviewer, requirements of the GIP are met directly. In addition, the Seismic Review Teams were trained in relay considerations by the Lead Relay Reviewer.

Therefore, after reconsideration of this issue, the evaluation not only meets the intent of the GIP, but also the wording of the GIP. The submittal criteria only requires elaboration on areas where the intent is met or the actions deviate from the GIP.

5. Be sure there is a statement in the final report to the effect that the A-46 effort is actually verifying that all cable trays are seismically adequate (not just those cable trays with cables for SSEL equipment), and that this is conservative.

Action:

Section 7.1.1 of the submittal has been modified to clearly address this. This was not a deficiency, but rather a point that deserved to be clearly identified to demonstrate the extent of the investigation.

6. Based on a case reviewed by the Audit Team, more detail documented on the SEWs form would be beneficial for instances where the team reviewed an issue and concluded it not be a concern. The benefit of documenting issues that are judged acceptable is to prevent unnecessary re-assessment of previously evaluated issues.

Action:

The documentation comment regarding completeness of the SEWs forms has been evaluated. This issue has been discussed with all the current walkdown engineers. All information relevant to the evaluation and pertinent issues are being incorporated on new and re-walked SSEL components. Existing SEWs are not being revised to include this increased level of detail unless a revision is needed in the review and consistency stage of the project. For the specific case of the Load Center and Transformer combined on the same SEWs form, a revision has been completed. The revision to the existing SEWs form states that the attached transformer has been reviewed against the appropriate caveats for its equipment class and found acceptable. The creation of an additional SEWs form, in addition to this statement, would conflict with the "Rule of the Box" approach and would not further the quality of the review of the equipment.

7. Improved documentation is warranted for the exclusion of HVAC as a necessary support system. Methods of analysis need to demonstrate the need or exclusion of HVAC.

Action:

HVAC equipment has been added to the SQUG SSEL for the necessary cooling of essential equipment for the 72-hour period following the seismic event per the GIP. Air Handling equipment necessary to use the booster fans to bring fresh air into the Control Rooms has been added to the SSEL. Extensive thermal modeling of temperature sensitive equipment locations has been performed. The model included all relevant heat loads and included mitigating actions such as opening doors and using booster fans. Based on this, the ventilating of the Control Room with outside air was satisfactory. To complement this assessment, extensive efforts were employed to derive the critical temperature at which the equipment reliability would be reduced to an insufficient margin.

8. In regard to HVAC, the PRT felt that there should be more complete explanations. In the SSEL selection section these items should be covered: 1) Address other areas where HVAC is not needed and what actions are required., 2) Address ambient temperatures and in-cabinet temperatures (for electrical equipment).

Action:

The need for HVAC in the support of the entire SSEL at the Oconee Nuclear Station is addressed in calculation OSC 5710. The identified areas of concern for temperature generation and/or temperature sensitivity were included in a thermal model as shown in calculation OSC 6667. This model is used to determine where actions regarding HVAC need to be taken and to what extent. In addition, the model incorporates any and all

actions taken and their consequential effects on the ambient temperatures. As far as the sensitivity of the equipment to the changing temperatures, this is addressed in calculation OSC 6579. No specific actions with regard to the equipment of concern is required to assure adequate cooling to assure continued performance.

9. One of the assumptions fundamental to establishing the SQUG scenario from which the SSEL is generated involved tripping the reactor. The question relates to the reliance on equipment not covered within the scope of the A-46 program.

Action:

The following is provided for clarification of an assumption stated in the SSEL calculation OSC-5710 involving the manual tripping of the reactor following a seismic event.

The engineer currently responsible for the generation of the existing SSEL has assured the SQUG group that the present station procedures give the Reactor Operator the option of reactor trip in accordance with the SSEL and GIP assumptions. (This may not be the Operator's first choice, but this option is sequenced into his options which provides the plant conditions associated with the current SSEL.) The Reactor Protection System (RPS) is a fail-safe system initiating a trip in the event of system actuation. Although the system is not explicitly identified on the current SSEL, a majority of the essential components (system cabinets, cable tray, etc.) have been identified for other related operations to the satisfaction of the GIP. Actuation of the RPS (including manual or automatic trip of the reactor) will get you to the point where the SSEL is generated.

10. Please see the J. E. Thomas PROFS note of January 9, 1996. The Peer Review Team would like to see a more complete answer. The issue can also be viewed by reference to these questions: A) Where is an automatic trip relied upon?, B) Where is a manual trip relied upon?, C) Are all situations covered? In a response please discuss how reactor trip is factored into SSEL selection. Explain how the intent of the GIP is met on this subject with regard to SSEL selection.

Action:

The SSEL selection calculation has been documented with the following information.

"The seismic event either results in an automatic reactor trip, or the operators manually trip the reactor based on plant conditions as directed by the Abnormal Procedures or the Emergency Procedures following the seismic event (i.e. loss of offsite power, loss of IA, LOCA for IPEEE). There is no time limit for initiation of the manual trip. As long as the plant remains stable then the operator could delaying tripping for an extended time. The equipment that, if allowed to deteriorate, would make the SSEL invalid, is the same equipment that the operator will be monitoring to determine if a plant trip is required."

11. The reliance on the expected failure of the Instrument Air System was questioned. One cannot have a guaranteed failure involved in the generation of the SSEL. The SSEL needs to account for both the existence and the failure of the Instrument Air System in the generation of the SSEL.

Action:

The SSEL has been revised to include both the failure and success of Instrument Air. Additional equipment has been included to allow this potential failure to occur, but not make the list dependent on an assured failure of the system. In addition, all the associated controls, power, and any potential relay chatter concerns have been included commensurate with the generation of the original SSEL.

12. More information is needed to be put in the report on operator actions. Make it clear what specific operator actions have been looked at and verified.

Action:

Calculation OSC 5710 addresses the actions taken by the operator. All the actions noted in the discussion are either: 1) The result of following some established procedure for the event or symptom occurring., or 2) The actions for which the operators are formally trained to perform in a general sense. The point here is that all the actions taken by the operators are expected or predicted responses, and none of these are unique or out of the ordinary.

Due to the fact that all the actions are either trained responses or procedure adherence related, no special mention of them is warranted within the report submitted to the NRC. What is expected to be included in the report are any operator actions unique to the operation of the plant in order to secure the alignment of the SQUG defined Safe Shutdown Equipment List. Therefore, due to the classification of these operator actions, no report editing is needed to resolve this question.

13. For valve 1MSVA0076 the PRT would like to see calculated pipe displacements that were used to verify that there would be no actual spatial interaction. It is also requested that these displacements be added to the SEWs form documentation.

Action:

The appropriate SEWs form has been revised. The revision addresses the calculated pipe movements and the calculation of reference. This revision validates and reinforces the earlier conclusions of the Seismic Capability Engineers.

14. On the instrument air question where credit cannot be taken for the assumed loss of instrument air, the PRT would like to verify that operator action can in fact be reasonably taken (the appropriate valves which may have to be operated by hand are accessible). It is requested that the PRT be provided with an explanation for what will be done in the different scenarios. See item number 11 from R. L. McCoy's letter of November 19, 1995. As stated above, it is worthwhile to document other required operator actions.

Action:

All operator actions are addressed in question # 12. In the generation of the SSEL, actions taken were assumed to be reasonable. These same actions were further confirmed to be reasonable thru the Station Operations review of the SSEL and the station procedures. Therefore, the conclusion is the failure or lack of failure of Instrument Air and any associated actions have been incorporated in the review of the SSEL.

15. The observation is provided that the outlier list (especially for block walls) could be reduced further by more realistically assessing failure modes.

Action:

This comment could apply to all outliers, but its primary focus and origin are the block walls. At the time of this question, approximately 75 separate block walls had undocumented seismic capacity. The walls had not been determined to be unacceptable-but could not be easily proven acceptable as-is. Since that time, about 50% of those walls have been proven to be seismically adequate for the SQUG program. The balance of the walls have either unknown capacities, or have been identified as needing an upgrade.

Reduction of outliers is an ongoing effort. This reassessment of outliers is not limited to block walls, but has been applied to relays, equipment, cable trays, etc..

16. In Section 2.2 of the relay report titled "Relay Outliers," be sure to include all the outliers.

Action:

Section 2.4 of the Relay Evaluation Report for the Oconee Nuclear Station addresses all the relay Outliers, including those resolved and those having proposed resolutions.

Section 11

REFERENCES

1. Generic Implementation Procedure (GIP) for Seismic Verification of Nuclear Plant Equipment, dated February 1992, copyright Seismic Qualification Utility Group (SQUG), Revision 2, corrected February 14, 1992.
2. USNRC, "Supplement No. 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)," dated May 22, 1992.
3. ONS USI A-46 Relay Evaluation Summary Report
4. Duke Power Company Letter to USNRC Responding to GL 87-02 -- Letter Dated: September 21, 1992.
5. USNRC Letter Accepting Duke Power Company Plan for Resolving USI A-46 --- Letter Dated: April 5, 1993.
6. Duke Power Company - Oconee Nuclear Station - Updated Final Safety Analysis Report (UFSAR) - Updated 12/31/95.

Appendix A

Résumés for Seismic Capability Engineers

RESUME
RAYMOND L. McCOY
PAGE 1

RESUME

Name: **RAYMOND L. McCOY**

Company: **Duke Engineering & Services, Inc.**

Title/Position: **Senior Engineer**

Years with Firm: **15**

Years Experience: **19**

Education/Training:

BS, Civil Engineering, University of Cincinnati, 1981
Graduate course work, Nuclear Engineering, University of South Carolina, 1981-1985

Professional Affiliations/Certifications:

Professional Licensed Engineer, North Carolina
Engineer in Training Certificate, Ohio
American Society of Civil Engineers, Associate Member
Society of American Military Engineers, Student Member

Experience:

08/92-Present **Senior Engineer - Duke Power Co.**

Serves as Project Manager for Individual Plant Evaluation for External Events (IPEEE) and A-46 effort for Oconee Nuclear Station. Completed training in Safe Shutdown Equipment Selection, Relay Evaluation and Seismic Walkdown for both A-46 and IPEEE programs. Duties also include scoping, planning, scheduling, technical support and serving as group leader.

RESUME
RAYMOND L. McCOY
PAGE 2

08/86-07/92

Design Engineer - Duke Power Co.

Conducted research on the reactor vessel support in a Plant Life Extension (PLEX) Study co-sponsored by Duke and the Electric Power Research Institute (EPRI), used by EPRI to generate a typical approach to PLEX work. Presented the results of this work at the American Nuclear Society Life Extension Seminar in August 1988. Also responsible for viewing other PLEX work performed by vendors.

Involved in development of Design Basis Documentation for Civil Structures and seismic issues for Oconee Nuclear Station.

Performed an extensive study on the seismic instrumentation program at one of Duke's three nuclear plants. Researched vendors' recommendations, Nuclear Regulatory Commission (NRC) commitments, and current licensing requirements.

Generated Training Manual for using a structural design/analysis computer program (STRUDL). Conducted a training class on the same program.

Coordinated civil effort in the evaluation of reactor building temperature limits and in the thermal analysis of concrete exposed to the evaluated temperature.

Assisted work group supervisor, during his absence, in assigning work, providing administrative support, and in the resolution of questions directed to the group.

Provided technical support/direction to North Carolina State University Research Center on Low Fluence Radiation Embrittlement of Ferritic Steels.

08/83-07/86

Engineer Associate - Duke Power Co.

Designed the addition of a hoist/elevator to existing reinforced concrete structure. Investigation included but not limited to capacity of the existing structure, extensive investigation into NRC commitments, design alternatives satisfying Occupational Safety and Health Act (OSHA) and Fire Code requirements.

Performed the required inspections on nuclear safety related structures at McGuire Nuclear Station. These included the standby nuclear service water dam and outlet, and the reinforced concrete structure of the reactor building.

RESUME
RAYMOND L. McCOY
PAGE 3

Analyzed and documented the effects of large impact loadings at the request of the NRC.

Developed procedure for qualifying and documenting the loads from structural attachments (e.g., lifting lugs, pipe supports, etc.) made to an operating plant. Responsible for qualifying attachment loads made to McGuire.

07/81-07/83 Engineer Associate - Duke Power Co.

Performed analysis using STRUDL for static and seismic loads, and design of maintenance access platforms. Reviewed drawings and coordinated with vendors and manufacturing representatives to complete station modifications.

09/77-09/80 U.S. Army Corps of Engineers

Co-op assignment in Louisville, Ky., included: structural and general engineering groups, geotechnical, relocations, and survey branches. Assignments in construction division included field inspection of projects and interfacing with contracting supervisors.

Awards/Honors:

Certificate of Achievement in Structural Design, University of Cincinnati
Eugene A. Carsey Award, Engineers and Scientists of Cincinnati (past Member)
Chi Epsilon Civil Engineering Honor Society (past Associate Editor)
Tau Beta Pi Engineering Honor Society
Charles and Oneida B. Herfurth Scholarship, 1980-1981

Russell P. Childs
211 Devon Way
Anderson SC 29621
803-261-9353

Oconee Nuclear Station
P.O. Box 1439
Seneca SC 29679
803-885-4402

Education

Clemson University: BSCE, 1982

Professional registration

Registered Professional Engineer: State of South Carolina

Professional experience

9/93 - Present Senior Engineer

Part of A-46/IPEEE Seismic Review Team at Oconee Nuclear Station. Duties include set up and organization of electronic data collection method using field computers, performing seismic walkdowns of SSEL equipment, overall organization and scheduling of walkdowns and performed/checking calculations as needed to support walkdown results and conclusions.

6/87 - 9/93 Design Engineer

Designed structural steel to support and restrain nuclear safety related piping systems at Oconee Nuclear Station. Duties included performing appropriate calculations to qualify the support structure and providing engineering support to construction during implementation. Calculations consisted of baseplate, anchor bolt, weld and member designs by use of ICES STRUDL, ANSYS BASEPLATE II and manual methods.

6/85 - 6/87 Engineer Associate

On site representative for Design Engineer at Oconee Nuclear Station. Performed the duties of "Accountable Engineer" for station modifications ranging from valve and equipment replacement or repair to station additions. Duties included coordinating implementation, providing engineering support to construction and ensuring that plant specifications are met.

2/83 - 6/85 Engineer Associate

Provided engineering field support at Catawba Nuclear Station. Primary duty was to interpret and evaluate structural steel erection problems and provide optimum action for resolution. Solutions ranged from minor sketch changes to major redesigns.

5/82 - 2/83 Engineer Assistant

Designed structural steel to support and restrain nuclear safety related piping systems at Oconee Nuclear Station. Duties included performing appropriate calculations to qualify the support structure and providing engineering

support to construction during implementation.. Calculations consisted of baseplate, anchor bolt, weld and member designs by use of ICES STRUDL, ANSYS BASEPLATE II and manual methods.

Professional memberships

Associate Member ASCE

Security clearance

Currently badged for unescorted access to Oconee Nuclear Station

References

Available upon request

Lawrence Brantley Elrod
4001 Brackenberry Drive
Anderson SC 29621
803-226-9876

Oconee Nuclear Station
P.O. Box 1439
Seneca SC 29679
803-885-4400

Education

Clemson University: BSCE, 1980

Professional registration

Registered Professional Engineer: South Carolina, North Carolina

Professional experience

8//94 - Present Senior Engineer

Part of A-46/IPEEE Seismic Review Team at Oconee Nuclear Station. Duties include performing overall project scheduling, seismic walkdowns of SSEL equipment, and perform/checking calculations as needed to support walkdown results and conclusions.

1/92 - 8/94 Senior Engineer

Involved with general civil engineering related projects including safety-related structural steel design/qualification. Also, performed miscellaneous environmental related work activities which were performed in an effort to enhance compliance with latest regulations.

11/89 - 12/91 Design Engineer

Responsible for assessing corporate impact and interfacing with local, State, Federal environmental agencies concerning various regulatory and legislative environmental issues. Also responsible for environmental assessments of all Company property bought and/or sold.

5/88 - 11/89 Design Engineer

Served as the assistant to chief civil engineer. Responsible for the development and monitoring of a 300 person/13 million dollar yearly budget. Also served as the division quality assurance coordinator, coordinated division personnel training needs and other administrative duties, as needed.

12/85 - 5/88 Design Engineer

Responsible for overall coordination and design of all high temperature pipe support designs for the EPRI Atmospheric Fluidized Bed Combustion Project. Also involved in miscellaneous structural steel design and resolving steel erection problems at the jobsite. Worked closely with vendors, Flour-Daniel, and Tennessee Valley Authority personnel.

12/84 - 12/85 Engineer Associate

Primarily responsible for the supervision of three contract personnel performing seismic design/qualification of HVAC duct supports. Also responsible for coordinating the work effort and solving design related problems among seven other engineers. Served as the interface between the HVAC contractor and the Design Engineering Department. Responsible for providing rapid solutions to HVAC duct support installation problems as they occurred at the jobsite.

5/84 - 12/84 Engineer Associate

One of four Design Engineering employees directly involved with a pipe support and stress analysis study done by Duke Power Company for the Tennessee Valley Authority. Work involved an extensive evaluation of the pipe support design and construction techniques in use at the Bellefonte and Watts Bar Nuclear Plants.

7/80 - 5/84 Engineer Associate

Work involved the stress analysis and support of small bore nuclear safety related piping systems. Involved with piping stress analysis, structural steel design of pipe supports, establishing math model boundaries and coordinating the work effort of these models among seven engineers. Responsible for resolving field installation problems, and reviewing as-built change notices for impact and reanalysis requirements.

Security clearance

Currently badged for unescorted access to Oconee Nuclear Station

References

Available upon request

Robert V. Hester
130 Lakewood Dr.
West Union, SC 29696

Oconee Nuclear Station
P.O. Box 1439
Seneca SC 29679
803-885-4333

Education

University of South Carolina BS Engineering, 1973
University of South Carolina MS Engineering(Structures), 1983
University of South Carolina MS Engineering(Mechanical), 1988

Professional registration

Registered Professional Engineer: State of South Carolina

Professional experience

9//93 - Present Engineer

Part of A-46/IPEEE Seismic Review Team at Oconee Nuclear Station. Duties include performing seismic walkdowns of SSEL equipment, origination and checking of calculations relative to equipment anchorage, seismic interaction, frequency evaluations, and structural adequacy.

6/79 - 9/93 Design Engineer

Analysed and designed structural steel and reinforced concrete structures for Nuclear Power Plant applications, performed Safety Evaluations in support of 10CFR50.59 commitments, designed instrumentation program for Bad Creek Pumped Storage Hydroelectric Project.

5/74 - 6/79 Engineer Associate

Analysed and designed structural steel and reinforced concrete structures for Nuclear Power Plant applications.

5/74 - 6/79 Engineer Assisstant

Analysed and designed earthworks and appunrtances for Lee Steam Station Ash Basin. Analysed and designed structural steel and reinforced concrete structures for Nuclear Power Plant applications.

Security clearance

Currently badged for unescorted access to Oconee Nuclear Station

References

Available upon request

RESUME

DARRYL ALLEN KELLEY

FORMAL

EDUCATION: North Carolina State University, BSCE, 1975
University of South Carolina, MCE, 1980

ADDITIONAL

TRAINING: McAuto Strudl Usage Seminar
Miscellaneous ASME Sections III & XI Seminar - ASME
Steel Design Current Design Practice Seminar - AISC
Load and Resistance Factor Design Seminar - AISC
Miscellaneous Welding Seminar - Lincoln Arc Welding
SQUG/IPEEE Walkdown Training - SQUG

PROFESSIONAL

INVOLVEMENT: Registered Professional Engineer - NC 8990 (1979)
SC 8006 1980)
Member - American Society of Civil Engineers

WORK

EXPERIENCE:

<u>From</u>	<u>To</u>	<u>Title</u>	<u>Program</u>	<u>Company</u>
8/95	Present	Engineering Supervisor II	Oconee Nuclear Station	Duke Power Company

Team leader of engineers and technical specialists responsible for Mechanical Equipment design, modification, and maintenance programs at Oconee Nuclear and Keowee Hydro Stations. Scope of work include site point contact for welding, piping, erosion/corrosion, mechanical fasteners, tanks, heat exchangers, accumulators, filters, strainers, Inservice Inspection, pressure testing, miscellaneous ASME Section XI activities, cranes, reactor vessel, control rod drive mechanisms, dry spent fuel storage, and fuel handling equipment. Scope of activities includes predictive and preventative maintenance, failure, trending, root cause of equipment failures, and maintenance engineering technical support. Manager responsible for implementation of SQUG program.

<u>From</u>	<u>To</u>	<u>Title</u>	<u>Program</u>	<u>Company</u>
4/91	8/95	Engineering Supervisor II	Oconee Nuclear Station	Duke Power Company

Team leader of engineers responsible for design, implementation and maintenance of Civil Engineering scope projects and equipment at Oconee Nuclear Station and portions of Keowee Hydro (including SQUG program). Site point contact for all civil engineering related problems and concerns. Duties include: effective organization, planning, direction, and monitoring of team activities to ensure both internal/external customers needs are met with high quality, cost-effective solutions to problems in a timely manner; providing effective team leadership to motivate and reward team members; effective management of individual and team performance to ensure site and individual goals/objectives are met; providing and promoting safe work environment.

<u>From</u>	<u>To</u>	<u>Title</u>	<u>Program</u>	<u>Company</u>
10/89	4/91	Senior Engineer	Duke Nuclear Stations	Duke Power Company

Work leader of engineers responsible for seismic qualification of equipment and commercial grade evaluations in support of Duke nuclear stations. Duties include: planning/estimating/scheduling/monitoring of group work effort; directing preparation, review, and revision of commercial grade evaluations; preparation, review, evaluation of specifications/vendor proposals; coordination with clients; providing effective team leadership. Additional responsibilities include coordination of utility input to NSSS vendor certification efforts for future ALWR and supporting EPRI on resolution of issues identified through ALWR Project.

<u>From</u>	<u>To</u>	<u>Title</u>	<u>Program</u>	<u>Company</u>
11/87	10/89	Senior Engineer	DOE/ALWR Project	Duke Power Company

Member of, EPRI sponsored, multi-discipline contractor team that organized and developed ALWR Utility Requirements Document. Duties included providing input to document in areas of plant constructability, building design\arrangement, and fueling/refueling systems. Attended working meetings with other contractors to resolve issues impacting standardized design requirements. Member of Contractor Team responsible for administrative and technical management of DOE/Duke Design for Constructability Program. Purpose of program was to identify and develop areas that could improve cost and schedule of ALWR construction. Duties included organization of working meetings/workshops to involve numerous industry representatives (utilities, A/E's, vendors, etc.) and preparation of written reports on such meetings.

Member of Subcontractor Team that managed portions of Combustion Engineering's System 80+ Standard ALWR Design Certification effort at Duke. Duties included preparation of scope documents, manpower estimates, schedules, and budget associated with work effort performed by Duke.

<u>From</u>	<u>To</u>	<u>Title</u>	<u>Program</u>	<u>Company</u>
11/85	11/87	Design Engineer II	Power Plant Modifications	Duke Power Company

Performed technical reviews of engineering studies, cost estimates, and design modifications to operating Fossil and Nuclear Generation Stations. Scope of reviews included constructability, code/regulatory compliance, material procurement, and schedule. Provided technical support through DE&S on miscellaneous projects for Mississippi Power and Light Quality Assurance Department and Washington Public Power Supply System. Designed powerhouse structural steel for TVA AFBC demonstration project.

10/82 11/85 Design Engineer I Catawba Duke Power Company
Nuclear Station

Supervised engineers responsible for: designing rupture restraint/jet barriers, qualification of structural steel frames for pipe hanger/rupture restraint loads, analysis/design of small bore ASME code pipe and associated pipe supports. Duties included supervision of assigned personnel, employee evaluations, counseling, scheduling/planning, developing/reviewing design specifications/construction procedures, reviewing design calculations and drawings, interfacing with various Design Engineering, Construction, and Nuclear Production personnel.

06/80 10/82 Design Engineer I Oconee Duke Power Company
Nuclear Station

Supervised engineers responsible for miscellaneous civil projects at Oconee. Scope of work included: structural qualification of reactor, auxiliary, and turbine buildings for design loads associated with NRC IE Bulletin 79-14, generation of specifications summarizing seismic design commitments for civil structures, updating Oconee Final Safety Analysis Report, design of small bore ASME code pipe supports in SSF, miscellaneous station modifications. Duties included supervision of assigned personnel, employee evaluations, counseling, developing/reviewing design specifications, reviewing design calculations, scheduling/planning, originating cost estimates for modifications, and interfacing with various Design Engineering, Construction, and Nuclear Production personnel.

<u>From</u>	<u>To</u>	<u>Title</u>	<u>Program</u>	<u>Company</u>
06/75	06/80	Engineer Assistant/ Engineer Associate	Power Plant Modifications	Duke Power Company

Performed engineering studies, cost estimates, and design modifications to operating hydroelectric, fossil, and nuclear generating power plants. Work responsibilities included preparation of engineering calculations, design sketches, specifications, bill of materials, cost estimates, personal/project schedules, and construction drawings. Additional duties includes technical

evaluation of vendor proposals, interfacing with Mechanical/Electrical/Vendor/ Construction Groups, annual inspections of civil structures, monitoring of construction progress, and resolution of field installation problems. Design experience includes: analysis and design of structural steel/reinforced concrete structures, hydrological flood routing studies including weir/open channel/pipe flow calculations, foundation design, evaluation of soil investigation and laboratory test data, earth dam analysis, and ASME Code.

Robert W. McAuley, Jr.

Formal

Education: North Carolina State University: BSCE 1975
University of South Carolina: Master of Engineering 1981

Professional

Involvement: Registered Professional Engineer - NC 9009
SC 8739
Member - ASCE

Work

Experience:

<u>From</u>	<u>To</u>	<u>Title</u>	<u>Program</u>	<u>Company</u>
11/91	Present	Senior Engineer	Nuclear Services	Duke Power

Serves as overall leader and coordinator for Duke's Individual Plant Examination For External Events (IPEEE) efforts at its three nuclear stations. Duties include strategy and plan development, leadership, technical involvement, and project coordination and management.

7/91	11/91	Engr. Supervisor I	Oconee	Duke Power
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Supervised Oconee Civil Engineering Group that provided general civil engineering design and support for modification work and other support activities of all structures, systems, and equipment at Oconee.

2/86	7/91	Design Engr. II/ Project Manager	Power Group Projects	Duke Power
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Served as Project Manager for various Power Group Projects, including Oconee Standby Shutdown Facility, Oconee Radwaste Facility, McGuire QA Office Building, and Oconee Technical Training Center Expansion. Responsibilities included corporate leadership and focus for all business activities of assigned projects, assuring that an integrated project schedule and business plan, in accordance with the Company Business Plan, were developed and followed.

10/85	2/86	Design Engr. I	Fossil Stations	Duke Power
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Lead Engineer for group of engineers designing pipe supports for fossil stations. Duties included coordination of all group activities.

12/79	10/85	Engr. Associate/ Design Engr. I	Catawba	Duke Power
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Supervised group of engineers designing pipe supports for large bore ASME code pipe analyzed by Rigorous Analysis Criteria. Duties included supervision, review of design calculations and drawings, and interfacing, as necessary, with Construction Department and other groups.

6/78	12/79	Engr. Associate/ Asst. Project Civil Engineer	Bad Creek Catawba	Duke Power
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Served as Assistant Project Civil Engineer for Catawba Nuclear Station and Bad Creek Pumped Storage projects. Duties included coordinating and monitoring Civil Division project schedules, coordinating between divisions, and preparing monthly status reports for management.

5/75	6/78	Engr. Assistant/ Engr. Associate	Catawba	Duke Power
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Part of design team that designed the Catawba Nuclear Station reinforced concrete Auxiliary Building. Responsibilities included design, technical supervision for preparation of all construction drawings and material lists, and consultation with construction engineers to resolve any problems during erection. Designed Catawba spent fuel storage racks and performed technical evaluation of contractor's bids. Prepared original draft of the "seismic design" portion of the Catawba Final Safety Analysis Report. Designed two-story structural steel office building addition.

JOHN M. RICHARDS

PERSONAL: Address: 6233 Edmore Blvd. Telephone: (704) 394-4140 (Home)
Charlotte, NC 28216 (704) 382-3916 (Office)

EDUCATION: Virginia Polytechnic Institute and State University, BSCE 1980
Virginia Polytechnic Institute and State University, MECE 1982

PROFESSIONAL AFFILIATIONS: Registered Professional Engineer, North Carolina, South Carolina
Member of American Society of Civil Engineers
Seismic Qualification Reporting and Testing Standardization (Chairman 1994-1995)
EPRI Seismic Design & Qualification Committee (Chairman 1995-Present)
EPRI Seismic Technical Evaluation of Replacement Items Task Group

COURSES & SEMINARS: SQUG New and Replacement Equipment Training
SQUG Walkdown Screening and Seismic Evaluation Training Course
SQUG Safe Shutdown Equipment Selection & Relay Screening and Evaluation Training
Seminar on Reducing Seismic Stresses in Structures, Equipment, and Piping - NCSU
Symposium on Current Issues Related to Nuclear Structures, Equipment, and Piping - NCSU
International Modal Analysis Conference - Union College
American Institute of Steel Construction LRFD Seminar - UNC Charlotte
ANSYS Computer Program Seminar- Patel Engineers
EDASP Computer Program Seminar - Stevenson & Associates
Miscellaneous Technical and Professional Development Seminars (15) at Duke Power
Computer Program Usage Seminars and Training (DOS, Lotus, dBASE III, Project Management Workbench, Windows, ACCESS, etc) at Duke Power

WORK EXPERIENCE:

<u>FROM</u>	<u>TO</u>	<u>TITLE</u>	<u>COMPANY</u>
4/91	Present	Senior Engineer	Duke Power

Coordination and supervision of seismic qualification activities. Activities include generic analysis of equipment seismic adequacy, evaluations for Nuclear Station modifications and component replacements, and Commercial Grade component seismic evaluations. Specified, observed, and reviewed shake table and low level in-situ modal tests. Participate on numerous industry seismic committees and working groups. Review proposed modifications to industry standards and NRC regulatory guides.

WORK
EXPERIENCE (Continued):

<u>FROM</u>	<u>TO</u>	<u>TITLE</u>	<u>COMPANY</u>
9/86	4/91	Design Engineer I	Duke Power

Seismic qualification of electrical equipment for all three Duke Power Nuclear Stations. Includes analysis of equipment mountings; review of shaker table test reports and vendor stress reports; and static and dynamic finite element analysis. Perform stress analysis using finite element techniques. Perform response spectra generation using finite element and "direct generation" techniques. Observed and reviewed shake table and low level in-situ modal tests. Participated in the Seismic Margin Assessment of Catawba Nuclear Station. Review proposed modifications to industry standards and NRC regulatory guides.

9/83	9/86	Engineer Associate	Duke Power
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Seismic qualification of electrical equipment for all three Duke Power Nuclear Stations. Analysis of equipment mountings and seismic qualification; review of shaker table test reports and vendor stress reports; and static and dynamic finite element analysis. Performed stress analysis and response spectra generation using finite element techniques. Developed techniques to pre qualify modifications to large main control board assemblies. Participated in the in-situ model testing of the Oconee Nuclear Station Main Control Boards.

2/82	9/83	Engineer Assistant	Duke Power
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Seismic qualifications of electrical equipment for Catawba Nuclear Station. Performed seismic stress analysis and response spectra generation using finite element techniques. Reviewed low level in-situ modal tests and verified finite element models using the test results.

PUBLICATIONS

Co-author of Seismic Qualification of Main Control Boards by Combined Mathematical Model and In-Situ Modal Test, submitted to the Specialty Conference on Structural Engineering in Nuclear Facilities, September 1984.

RESUME

Name: RICHARD W. HOUGH

Company: Duke Engineering & Services, Inc.

Title/Position: Design Engineer

Years with Firm: 15

Years Experience: 15

Mr. Hough has nuclear expertise includes structural design. He has performed structural designs at Duke Power's Catawba, McGuire, and Oconee Nuclear Stations. His experience has included designs associated with turbine, auxiliary and reactor buildings and has worked on steam generator replacement projects at St. Lucie and Point Beach nuclear plants. Most recently, Mr. Hough has prepared concrete construction documents and converted to Russian equivalents for Zaporozhye Nuclear Power Plant in Ukraine.

Education/Training:

BS, Civil Engineering, Clemson University, 1981
Graduate Courses in Structural Design, University of South Carolina

Duke Power Training:
Computer Program Usage Seminar; STRUDL/BASIC/DYNAL
Advanced STRUDL II
Finite Elements
Engineering Scheduling
Piping Analysis
Design of Welded Steel Structures Seminar, Lincoln Electric Co.
EPRI A-46 and IPE SQUG Training

Central Piedmont Community College, 1995-1996:
Microsoft Word Training (Excel Level 1 & 2, Word Level 1 & 2, Access Level 1)
WordPerfect Level 1

Professional Affiliations and Certifications:

Registered Professional Engineer, N.C. #12987, S.C. #11258
American Society of Civil Engineers (ASCE)

Experience:

09/92-Present

Design Engineer - Duke Engineering & Services

Currently working on the Zaporozhye Nuclear Power Plant Spent Fuel Storage Project, in South Ukraine. Responsible for concrete documents, comparison and conversion of U.S. documents into equivalent Russian construction documents.

Has originated calculations for new, existing and modified pipe supports in clients, including Carolina Power & Light's Brunswick Nuclear Station. Designed/analyzed building steel and estimated steel, earthwork, concrete and form work requirements on buildings of the Monitored Retrievable Storage Facility (MRS). Audited St. Lucie Steam Generator Replacement documents for technical and quality assurance requirements.

Completed A-46 and IPE SQUIG training courses. In accordance with this training, surveyed safe shutdown equipment at Oconee Nuclear Station. Checked calculations that analyzed and designed concrete and reinforcing for the main steam valve house wall, steam generator wing wall, diesel generator interior and exterior walls, east-west shear walls, and north-south shear walls for the System 80+ ALWR standardized nuclear plant.

Designed permanent and temporary supports in preparation for the removal of steam generators at the Florida Power & Light Port St. Lucie Nuclear Plant. Responsible for designing supports for the replacement steam generator blowdown piping reroute. Researched rupture restraint and jet impingement requirements for the blowdown nozzles and piping for the replacement steam generator.

Qualified pipe support load increases at Oconee Nuclear Station. Wrote aging management review sections for electrical equipment (structural section) in support of the Oconee Nuclear Station License Renewal effort.

Also performed tubing analysis and support qualification calculation for new tube routes for the Point Beach Steam Generator Replacement Project.

01/89-09/92

Design Engineer - Duke Power Company

Responsible for estimating and scheduling work hour requirements and time frames for support/restraint calculations at McGuire Nuclear Station. Coordinated work tasks for nuclear station modifications. Performed and checked calculations of support/restraints for mechanical piping in the turbine, auxiliary, and reactor buildings. Designed HVAC supports and analyzed duct spans for static and dynamic analysis. Provided field survey support/restraint configurations for later office analysis. Performed stiffness analysis calculations on support restraints for pressurizer relief piping.

09/84-01/89

Engineer Associate - Duke Power Company

Designed and analyzed McGuire Nuclear Station's HVAC supports for seismic adequacy. Worked as a field engineer at Bad Creek Hydroelectric Pumped Storage Project. Designed and analyzed foundation and pedestal concrete in preparation for a high capacity concrete mix plant. Designed shoring to support concrete pours for roofs and floors of the Bad Creek Powerhouse. Designed beam steel for temporary walkway platform extending the length of the Bad Creek Powerhouse. Checked walkway shop drawings. Performed calculations on as-built conditions for Oconee Nuclear Station's support/restraints. Worked as field engineer supporting night shift outage work at Oconee Nuclear Station. Checked support/restraints for construction and initiated changes. Verified engineering information on in-service inspection support/restraint reports.

05/81-09/84

Engineer Assistant - Duke Power Company

Performed calculations on McGuire Nuclear Station's HVAC fan supports and duct layouts. Performed and checked calculations on support/restraints for mechanical piping within the turbine and auxiliary buildings. Performed field surveys locating requested platforms required for personnel access to valves and instruments at Catawba Nuclear Station. Originated calculations for the design of these platforms. Designed beams and supports for bridge cranes. Performed calculations to verify the adequacy of load changes on the pressurizer lower lateral support. Checked calculations on embedded plate allowable capacities, reactor vessel stud guide brackets, and missile shield lifting rigs. Performed and checked calculations tabulating loads for various cable tray support configurations, verifying the structural integrity of the reactor vessel primary shield and upper shield concrete walls. Checked adequacy of

McGuire Nuclear Station access platforms for seismic loads. Reviewed field initiated rebar cuts and concrete attachments. Analyzed masonry block walls for seismic loads and designed supports to restrain these block walls from failing.

RESUME

Name: GERALD L. GREEN

Company: Duke Engineering & Services, Inc.

Title/Position: Senior Engineer

Years with Firm: 22

Years Experience: 26

Mr. Green is experienced as a structural engineer. He has extensive experience with McGuire and Catawba Nuclear Stations' reactor building components including the crane wall, concrete portions of the steam generator and pressurizer enclosures, annulus floors and partition walls, and the primary shield wall. He was part of the original group preparing DBDs for McGuire Nuclear Station. He completed the DBD for the standby nuclear service water pond and associated safety-related structures and supported completion of the reactor building DBD. He prepared the structural design criteria specifications for the System 80+ Advanced Light Water Reactor.

Education/Training:

ME, Structures and Mechanics, University of South Carolina, 1969

BS, Civil Engineering, University of South Carolina, 1968

Civil Engineer Corps Officer School, US Naval Construction Battalion Center, Port Hueneme, Calif., 1969

Structural Steel Connections, University of South Carolina, APOGEE

Principles of Accounting, University of North Carolina at Charlotte, 1985-86

Strength Design of Reinforced Concrete, Central Piedmont Community College

Welding Seminar, Lincoln Electric

Duke Power Training:
Performance Management Program
Effective Management Program
Management Development Program
Basic Engineering Professional Technical Training
Engineering Nuclear Power Fundamentals
Technical and Effective Writing Classes

SQUG Walkdown Screening and Seismic Evaluation Training Course, Follow-up Seismic IPE Add-On Course

Knowledgeable in the use of STRUDL for structural analysis

Professional Affiliations/Certifications:

Registered Professional Engineer, N.C. # 6950
Registered Professional Engineer, S.C.# 7949
American Society of Civil Engineers
NSI N690 Committee on Nuclear Safety Related Steel Structures, 1992-present

Experience:

05/94-Present **Senior Engineer, Advanced Nuclear Programs - Duke Engineering & Services**

Participating as a Seismic Engineer in the SQUG seismic evaluation walkdowns at Oconee Nuclear Station. Prepared update of the ABB-CE System 80+ Design Certification Distribution Systems Design Guide. Prepared scoping document relating to nuclear plant life extension for the Oconee Nuclear Station Reactor Buildings.

02/93-05/94 **Senior Engineer, Advanced Nuclear Programs - Duke Engineering & Services**

Prepared the Structural Design Criteria Specification for the ABB-CE System 80+ Advanced Light Water Reactor. Prepared calculations using STRUDL generated reactions and ABB-CE provided SAP90 design loads to determine reinforcing requirements for critical areas of the Nuclear Annex (i.e. Auxiliary Building) exterior walls. Provided technical assistance in support of other engineers working on the System 80+ in the areas of concrete design and concrete reinforcing details.

12/92-02/93 **Senior Engineer - Carolina Power and Light Co.**

Assigned under DE&S contract to provide detailed technical review of calculations generated to seismically qualify Brunswick Nuclear Station Reactor Building miscellaneous platforms. Calculations were being performed by Bechtel Corp. with an NRC requirement mandating that all platform calculations would be completed prior to unit startup.

04/92-12/92
Power

Senior Engineer, McGuire Nuclear Station - Duke

Provided engineering and technical support to other station groups for questions involving structural modifications and equipment anchorage. Served as work leader while providing technical support for projects at McGuire Nuclear Station. Participated on structural and dam inspection teams, and assisted with maintenance requirements for structural steel corrosion in the McGuire Turbine Building. Provided maintenance recommendations for alleviating leakage problems into the Turbine Building. Performed inspection and qualification of structural steel for QA condition upgrades.

07/86-04/92

Senior Engineer, Design Engineering - Duke Power

Transferred to new group to serve as lead Civil Engineer for the expansion of the McGuire Nuclear Station Auxiliary Building. Project was to add space for low level radwaste collection and consolidation as well as additional office space. The building addition consisted of a steel frame structure of approximately 14,000 square feet on three levels. Performed the structural steel design, overseeing the preparation of structural drawings. Interfaced with steel fabricator to review and approve shop drawings and resolve fabrication questions. Prepared calculations required to qualify the modifications to the adjacent steel structure needed to provide functional tie-ins.

Provided engineering and technical support to other station groups for questions involving structural modifications and equipment anchorage. Served as work leader while providing technical support for projects at McGuire Nuclear Station.

Performed reverification of original calculations documenting available free volume inside containment. Intent was to evaluate loss of steam expansion space due to the addition of equipment.

Participated in the original group preparing Design Basis Documents (DBDs) for McGuire Nuclear Station. Completed the DBD for the Standby Nuclear Service Water Pond and associated safety related structures.

Served as de facto supervisor for a period of 6 months coinciding with terminal illness of assigned supervisor. Responsible for providing day-to-day technical support to other junior engineers

11/83-07/86 **Design Engineer, Design Engineering - Duke Power**

Served as work leader under the combined Oconee and McGuire pipe support

organization, following reorganization in anticipation of completion of design work related to IEB 79-14. Responsible for completeness and technical accuracy of support/restraint calculations.

09/78-11/83 **Design Engineering Supervisor, Design Engineering - Duke Power**

Assisted in the planning required for the organizational structure as well as the procedures needed to efficiently prepare support restraint designs for the proposed Cherokee Nuclear Station. With the release of IEB 79-14 after the Three Mile Island incident, work group efforts were refocused from new S/Rs to surveillance and analysis to qualify existing piping support restraints. Responsible for main steam and main feedwater systems with loads on some support restraints near 200 kips. Approved support restraint calculations consisting of qualification for existing structural steel, including connections and reinforced concrete components for the increased support restraint loads.

Major support restraint modifications required adding steel members for support restraint attachments and new steel beams to transfer heavier loads through the existing structural steel framework. Supervised workforce including six Duke employees and as many as 13 job shoppers.

09/76-09/78 **Assistant Design Engineer, Design Engineering - Duke Power**

Designed structural steel for the Cherokee Nuclear Station Control Annex Building as well as the Catawba and Cherokee turbine buildings. Performed calculations and checked design drawings. Checked and approved vendor fabrication drawings prior to fabrication. The Control Annex was a steel framed, seismic QA1 structure, measuring 80'X240'X90' high. The Control Annex involved a gantry crane mounted on railroad tracks approximately 100 feet above the basement floor. Crane runway support beams were mounted on column segments that extended above the roof and were designed to be removed prior to project completion.

09/73-09/76

Engineer Associate, Design Engineering - Duke Power

Assigned to the Design Engineering group responsible for the McGuire and Catawba Nuclear Stations' reactor building components, primarily reinforced concrete. Specific assignments included McGuire's crane wall and the concrete portions of the steam generator and pressurizer enclosures. Catawba assignments included the crane wall, the annulus floors and partition walls supported from the outside face of the crane wall, and the primary shield wall.

11/71- 09/73

Lieutenant, Mobile Construction Battalion 62 - U.S. Navy

As the Plans and Training Officer (S2), administered the battalion training program and maintained the battalion contingency plans. Was designated Project Manager for the permanent runway paving project on Diego Garcia in the British Indian Ocean Territories.

Supervised construction crews transporting concrete from local batch plant in open dump trucks to another crew operating the slip form paver and associated construction equipment. Paving consisted of a 150 by 8000-foot concrete runway with paved overruns, taxiways, parking apron and surrounding site preparation. Supervised electrical crew installing runway lighting. Managed earthmoving personnel and equipment performing final site clearing and grading around the airfield site.

Served as NMCB-62 Delta Company Commander (builders, plumbers, and electricians) following deployment until release from active duty.

11/69-11/71

Lieutenant Jr. Grade/Lieutenant, U. S. Naval Communications Station, Sidi Yahia, Morocco - U.S. Navy

Served as Assistant Public Works Officer. Administered preparation of military construction and special project funding requests. Inspected maintenance, remodeling and construction projects performed by local contractors. Projects included base kindergarten building, barracks remodeling and road improvements. Provided technical expertise to station personnel on civil engineering matters. Supervised maintenance and operation duties.

Served as station civilian personnel officer. Supervised preparation of weekly payroll records. Maintained liaison with local union representatives.

09/69-11/69

**Lieutenant Jr. Grade, Civil Engineer Corps Officers
School, Port Hueneme, Calif. - U. S. Navy**

Attended Basic and Public Works Management classes at the Navy Civil Engineer Officers School.

07/69-08/69

Engineer Assistant, Design Engineering - Duke Power

Designed miscellaneous steel equipment supports and participated in the design of steel columns for the Oconee Nuclear Station Turbine Building.

RONALD M. POLIVKA

EDUCATION

UNIVERSITY OF CALIFORNIA, Berkeley, California: Ph.D., Structural Engineering, 1976
UNIVERSITY OF CALIFORNIA, Berkeley, California: M.S., Structural Engineering, 1970
UNIVERSITY OF CALIFORNIA, Berkeley, California: B.S. (Honors), Civil Engineering, 1969

SQUG Walkdown Screening and Seismic Evaluation Training Course, September 1994

Department of Energy Workshop on Walkthrough Field Guide and SQUG/EPRI Seismic Evaluations, Denver, Colorado, April 1993

Workshop on the Design and Evaluation Guidelines for Department of Energy Facilities Subjected to Natural Phenomena Hazards, UCRL 15910 (DOE Orders 5480.23 and 5480.28), Lincolnshire, Illinois, April 1991

PROFESSIONAL HISTORY

EQE International, San Francisco, California, Vice President, 1994-present
Cygn Energy Services, Oakland, California, Vice President and Western Regional Manager, 1987-1994

URS/John A. Blume & Associates, San Francisco, California, Vice President, 1983-1987.
Impell Corporation (formerly EDS Nuclear), San Francisco, California, Manager, Structural Analysis Section, 1976-1983.

Bechtel Corporation, San Francisco, California, Engineer, Special Structures Group, Nuclear Power Division, Summers of 1968, 1969, and 1971

PROFESSIONAL EXPERIENCE

Dr. Polivka has 20 years of experience in providing project management, seismic and structural consultation for commercial, energy, industrial and transportation facilities. He has had operational and management responsibility of engineering and technical staffs in excess of 80, performing over \$8 million in annual revenues. Currently, Dr. Polivka is responsible for providing senior-level project management and technical support for commercial, nuclear, and DOE projects.

His **nuclear power plant experience** includes:

- Project and Technical Manager for the A-46 and IPEEE Seismic assessment of the Keowee Hydro Station and the 230 Kv switchyard for the Oconee Nuclear Station, owned by Duke Power Company. The Keowee Hydro Station provides a source of emergency power generation for the Oconee Nuclear Station. The evaluations included unique components outside the typical

PROFESSIONAL EXPERIENCE (Continued)

SQUG evaluations, such as the turbine generators, governor control devices, exciter cabinets, current transformers, Cogental circuit breakers, and overhead and underground transmission lines

- Project and Technical Manager for the IPEEE Programmatic Assessment performed for Tennessee Valley Authority's (TVA) Watts Bar Nuclear (WBN) Plant. Recommended the appropriate methodology to be employed (e.g., SMA versus SPRA), along with associated costs. Also recommended how other related programs at WBN, such as the Appendix R and IPE work, could be effectively integrated into the IPEEE program.
- Project Engineer for the seismic reevaluation of essential piping systems at the San Onofre Nuclear Generating Station, Unit 1, owned by the Southern California Edison Company. Developed functionality criteria in support of SCE's intention to return to power prior to completion of their SEP seismic upgrade program for piping. The program involved selecting representative piping systems and demonstrating through nonlinear analyses that integrity and functionality were maintained below the criteria stress limits.
- Project Engineer for the seismic soil-structure interaction evaluation of the Hope Creek plant containment structure, owned by Public Service Electric & Gas.
- Project Engineer for the \$12 million structural reevaluation of Nebraska Public Power District's Cooper Nuclear Station BWR toroidal suppression chamber and its associated vent system and support structures.
- Developed a combined testing and analytical program to generically define vent downcomer loads for GE Mark I BWR containment systems. Represented General Electric Company and the Mark I Owners Group at licensing hearings before the Nuclear Regulatory Commission.
- Developed probabilistic-based site-specific seismic design criteria for the proposed San Joaquin Nuclear Project, owned by the Los Angeles Department of Water and Power.
- Evaluated the seismic vulnerability of the main electrical control panel for the R.E. Ginna Nuclear Power Plant, using a combined analytical and in-situ testing methodology.
- Project Manager for the development of emergency planning/evacuation procedures and training effort for Pacific Gas & Electric's Diablo Canyon Nuclear Power Plant.

PROFESSIONAL EXPERIENCE (Continued)

- Conducted dynamic fluid-soil-structure-interaction evaluations of Offshore Power Systems' proposed floating nuclear power plant station subjected to a wide variety of seismic and environmental loadings.
- Conducted seismic analyses of submerged fuel storage rack modules for the Salem, Peach Bottom, and Indian Point nuclear power plants. These nonlinear analyses evaluated the extent to which the racks would slide on the floor of the spent fuel pool and determined the resultant impact forces against the pool wall. Dynamic evaluations were also conducted for individual fuel canisters in the grid assembly.

His **DOE experience** includes:

- Program Manager for a 55-person project team which was responsible for implementation of the Rocky Flats Facilities Safety Assessment Program. This program entailed developing safety evaluation reports on key building systems; identifying functional performance requirements; defining measurable test functions and criteria; managing the issues resolution phase of this project; and performing comprehensive vital safety system functional assessments for Buildings 559, 707 and 771.
- Program Manager for selected seismic and safety analysis projects which were conducted at the DOE/Hanford site in support of Kaiser Engineers Hanford Company. These projects included:
 - Performed safety evaluations, developed hazard classifications, component/system safety classifications, and safety analysis reports. An example project included preparation of the safety assessment document for the Liquid Effluent Retention Facility (LERF). This assessment provided the risk analysis, safety analysis, and described the design basis, design criteria, and how the facility met the criteria and complied with DOE Order 6430.1A.
 - Performed seismic analysis and design of the Multi-Function Waste Tank Facility Project, W236A, to be used for the storage of high-level waste in double shell tanks. This project was conducted in accordance with DOE Order 6430.1A, DOE Order 5480.28, UCRL 15910, and the Tank Seismic Expert Panel's Seismic Guidelines, which supplement UCRL 15910.

PROFESSIONAL EXPERIENCE (Continued)

- Principal-in-Charge for the Management/Integration Overview of the Yucca Mountain Project Office Study Plan entitled "Historical and Current Seismicity" for the Yucca Mountain site. This review consisted of a technical overview of the Study Plan and a determination of the Study Plan's consistency with the Site Characterization Plan (SCP). Prior to conducting this review, Dr. Polivka successfully completed the DOE's Certification Training Program for DOE/HQ Study Plan Reviewers.
- In a study prepared for the Savannah River Plant, Dr. Polivka performed a comparative study of the seismic response of Reactor and Process Area Building 105-C using both the Housner and Blume seismic criteria.
- Dr. Polivka provided Senior-Level Project Management for the seismic/structural and mechanical/systems design portion of a major project comprised four, 500,000-gallon high-level radioactive waste storage tanks located at the Idaho National Engineering Laboratory (INEL) DOE facility.

Dr. Polivka's **commercial, industrial, and transportation experience** is primarily focused in the area of earthquake engineering and rehabilitation design programs. His experience in this area includes:

- Project Manager for seismic analysis of San Mateo Bridge, a major 5-mile crossing of the southern portion of the San Francisco Bay.
- Member of the Canadian Ministry of Transportation (MoTH) Seismic Peer Review Panel for the Port Mann Bridge seismic retrofit project. The Port Mann Bridge is a one-mile long, steel tied-arch structure which spans the Fraser River in Vancouver, B.C., and is a major link on the Trans-Canada highway.
- Project Manager for various seismic analysis and consultation projects conducted for Caltrans (State of California Transportation Department). Following the October 1989 Loma Prieta Earthquake, Dr. Polivka provided project overview and consultation of seismic analysis work performed by six consultants on the elevated viaducts in San Francisco. Dr. Polivka also supported Caltrans in presentations to the Governor's Board of Inquiry, and directed a series of seismic parametric studies of bridge structures which both validated and improved upon existing Caltrans seismic analysis procedures.

PROFESSIONAL EXPERIENCE (Continued)

- Project Manager for a comprehensive \$20 million seismic reliability assessment and upgrade of facilities and pipelines owned by the Seattle Water Department. This program, accomplished over an 8-year period, encompassed the major storage, transmission, treatment, and distribution facilities, and included a review and upgrade of the existing emergency response plan.
- Conducted a seismic/structural evaluation of 4 major water tanks owned by the Olympic View Water & Sewer District in Edmonds, Washington. The tanks included a 1.5 M.G. ground reservoir and 2.5 M.G. standpipe reservoir.
- Project Manager for a major seismic vulnerability assessment of facilities owned by the Southern California Gas Company. This project encompassed 13 gas compression and storage facilities, and included the evaluation of the seismic vulnerability of 550 items of major equipment and 40 structures, thus representing one of the largest seismic risk assessments to have been conducted of a lifeline gas-supply system in the State of California.
- Principal-in-Charge for an area-wide earthquake loss studies which encompassed the City of Boston and the City and County of St. Louis and two adjacent counties. This project was sponsored by the Federal Emergency Management Agency (FEMA) and predicted effects of a recurrence of the 1811-1812 New Madrid earthquake.
- Project Manager for a number of earthquake risk reduction projects for major industrial clients such as Apple Computer, National Semiconductor, Genentech, Raychem, Kaiser Aluminum, Del Monte, City of San Francisco (Moscone Convention Center), and the May Company.
- Conducted site investigations and investigated causes of failures from damaging earthquakes, including 1984 Morgan Hill, 1985 Mexico City, and 1989 Loma Prieta earthquakes.
- Organized and sponsored regional earthquake conferences in San Francisco, Los Angeles, Salt Lake City, and Seattle. These conferences were widely attended by business and industry and received local television and news coverage.
- Served as guest speaker at a number of civic and business functions, including the Rotary Club, Risk and Insurance Managers Society, American Institute of Plant Engineers, National Safety Council, Society of Fire Protection Engineers, and Johnson and Higgins' Western Property Loss Control Conference.

PROFESSIONAL EXPERIENCE (Continued)

- Performed soil-structure interaction (SSI) seismic analyses of three 160-ton transformers situated on a common foundation. These transformers are located at the Sylmar Converter Station, terminus of the Pacific DC Intertie Project.
- Dr. Polivka has specialized experience in the evaluation of offshore oil platforms subjected to extreme environmental loadings. He served as Project Engineer for the Offshore Structural Assessment (OSA) program, sponsored by a consortium of 13 oil companies, for determining the practicality of using a combination of instrumentation and structural analysis to monitor the vibration signatures and associated structural integrity of offshore production platforms in the Gulf of Mexico. Three operating platforms were evaluated as part of this study, owned by Gulf, Conoco, and Shell Oil companies. Each platform was instrumented with accelerometers and the acquired data was correlated with analytical studies.
- Dr. Polivka provided consultation services to Shell Oil Company on the marine installation of the Cognac Platform, which is one of the tallest offshore platforms in the world. The platform consisted of three large space frame structures that were lowered to a subsea assembly location and joined together to form a tower extending 1,050 feet to the surface. The installation was simulated by development of a linear dynamic system model consisting of a submerged platform section suspended by lowering cables from two derrick barges moored side by side over the installation site. Environmental disturbances considered included the loads imposed by wind, waves, and current, as well as on-board mechanical equipment vibrations.
- Dr. Polivka served as an instructor of a structural analysis class at San Francisco State University. During the course of his studies at the University of California, he worked both as a Research and Teaching Assistant and worked three summers at Bechtel Corporation in their Special Structures Group. He has written several public-domain finite element computer programs for solving a variety of structural problems, such as nonlinear heat transfer analysis, temperature stresses in concrete dams, and time-dependent behavior of reinforced concrete columns.

PROFESSIONAL REGISTRATION

California: Professional Civil Engineer
Michigan: Professional Civil Engineer
Washington: Professional Civil Engineer

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers (Fellow)
Structural Engineers Association of Northern California
Board of Directors, Engineering Alumni Society, University of California at Berkeley
Tau Beta Pi
Chi Epsilon

PUBLICATIONS

"Seismic Retrofit of Elevated Steel Water Tanks Using Base Isolation," with D. Bleiman and S. Kim, Fifth U.S. National Conference on Earthquake Engineering (July 1994).

"Technical Issues Associated with the Seismic Analysis of the San Mateo-Hayward Bridge", with R. Donikian, C.-Y. Chang, M. Tabatabaie, 11th International Bridge Conference, Pittsburgh, PA (June 1994).

"A Case Study: Seismic Retrofit of a Historic Brick Landmark Using Base Isolation," with D. Bleiman, S. Kim and M. Alhurabi, Fifth U.S. National Conference on Earthquake Engineering (July 1994).

"Seismic Vulnerability Assessment of the San Mateo-Hayward Bridge, with R. Donikian, submitted to Catrans District 59, Contract No. 59S283 (December 1993).

"Seismic Vulnerability Assessment of the Seattle Water Department's Water Supply System Facilities," with W. Anton and L. Harrington, Third U.S. Conference on Lifeline Earthquake Engineering (August 1991).

"Evaluation of Techniques for the Seismic Modeling of Elevated Freeway Bridges," with A. Ghose, B. Maroney, Third U.S. Conference on Lifeline Earthquake Engineering (August 1991).

"Brief Comparative Study of the Seismic Response of Building 105-C at the Savannah River Plant for the Housner and Blume Criteria," prepared for E.I. du Pont de Nemours & Company (December 1983).

"BWR Mark I Containment Suppression Chamber Reevaluation," with A.P. Cimento, Transactions of the Seventh International Conference on Structural Mechanics in Reactor Technology, Chicago, Illinois (August 1983).

"Survey of Seismic Risk Assessment in the Nuclear Industry," prepared for Kaihatsu Architects & Engineers (December 1981).

PUBLICATIONS (Continued)

"Survey of Seismic Engineering Practices in the U.S. Nuclear Industry," prepared for Toshiba Corporation (November 1981).

"Mark I Containment Evaluation and Review," prepared for Tokyo Electric Power Company (March 1981).

"Uniform Probability Response Spectra for a Site near the San Andreas Fault," with R.D. Wheaton, Transactions of the Seventh World Conference on Earthquake Engineering, Istanbul, Turkey (September 1980).

"Finite Element Analysis of Nonlinear Heat Transfer Problems," Ph.D. Thesis, University of California, Berkeley (June 1976).

"Time-Dependent Behavior of Reinforced Concrete Columns, Including Effects of Shrinkage, Creep and Cracking," University of California, Berkeley (June 1975).

"A Method for Predicting the Time-Dependent Response of Reinforced Concrete Columns."

Master's Thesis, University of California, Berkeley (December 1970).

FARZIN R. BEIGI

PROFESSIONAL HISTORY

EQE International, San Francisco, California, Principal Engineer, 1990-Present
TENERA L.P., Berkeley, California, Structural Engineer, 1982-1990

PROFESSIONAL EXPERIENCE

Mr. Beigi has over thirteen years of professional structural and civil engineering experience. As a principal engineer for EQE's Engineering Consultants Division, Mr. Beigi provides consulting engineering services for civil, structural, and structural mechanics engineering solutions primarily for seismic evaluation projects.

Most recently, Mr. Beigi has been involved in development of design verification criteria for seismic adequacy of HVAC duct systems at Salem Nuclear Power Plant. He has performed field verification of as-installed HVAC systems and provided engineering evaluations documenting seismic adequacy of these systems, which included dynamic analyses of selected worst-case bounding samples.

Mr. Beigi has performed non-linear analysis of bridge cranes at DOE's Paducah Gaseous Diffusion Plant utilizing Drain-2Dx non-linear structural program.

Mr. Beigi has generated simplified models of structures for facilities at Los Alamos National Lab and Cooper Nuclear Station for use in development of building response spectra considering the effects of soil-structure-interactions.

Mr. Beigi has participated as a seismic capability engineer for resolution of A-46 issues and Seismic Margin Assessment at the Browns Ferry Nuclear Power Plant (TVA), Oconee Nuclear Plant (Duke Power Co.), Duane Arnold Energy Center (Iowa Electric Company), Calvert Cliffs Nuclear Power Plant (Baltimore Gas and Electric), and Robinson Nuclear Power Plant (Carolina Power & Light). He has performed extensive fragility studies of the equipment and components in the switchyard at the Oconee power plant.

Mr. Beigi has developed standards for design of distributive systems to be utilized in the new generation of Light Water Reactor (LWR) power plants. These standards are based on the seismic experience data base, testing results, and analytical methods.

Mr. Beigi managed EQE's on-site office at the Tennessee Valley Authority Watts Bar Nuclear Power Plant. His responsibilities included staff supervision and technical oversight for closure of seismic systems interaction issues in support of the Watts Bar start-up schedule. Interaction issues that related to qualification for Category I systems and components included seismic and thermal proximity issues, structural failure and falling of non-seismic Category I plant features, flexibility of systems crossing between adjacent building structures, and seismic-induced spray and flooding concerns. Mr. Beigi utilized seismic experience data coupled with analytical methods to address these seismic issues.

PROFESSIONAL EXPERIENCE (Continued)

As a project engineer, Mr. Beigi conducted the seismic qualification of electrical raceway supports at the Watts Bar Plant. The qualification method involved in-plant walkdown screening evaluations and bounding analysis of critical case samples. The acceptance criteria for the bounding analyses utilized ductility-based criteria to ensure consistent design margins. Mr. Beigi also provided conceptual design modifications and assisted in the assessment of the constructability of these modifications. Mr. Beigi utilized similar methods for qualification of all non-seismic Category I HVAC ducts and supports at Watts Bar, and assisted criteria and procedures development for HVAC ducting, cable trays, conduit and supports at the TVA Bellefonte nuclear power plant.

Mr. Beigi also has extensive experience utilizing finite element computer codes in performing design and analysis of heavy industrial structures, systems, and components in accordance with AISC and ACI structural design codes. At the Texas Utility Comanche Peak Nuclear Power Plant, Mr. Beigi administered and scheduled individuals to execute design reviews of cable tray supports; evaluated generic design criteria for the design and construction of nuclear power plant systems and components and authored engineering evaluations documenting these reviews. He performed various construction inspections, walkdowns, and as-building at nuclear power plants.

Also, Mr. Beigi's engineering experience includes: analysis of reinforced concrete slabs and walls due to impactive loads; design and analysis of conduit and cable tray supports for earthquake loading; determination of the adequacy of reinforced concrete slabs and walls due to omission of reinforcing bars or improper cutting of bars; dynamic analysis of heavy steel structures; and design of seismic supports for tanks and other equipment at industrial facilities.

EDUCATION

SAN FRANCISCO STATE UNIVERSITY, San Francisco, CA: B.S. Civil Engineering, 1982

REGISTRATION

Professional Engineer: California
Certified as Seismic Capability Engineer for SQUG Seismic Evaluation Walkdowns

STEPHEN J. EDER

PROFESSIONAL HISTORY

EQE International, San Francisco, California

President, EQE Japan, 1995-present

Vice President and Regional Manager, 1985-1995

URS/John A. Blume & Associates, Engineers, San Francisco, California, 1982-1985

J. G. Bouwkamp, Inc., Structural Engineers, Berkeley, California, 1981-1982

PROFESSIONAL EXPERIENCE

Mr. Eder provides engineering and management consulting for safety evaluation of power plants, national laboratories, and industrial facilities. He is currently President of EQE Japan. His experience includes structural dynamic analyses, seismic evaluation and margin assessments, post-earthquake reconnaissance studies, and shake table and other dynamic tests and qualification. Mr. Eder provides technical direction to many projects, targeted at efficient balance of computational analysis and experience-based screening evaluations.

In support of the Seismic Qualification Utility Group (SQUG), Mr. Eder assisted development of the SQUG Generic Implementation Procedure, and provides the Steering Group with ongoing technical and licensing support. As a SQUG Subject Matter Expert, Mr. Eder is responsible for technical areas of the Unresolved Safety Issue A-46 (USI A-46) walkdown screening and seismic evaluation training course, follow-up workshops, and bulletin board support. He also served as a key developer of the SQUG Management Guidelines for seismic qualification of new and replacement equipment and parts, and is an instructor for that training course.

For the U.S. Department of Energy (DOE), in conjunction with Lawrence Livermore National Laboratory (LLNL), Mr. Eder was responsible for developing and conducting the training course of use of SQUG methods at DOE facilities. He also developed and provides training for the field guide for walkthrough screening evaluation of DOE facilities. This included trial walkthroughs at Paducah Gaseous Diffusion Plant, LLNL, and Stanford Linear Accelerator Center. He assisted in developing the Program Plan for evaluating existing DOE facilities and serves as Technical Liaison for the DOE Existing Facilities Steering Group. Mr. Eder was lead reviewer in support of the Tiger Team Technical Safety Appraisal of Los Alamos National Laboratory and Idaho Chemical Processing Plant for the Natural Phenomena Hazard (NPH) team.

For the Advanced Reactor Corporation (ARC), Mr. Eder supported development of experience-based seismic qualification criteria for the Advanced Light Water Reactor (ALWR) First-of-a-Kind Engineering (FOAKE) project on equipment and distribution systems. This included establishing the basis for and developing the Design-by-Rule methodology for HVAC ducting, cable trays, and conduit systems.

PROFESSIONAL EXPERIENCE (Continued) Mr. Eder has provided a leading role in program plan development, criteria definition, program implementation, and configuration control design for DOE facilities. These projects include the Savannah River Site (SRS) K, L, and P reactors; Oak Ridge

National Laboratory High Flux Isotope Reactor; and the LLNL Plutonium Facility. While at SRS, Mr. Eder was a member of the Senior Review Team for seismic issues in support of reactor restart.

Mr. Eder pioneered the development of the innovative raceway system seismic evaluation guidelines for SQUG, using earthquake experience data, test results, and fatigue analysis as a basis. To ensure applicability of the SQUG procedure for conduit and cable trays, he performed trial reviews for several nuclear power plants including Zion, Three Mile Island, Oyster Creek, Vermont Yankee, Prairie Island, Kewaunee, Point Beach, Palisades, Yankee Rowe, Millstone, Calvert Cliffs, Beaver Valley, and Nine Mile Point.

Mr. Eder has been involved with cable tray and conduit system seismic evaluation programs at many nuclear power plants. His involvement includes plant-specific criteria development and review. He has supported raceway qualification at near-term operating license plants, including Seabrook Station, Watts Bar, Bellefonte, and Darlington. He performed raceway evaluations at several older operating plants including Tihange, Browns Ferry, Cooper Station, Sequoyah, Davis-Besse, Robinson, Peach Bottom, Hatch, and Duane Arnold. He conducted raceway qualification training courses for engineers from General Public Utilities, Toledo Edison, Carolina Power and Light, and Southern Company Services, as well as generic courses for SQUG.

Mr. Eder participates in expansion of experienced-based evaluation techniques to technical areas outside of the scope of the USI A-46 program. Mr. Eder supports development of the evaluation program for piping systems at SRS and Oak Ridge National Laboratory. He assisted in developing design criteria for fire protection piping at SRS, Watts Bar, and Darlington. He has performed non-safety piping reviews in support of systems interaction reviews at Browns Ferry, Sequoyah, Watts Bar, Darlington, and Savannah River. He has supported development of duct system seismic evaluation guidelines for Salem, Brunswick, Browns Ferry, Bellefonte, and Comanche Peak. He also has contributed to anchorage design and evaluation criteria and procedure development programs for Savannah River and Beznau, and systems interaction programs at Washington Public Power Supply Systems, Watts Bar, and Comanche Peak. At SRS, he provided consulting for the in-situ test program for lead cinch anchors.

Mr. Eder provides the Davis-Besse A-46 and IPEEE programs with senior consultant support. Mr. Eder also is the screening evaluation and walkdown manager for the Duane Arnold A-46 and IPEEE program. He performed the seismic margins assessment IPEEE screening evaluation walkdowns for Palo Verde Nuclear Generating Station. He also supports the A-46 and IPEEE reviews for Browns Ferry, Brunswick, Robinson, and Three Mile Island. Mr. Eder has supported miscellaneous component and equipment qualification efforts for several nuclear power and DOE facilities, including Rancho Seco, Browns Ferry, Duane Arnold, Robinson, Davis-Besse, Fort Calhoun, Cooper Station, Beznau, Rocky Flats, Savannah River, and Oak Ridge National Laboratory.

PROFESSIONAL EXPERIENCE (Continued) Mr. Eder also supports general engineering use of experienced based methods for equipment components and systems evaluation. Mr. Eder is a member of the Seismic Task Group of the National Fire Protection Association (NFPA) Technical Committee on

Automatic Sprinklers, responsible for evaluating, developing, and recommending changes to NFPA 13 provisions for seismic support of sprinkler system piping and components. He is Co-chairman of the Special Working Group on the standardization of the experience-based seismic equipment qualification methodology for the American Society of Mechanical Engineers (ASME) and the Institute of Electrical and Electronics Engineers (IEEE). He serves as Principal Investigator for the National Center for Earthquake Engineering Research (NCEER) development of design and performance guidelines for non-structural building elements. He serves on the Seismic Rehabilitation Advisory Panel (SRAP) for the Federal Emergency Management Agency (FEMA) and Building Seismic Safety Council (BSSC). He also serves on the Technical Subcommittee for systems and components seismic evaluation for the BSSC National Earthquake Hazard Reduction Program (NEHRP) recommended seismic design provisions.

At URS/Blume, Mr. Eder served as Project Engineer to assess the fragility of structures in St. Louis for a reoccurring New Madrid Earthquake. He also conducted seismic vulnerability assessment of processing facilities for Southern California Gas Company which included structures, pipelines, tanks, and equipment. Mr. Eder performed seismic analysis and design review of the Diablo Canyon Unit 1 and 2 turbine buildings. He also conducted seismic analyses of the Diablo Canyon Unit 1 containment building annulus structure and piping, and buildings at Millstone 3 Nuclear Plant.

Mr. Eder's research projects include development of decoupling criteria for piping and equipment systems dynamic models, and statistical evaluations to compare the validity of modal combination techniques used in dynamic analysis. He developed guidelines on nonlinear tubular strut behavior for seismic evaluation of offshore platforms, by correlative analysis of shake-table tests. He also performed correlative dynamic analyses of high-rise towers to evaluate the effects of modeling assumptions on predicting response for seismic design, and to assess earthquake building code practices.

EDUCATION

UNIVERSITY OF CALIFORNIA, Berkeley: M.Eng., Structural Engineering and Structural Mechanics, 1982

CLARKSON COLLEGE OF TECHNOLOGY, Potsdam, New York: B.S. Civil and Environmental Engineering, 1980

CANISIUS COLLEGE, Buffalo, New York: Engineering Science and Computer Science, 1978

REGISTRATION

California: Civil Engineer

AFFILIATIONS

National Fire Protection Association (NFPA) Technical Committee on Automatic Sprinklers
American Society of Civil Engineers
ASCE Seismic Raceway Working Group
ASCE HVAC Duct Design and Analysis Working Group, Chairperson
Earthquake Engineering Research Institute
Applied Technology Council
American Society of Mechanical Engineers and Institute of Electrical and Electronics Engineers Special Work Group, Chairperson
Structural Engineers Association of Northern California (SEAONC)
SEAONC Seismology Subcommittee on Non-Building Structures and Building Components
Building Seismic Safety Council Seismic Rehabilitation Advisory Panel
Electric Power Research Institute's Post Earthquake Investigation Team
Tau Beta Pi National Engineering Honor Society
Phi Kappa Phi National Honor Society

PUBLICATIONS

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With P. J. Butler and R. P. Kassawara. 1994. "Application of the GIP Methodology to Demonstrate Seismic Adequacy of New and Replacement Equipment and Parts in USI A-46 Plants." ASME 1994, PVP-Vol. 275-2, Seismic Engineering - Volume 2. Proceedings American Power Conference, Illinois Institute of Technology, April 1994, Chicago, Illinois.

With N. P. Smith and R. P. Kassawara. 1994. "Future Direction for the Use of Earthquake Experience Data." Proceedings American Power Conference, Illinois Institute of Technology, April 1994, Chicago, Illinois.

With M. W. Eli and M. W. Salmon. November 1993. "Walkthrough Screening Evaluation Field Guide, Natural Phenomena Hazards at Department of Energy Facilities." UCRL-ID-115714, Revision 2. Lawrence Livermore National Laboratory.

"Seismic Design of Important Systems and Components--Functionality Considerations." 1993. Structural Engineers Association of Northern California, 1993 Fall Seminar, Nonstructural Components: Design and Detailing. San Francisco, California.

With C. Scawthorn, M. Zadeh, and G. Johnson. 1993. "Economic Impacts of Earthquake Damage to Nonstructural Components." 40th North American Meetings of the Regional Sciences Association International, Houston, Texas.

With M. W. Barlow, R. J. Budnitz, and M. W. Eli. 1993. "Use of Experience Data for DOE Seismic Evaluations." 4th DOE Natural Phenomena Hazards Mitigation Conference, Atlanta, Georgia.

PUBLICATIONS (Continued)

With K. Porter, G. S. Johnson, M. M. Zadeh, and C. Scawthorn. 1993. "Seismic Vulnerability of Equipment in Critical Facilities: Life-safety and Operational Consequences." National Center for Earthquake Engineering Research.

With M. W. Eli. 1991. "Use of Earthquake Experience Data." Prepared for the Third DOE Natural Phenomena Hazards Mitigation Conference, St. Louis, Missouri.

With J. O. Dizon. 1991. "Advancement in Design Standards for Raceway Supports and Its Applicability to Piping systems." PVP-Volume 210-1, Codes and Standards and Applications for Design and Analysis of Pressure Vessel and Piping Components. ASME 1991.

"Cable Tray and Conduit System Seismic Evaluation Guidelines." March 1991. EPRI Report NP-7151. Prepared for the Electric Power Research Institute. San Francisco, CA: EQE International.

With G. S. Johnson. March 1991. "The Performance of Raceway Systems in Strong-motion Earthquakes." EPRI Report NP-7150. Prepared for the Electric Power Research Institute. San Francisco, CA: EQE International.

With G. S. Johnson. March 1991. "Longitudinal Load Resistance in Seismic Experience Data Base Raceway Systems." EPRI Report NP-7153. Prepared for the Electric Power Research Institute. San Francisco, CA: EQE International.

With J. P. Conoscente and B. N. Sumodobila. March 1991. "Seismic Evaluation of Rod Hanger Supports for Electrical Raceway Systems." EPRI Report NP-7152. Prepared for the Electric Power Research Institute. San Francisco, CA: EQE International.

With Winston & Strawn, MPR Associates, Inc., etal. June 1991. "Generic Implementation Procedure (GIP) for Seismic Verification of Nuclear Plant Equipment." Revision 2. Prepared for the Seismic Qualification Utility Group.

With L. J. Bragnolo and J. P. Conoscente. 1990. "A Proposed Methodology for the Seismic Design of Rectangular Duct Systems." Applied Technology Center (ATC) Seminar on Seismic Design and Performance of Equipment and Nonstructural Elements in Building and Industrial Structures, Irvine, California. ATC-29.

With J. J. Johnson and N. P. Smith. 1990. "Developments of the Seismic Qualification Utility Group." Applied Technology Center (ATC) Seminar on Seismic Design and Performance of Equipment and Nonstructural Elements in Building and Industrial Structures, Irvine, California. ATC-29.

With W. Djordjevic, J. Eidinger, and F. Hettinger. 1990. "American Society of Civil Engineers Activities on Seismic Design of Electrical Raceways." Current Issues Related of Nuclear Power Plant Structures, Equipment, and Piping. Proceedings of the Third Symposium, Orlando, Florida, December 1990.

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With J. P. Conoscente, B. N. Sumodobila, and S. P. Harris. 1989. "Seismic Fatigue Evaluation of Rod Hung Systems." Prepared for the *Tenth Conference on Structural Mechanics in Reactor Technology*, (SMiRT).

With P. D. Smith and J. P. Conoscente. December 1988. "SQUG Cable Tray and Conduit Evaluation Procedure." Paper presented at the Second Symposium on Current Issues Related to Nuclear Power Plant Structures, Equipment and Piping, Orlando, FL.

With P. I. Yanev. 1988. "Evaluation of Cable Tray and Conduit Systems Using the Seismic Experience Data Base." *Nuclear Engineering and Design* (North-Holland, Amsterdam) 107: 149-153.

With S. W. Swan, "Summary of the Effects of the 1985 Mexico Earthquake to Power and Industrial Facilities." Proceedings of the American Society of Civil Engineers International Conference on the 1985 Mexico Earthquake, Factors Involved and Lessons Learned, Mexico City, Mexico, September 1986.

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With S. W. Swan, "The Mexico Earthquake of September 19, 1985; Performance of Power and Industrial Facilities," Proceedings of the Third U. S. National Conference on Earthquake Engineering, Charleston, South Carolina, August 1986.

"Performance of Industrial Facilities in the Mexican Earthquake of September 19, 1985," Electric Power Research Institute Report No. NP-4605, Project 1707-30 Final Report, Palo Alto, California, June 1986, also presented at the IEEE Power Engineering Society Summer Meeting, Mexico City, Mexico, July 1986.

"Earthquake Response Analysis of a Braced Offshore Platform," Master of Engineering Thesis, University of California, Berkeley (June 1982), also presented at American Petroleum Institute Committee Hearing, October 1982, San Francisco, California.

REPORTS

With J. O. Dizon. 1993. "Seismic Adequacy Verification of HVAC Duct Systems and Supports." Technical Standard SC.DE-TS.ZZ-4707(Q). Prepared for Public Service Electric and Gas Company.

With J. K. Arros. 1993. "Applications of Experience-based Methods for Seismic Qualification of Distribution Systems." Prepared for Advanced Reactor Corporation FOAKE ALWR Seismic Qualification Project.

REPORTS (Continued)

With MPR Associates and Winston and Strawn. 1993. "Verifying the Seismic Adequacy of New and Replacement Equipment and Parts." Prepared for the SQUG Management Guidelines Document.

With G. S. Johnson. 1993. "II/I Seismic Evaluation of the WPPSS Nuclear Plant No. 2 Turbine Building." Prepared for Washington Public Power Supply System.

With Lawrence Livermore National Laboratory. 1992. "Program Plan for the Evaluation of Systems and Components in Existing DOE Facilities Subject to NPH." Prepared for the U.S. Department of Energy.

With J. O. Dizon, P. D. Baughman, and G. S. Johnson. 1992. "Peer Review of the Watts Bar Nuclear Plant Integrated Interaction Program Suspended Systems Proximity Task." Prepared for Tennessee Valley Authority.

With G. S. Hardy, G. S. Johnson, and R. W. Cushing of EQE; MPR; S&A; and URS. 1992. "Walkdown Screening and Seismic Evaluation Training Course." Prepared for Seismic Qualification Utility Group.

With M. W. Salmon. "Technical Safety Appraisal of the Idaho Chemical Processing Plant, NPH Discipline." Prepared for the U.S. Department of Energy.

With M. W. Eli. "NPH Walkdown Evaluation Summary Report - Paducah Gaseous Diffusion Plant." Prepared for the U.S. Department of Energy.

With G. S. Johnson, R. H. Kincaid, and G. S. Hardy. 1992. "High-rise Building Critical Equipment Study." Prepared for National Center for Earthquake Engineering Research.

With K. E. Smith. 1992. "Seismic Performance of Standby and Emergency Power Engine Generator Systems." Prepared for National Center for Earthquake Engineering Research.

With M. W. Eli and L. J. Bragagnolo. 1991. "Walkthrough Screening Evaluation Field Guide, Natural Phenomena Hazards at Department of Energy Facilities." Special Release for 3rd DOE Natural Phenomena Hazard Mitigation Conference, October 1991, St. Louis, Missouri.

With G. S. Johnson and T. R. Kipp. 1991. "Integrated Interaction Program Screening and Acceptance Criteria." Design Criteria WB-DC-20-32. Prepared for Tennessee Valley Authority.

With R. J. Hookway and T. R. Kipp. 1991. "Commodity Clearance Requirements." Engineering Specification N3C-941. Prepared for Tennessee Valley Authority.

With R. D. Hookway and T. R. Kipp. 1991. "Seismic Qualification of Category I(L) Fluid System Components and Electrical or Mechanical Equipment." Design Criteria WB-DC-40-31.13. Prepared for Tennessee Valley Authority.

REPORTS (Continued)

With R. D. Hookway and T. R. Kipp. 1991. "Seismic Design Specification for Category I(L) Piping, Pipe Supports, and In-line Components." Engineering Specification N3C-943. Prepared for Tennessee Valley Authority.

With R. P. Kennedy, J. D. Stevenson, J. J. Johnson, W. R. Schmidt, and K. Collins. June 1990. "Watts Bar Civil Program Review." Prepared for Tennessee Valley Authority.

With J. O. Dizon and G. M. Zaharoff. 1989. "Evaluation of Seismic-induced Spray Hazards at Browns Ferry Nuclear Plant." Report No. 51001.02-R-001. Prepared for the Tennessee Valley Authority. San Francisco, CA: EQE Engineering.

"Seismic Evaluation of Cable Tray Systems at H. B. Robinson Plant, Unit 2." 1989. Report No. 50018.01-R-01. Prepared for Carolina Power & Light Company. San Francisco, CA: EQE Engineering.

With L. J. Bragagnolo, K. M. David, J. E. Hoekendijk, and G. M. Zaharoff. 1989. "Program Plan for the Seismic Evaluation of HVAC Duct at Brunswick Steam Electric Plant." Prepared for Carolina Power & Light Company. Project No. 52029.03. San Francisco, CA: EQE Engineering.

With P. D. Smith. 1989. "Trial Implementation of the SQUG Raceway Seismic Evaluation Guidelines at A-46 Plants." Report prepared for the Seismic Qualification Utilities Group. San Francisco: EQE Engineering.

With S. P. Harris, P. D. Smith, and J. E. Hoekendijk. October 1988. "Performance of Condensers and Main Steam Piping in Past Earthquakes." Report prepared for General Electric Nuclear Energy Boiling Water Reactor Owners Group. San Francisco: EQE Engineering.

With J. J. Johnson, G. S. Hardy, N. G. Horstman, G. Rigamonti, M. R. Reyne, and D. R. Ketcham. August 1988. "Technical Basis, Procedures and Guidelines for Seismic Characterization of Savannah River Plant Reactors." E. I. Dupont De Nemours & Co, Aiken, South Carolina.

With S. P. Harris, P. S. Hashimoto, J. O. Dizon, B. Sumodobila, G. M. Zaharoff, and L. J. Bragagnolo. March 1988. "Seismic Evaluation of the High Flux Isotope Reactor Primary Containment System." Report prepared for Martin Marietta Energy Systems, Inc. San Francisco: EQE Engineering.

GAYLE S. JOHNSON

PROFESSIONAL HISTORY

EQE International, San Francisco, California, Technical Manager, 1986-1988;
1990-present

PMB Engineering Inc., San Francisco, California, and Oslo, Norway, Project Engineer,
1981-1986 and 1988-1990

SUMMARY

Mr. Johnson has over 15 years of experience in seismic safety evaluations, seismic criteria development, structural design, linear and nonlinear analysis, and software development. He has participated in and managed several seismic evaluations of industrial and petrochemical facilities, blast evaluations of petrochemical control buildings, and analysis and design projects in the offshore industry. He is currently Chairman of the ASCE Committee on Seismic Evaluation and Design of Petrochemical Facilities. Specific projects are briefly described as follows.

PROFESSIONAL EXPERIENCE

Industrial and Petrochemical Facilities:

Mr. Johnson has managed and performed seismic structural evaluations of numerous refineries, petrochemical facilities, power plants, and other industrial facilities, including on-site evaluations, analytical reviews, and conceptual upgrade recommendations. Specific facilities include the following:

- Unocal Refinery - Rodeo, California: Seismic evaluation of structures and equipment containing acutely hazardous materials in all process units.
- Shell Refineries - Martinez, California: Seismic evaluation of structures and equipment containing acutely hazardous materials in all process units.
- Tosco Refinery - Martinez, California: Seismic evaluation of structures and equipment containing acutely hazardous materials in chemical plant.
- Exxon Refinery - Benicia, California: Seismic risk evaluation of all process units, tank farms, and marine terminal.
- Pacific Refinery - Hercules, California: Seismic evaluation of all process units and tank farms. Structural evaluation of vapor recovery unit on offshore marine loading wharf.

PROFESSIONAL EXPERIENCE (Continued)

- PG&E Power Plants - San Francisco and Pittsburg, California: Seismic evaluation of structures and specific equipment containing acutely hazardous materials.
- ICI Agricultural Products (Zeneca) - Richmond, California: Seismic evaluation of structures and specific equipment containing acutely hazardous materials.
- Imperial West Chemical Facilities - Antioch and Pittsburg, California: Seismic evaluation of structures and specific equipment containing acutely hazardous materials.
- General Chemical - Pittsburg, California: Seismic evaluation of structures and equipment containing acutely hazardous materials in all process units.
- DuPont - Antioch, California: Development of seismic criteria and review of piping evaluation for systems containing acutely hazardous materials.
- Catalytica Fine Chemicals - East Palo Alto, California: Seismic evaluation of process building and equipment containing acutely hazardous materials.
- IDC Yokohama Center - Yokohama, Japan: Seismic evaluation of telecommunication facility to determine potential damage and financial exposure (Probable Maximum Loss and Business Interruption) in a major earthquake.
- Sugar Mills - Guatemala: Seismic evaluation of five large sugar mills to determine potential damage and financial exposure (Probable Maximum Loss and Business Interruption) in a major earthquake.
- Chevron Estero Marine Terminal - Morro Bay, California: Seismic evaluation of tank farm and pipelines for marine terminal in support of environmental impact report.

Other projects include:

- On-site hurricane and earthquake risk evaluation of entire water and power system for the Virgin Islands Water and Power Authority as part of a review of insurance requirements.
- Structural evaluation of typical refinery buildings and development of siting criteria for control buildings for blast loads for Amoco.

PROFESSIONAL EXPERIENCE (Continued)

- Structural evaluation of several refinery buildings for blast loading at Clark Blue Island Refinery.
- Structural evaluation of control and office buildings for blast loads at Frontier Refinery in Cheyenne, Wyoming. Development of conceptual upgrade schemes.
- Managed multi-year research project for National Center for Earthquake Engineering Research to develop practical methodology for the rapid evaluation of key equipment systems in critical facilities such as hospitals, data centers, and telecommunications centers that must remain functional after earthquakes.

Offshore Facilities:

Mr. Johnson has managed and participated in numerous structural design and analysis projects in the offshore industry, including the following:

- Seismic evaluation of topsides and appurtenances for AIOC Chirag I platform, Caspian Sea, Azerbaijan. Reviewed systems designs, procurement specifications, vendor packages, and piping analyses for seismic vulnerabilities.
- Performed on-site evaluation of British Petroleum Clyde platform to assess response of equipment to blast induced vibration loading for the UK Health and Safety Executive.
- Independent certification and verification (CVA) of the fatigue design of the Texaco Harvest platform.
- Responsible for fatigue analysis and design of the Chevron Hidalgo platform.
- Lead engineer responsible for design wave analyses, fatigue analysis and design, transportation analysis, and seismic ductility analysis of the Cities Service Julius platform.
- Performed fatigue reevaluation of the Occidental Claymore platform, including analysis of the as-built and as-repaired conditions, calibration of actual damage to analytical results, and evaluations of existing and proposed repairs.
- Responsible for conceptual design and analysis of several deepwater structures, including conceptual design, foundation analysis, spectral fatigue analysis, time domain fatigue analysis, seismic ductility analysis, reserve strength pushover analysis, risk analyses, cost estimating and scheduling, and fabrication/installation studies.

PROFESSIONAL EXPERIENCE (Continued)

- Developed methodologies and software to evaluate low frequency fatigue of compliant towers using time domain nonlinear analysis and rainflow cycle counting techniques.
- Project manager for seismic hazard evaluation of the Amoco Azeri Project in the Caspian Sea, offshore Azerbaijan. Project included seismicity studies and hazard evaluations for offshore platforms, onshore facilities, and pipelines, fault crossing studies for pipelines, and seismic zonation for the pipeline route.
- Project manager for seismic hazard evaluation of offshore and onshore sites, Sakhalin Island, Russia, for Marathon and Exxon. The projects included hazard evaluations for offshore platforms, onshore facilities, and pipelines; pipeline liquefaction studies; fault crossing evaluations; tsunami evaluations; and interpretation and evaluation of Russian seismic building codes and pipeline design codes.
- Pushover analyses of Statoil's Veslefrikk platform.
- Conceptual design, design analyses, and pile/sleeve wear evaluation of the Aker Concrete Compliant Tower, for Aker Engineering in Oslo, Norway.

Earthquake Investigations:

Mr. Johnson has participated in numerous post-earthquake reconnaissance investigations to evaluate the performance of structures, piping, and equipment. Earthquakes include the 1992 Landers and Big Bear, 1992 Cape Mendocino, 1989 Loma Prieta, 1987 Whittier, 1986 Chalfant Valley, 1985 Mexico, and 1984 Morgan Hill earthquakes.

Nuclear Facilities:

While with EQE Mr. Johnson has been involved with several seismic safety programs, including the evaluation of Category I(L) piping at Sequoyah; cable trays and conduit at Sequoyah, Browns Ferry, and Bellefonte; HVAC at Brunswick and Bellefonte; seismic interaction at Salem, Comanche Peak, and Watts Bar; and tank qualification at Cooper Station. He has managed the data base development and criteria development for cable trays and conduit for the Seismic Qualification Utility Group (SQUG) and participated in the trial plant cable tray walkdown at Zion. He has participated in the development of the SQUG seismic evaluation training courses and has been an instructor for all training courses given to date.

EDUCATION

UNIVERSITY OF MINNESOTA, Minneapolis: B.S. Civil Engineering, 1980
UNIVERSITY OF CALIFORNIA, Berkeley: M.S. Civil Engineering, 1981

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers (ASCE)
ASCE, Petrochemical Energy Committee, Chairman - Task Committee on Seismic
Evaluation and Design
Seismology Society of America
Structural Engineers Association of Northern California
Earthquake Engineering Research Institute
Norwegian Earthquake Engineering Society

REGISTRATION

California: Civil Engineer

PUBLICATIONS

With I. Sharrock, and M. P. Wong. 1993. "Seismic Evaluation of Offshore Platform Topsides Equipment." Presented at the 2nd International Conference and Exhibition, "Offshore Structural Design Against Extreme Loads," London, UK, November 3-4, 1993.

With C. Scawthorn, M. Zadeh, and S. Eder. 1993. "Economic Impacts of Earthquake Damage to Nonstructural Components." 40th North American Meetings of the Regional Sciences Association International, Houston, Texas.

"Effects of Aging on the Seismic Performance of Petrochemical Facilities." Presented at the DOE Workshop on Aging of Energy Production and Distribution Systems, Houston, Texas, October 1992.

With M. K. Ravindra, W. H. Tong, and M. J. Griffin. 1991. "Seismic Assessment Under RMPP: Recent Applications." In *Proceedings for the HAZMACON 1991 Conference*. Santa Clara, CA.

With A. E. Hasle, and R. F. Figgers. 1989. "Evaluation of Wear in Compliant Tower Pile Systems." OTC 5912. Presented at the 21st Annual Offshore Technology Conference, Houston, Texas, May 1-4, 1989.

With P. I. Yanev and S. J. Eder. 1987. "Qualification of Nuclear Plant Raceway Systems Based on Earthquake Experience Data." Presented at the 9th SMiRT Conference, 1987.

BRANTLEY C. BUERGER

PROFESSIONAL HISTORY

EQE International, Stratham, New Hampshire, Project Engineer, 1993-present

ABB Impell Corporation, Syracuse, New York, Supervisor - Engineering Mechanics Division, 1991-1992;
1988-1990

Senc Technical Services, Southport, North Carolina, Engineer, 1990-1991

Mielczarek Construction, Deerfield, Illinois, Carpenter, 1988

Gilbert Commonwealth (Tennessee Valley Authority), Engineer, 1986-1988

Duke Power Company, Charlotte, North Carolina, Engineer, 1981-1986

EXPERIENCE SUMMARY

Mr. Buerger has over 13 years of professional engineering experience as a structural engineer in the nuclear utility industry. participating in a wide range of projects. Currently, he is a Project Engineer for EQE's Engineering Consultants Division.

Mr. Buerger's experience includes:

- Seismic IPEEE/A46 implementation and outlier resolution
- Seismic Margins Assessments and Fragilities Development
- Piping Analysis
- Structural Steel Analysis and Design
- Reinforced Concrete and Masonry Analysis and Design
- Finite Element Qualification
- Major Building Design
- General Civil Projects

As a Project Engineer for EQE's Engineering Consultants, Mr. Buerger has been responsible for:

- IPEEE/A46 inspections and subsequent resolution of outliers
- Seismic Margins Assessments and the development of Seismic Fragilities for piping and structures
- MSIV leakage inspections and outlier resolutions
- STERI evaluations for replacement parts

PROFESSIONAL EXPERIENCE (Continued)

As Supervisor for the Engineering Mechanics Division at ABB Impell, Mr. Buerger provided the following services:

- Design and analysis of block walls
- Structural design and dynamic qualification of I&C performance monitoring equipment on diesel generators
- Analysis/failure evaluation of bound intake water head gate; subsequent requalification of all intake/discharge gates/hoists/ rigging
- Reportability evaluations and occurrence reports
- Systems Turnover Program for reload/restart
- Design and analysis of lead shielding, heavy equipment anchorages, and building steel modifications
- Implementation of the client's modification program with supporting 10CFR50.59 evaluations
- Authored procedures, specifications, and technical reports

For Senc Technical Services, Mr. Buerger provided the following:

- Extensive use of ALGOR SUPERSAP finite element analysis program for qualification of plate/shell structures; performed benchmark of same
- Formal training on Class 1 plate/shell design and analysis per ASME code, and on finite element modeling/theory/methods
- Analysis, design, and short-term structural integrity reviews of pipe supports and miscellaneous steel to support calculation reconciliation effort

For Gilbert Commonwealth, Mr. Buerger performed various engineering tasks at Browns Ferry and Sequoyah Nuclear Plants. Work included the following:

- Qualification of miscellaneous steel components for seismic loadings; performed detailed failure evaluation and subsequent redesign of upper drywell floor steel; identified errors in GTSTRUDL NF17 code check method of computing torsional stresses
- Seismic qualification and design of electrical conduit supports; extensive use of AISI code

For Duke Power Company, Mr. Buerger provided services at McGuire and Oconee Nuclear Stations that included:

- Seismic design of major addition to the Reactor Building. Two hundred (200) tons of steel and connections; included 150 ton bridge crane. Mat slab over caisson foundation.

PROFESSIONAL EXPERIENCE (Continued)

- Lead responsible for scope, schedule, and cost development on several major projects (\$2 to 3 million range)
- Civil lead on analysis of turbine-generator foundation vibration
- IEB 79-14 design and analysis of pipe supports and misc. steel

EDUCATION

UNIVERSITY OF VIRGINIA, Charlottesville, VA: B.S. Civil Engineering, 1981

PROFESSIONAL REGISTRATIONS

Professional Engineer: Vermont (18-0006271)

Professional Engineer: Illinois (062-044370)

Professional Engineer: North Carolina (13321)

JAMES L. WHITE

PROFESSIONAL HISTORY

EQE International, Stratham, New Hampshire, Senior Consultant, 1987-present
Cygn Energy Services, Boston, Massachusetts, Project Manager, 1980-1987
Bechtel Power Corporation, Plymouth, Massachusetts, Senior Construction Engineer, 1977-1980
Stone & Webster Engineering Corporation, Boston, Massachusetts, Structural Engineer, 1970-1977

PROFESSIONAL EXPERIENCE

Mr. White has over 20 years experience in structural engineering and construction for existing and under-construction nuclear power plants. His responsibilities have included development of design criteria, specifications, and drawings for power plant buildings and specialized structures such as circulating water tunnels and power piping systems.

At EQE, Mr. White has acted as project manager and seismic review team member on numerous seismic evaluation projects using the EQE seismic experience data base, and the SQUG Generic Implementation Procedure (GIP). He is currently Task Leader for USI A-46 at Three Mile Island and Oyster Creek. He has completed the SQUG training for Seismic Capability Engineers. Mr. White has also participated in IPEEE/A-46 walkdowns and subsequent resolution of outliers at Indian Point 2, Calvert Cliffs 1 and 2, and Savannah River. He has performed cable tray and conduit screening, analytical review and resolution of outliers at TMI, Oyster Creek, Calvert Cliffs 1 and 2, and Indian Point 2. Mr. White has performed seismic qualifications of Regulatory Guide 1.97 equipment, piping, valves, control panels, and miscellaneous equipment for Boston Edison's Pilgrim Nuclear Power Plant. Mr. White acted as seismic review team member at the Savannah River Plant, performing seismic reviews of relays, raceways, control panels, tubing, valves, and various equipment in the K, L, and P reactors. In addition, he has analyzed the seismic adequacy of cranes at EDF nuclear power plant through comparison with cranes in the EQE seismic experience data base. He has also utilized the data base in analyzing the seismic adequacy and hazard potential of equipment at the Salem Nuclear Power plant. This work involved site inspection and evaluation with safety-related equipment as targets and nonsafety-related piping as sources.

Mr. White has also extensive piping experience and was Project Manager and Project Engineer on several piping and pipe support analysis and modification projects. Specific projects are described as follows:

- o Performed field review of Salem Unit 2 small bore piping in containment for seismic II/I and pressure integrity using deflection screening.
- o Participating in data gathering walkdowns of data base sites for tubing, piping, and piping fittings.
- o Performed field walkdowns and review of piping and pipe supports for seismic II/I at Browns Ferry. Mr. White was Project Engineer in charge of piping penetration walkdowns to estimate piping movement for Browns Ferry Unit 2.
- o Project Engineer for the seismic qualification of diesel air start system piping at Ginna Nuclear Power Station. Evaluated piping using seismic experience data and conventional techniques.
- o BECo Pilgrim reactor water level piping modification.
- o J. A. Fitzpatrick environmental enclosure chilled water piping project.

PROFESSIONAL EXPERIENCE (Continued)

In previous assignments, Mr. White implemented various design changes for the Pilgrim Nuclear Power Station. Projects for which he was responsible include H.P. checkpoint reconfiguration, seismic building separation, and reactor water level (RWL) modification. On the RWL project he was responsible for engineering interface for core drilling of two holes through the primary containment to install new ASME instrumentation penetrations. His responsibilities also included engineering interface for installation of ASME Class I piping and pipe supports, modification of reactor water level instrumentation, and cutting and replacement of Reactor Pressure vessel nozzles. This assignment was a continuation of work that he performed at Cygna as a lead structural engineer preparing the design change package for the RWL modification.

Mr. White served as Project Manager and Project Engineer for analysis and modification of many nuclear plants, including the J. A. Fitzpatrick, Salem, Maine Yankee, Vermont Yankee, Pilgrim, and Millstone Unit I stations. Several important projects for which he held primary responsibility, including supervision of staffs of multi-disciplined engineers and designers, are described below.

- o Engineering and designing environmental enclosures for Class 1E electrical equipment. This project included pipe stress analysis, piping layout and design, structural design of steel-frame enclosure structures, and specification and qualification of HVAC equipment in accordance with IEEE 344.
- o Assessing management and work practices for piping, pipe support, and as-built documentation for the Public Service Electric and Gas Company.
- o Analyzing safety related pipe support baseplates for Maine Yankee in response to NRC Bulletin 79-02. Designing modifications for baseplates that failed analytical criteria.
- o Designing on-site structural, HVAC, electrical, and piping modifications at Millstone Unit 1 in relation to 79-01B.
- o Analyzing and designing piping and pipe supports for Vermont Yankee to resolve NRC Bulletins 79-02 and 79-14.

While with Bechtel, Mr. White implemented plant modifications for Boston Edison's Construction Management Group, a position that required supervision of approximately 16 engineers. In previous assignments for Boston Edison he managed completion of a security building, access roads, and parking lot modifications. Prior to this period, as a structural engineer for Stone and Webster, Mr. White engineered major plant structures and foundations and prepared design criteria, cost estimates, calculations, specifications, drawings, and reports. He was also responsible for evaluating, awarding, and administering various procurement and construction contracts as well as resolving construction problems.

Additional projects in which Mr. White was involved include the following:

- o **Project Manager:** Seismic review and evaluation of piping, pipe supports, equipment, and structures for maintaining integrity of main steam system at Iowa Electric power plant. Evaluated steel-frame structures and subcomponents for seismic capacity.
- o **Structural Engineer:** Participated in the design review of tritium piping and related equipment at the Princeton Plasma Physics Laboratory in New Jersey. Performed seismic review and evaluated structural and mechanical components.
- o **Structural Engineer:** Participated in seismic qualification and anchorage evaluation of motor generator sets, control panels, battery chargers, and miscellaneous electrical equipment for Consolidated Edison's Indian Point Power Plant.

PROFESSIONAL EXPERIENCE (Continued)

- o **Project Manager:** Structural evaluation for second-story addition to a 20,000-square-foot vocational school bldg. Reviewed existing building components and design of foundations, and structural/steel concrete slabs.
- o **Structural Engineer:** In charge of structural engineering services for renovation of Hanscomb Air Force Base's officer's club building. Responsible for structural design, construction specifications, and installation drawings for building and HVAC renovations.
- o **Structural Engineer:** Responsible for evaluation and review of retrofit work for the Massachusetts College of Art. Review included structural assessment of a six-story reinforced concrete-frame building with concrete masonry partition walls. Renovation work was performed to incorporate classroom use changes.
- o **Project Manager:** Seismic evaluation and upgrade of HVAC system for Boston Edison's Pilgrim Nuclear Power Plant. Project included evaluating and modifying seismic loadings. Equipment included large centrifugal fans, motor control centers, dampers, control panels, plenum structures, electrical raceways, and other mechanical and electrical equipment.
- o **Project Engineer:** Seismic evaluation of service water piping, pipe supports, and equipment for the Vermont Yankee Nuclear Power Plant. Project included seismic review of large steel-frame power plant structures to ensure structural integrity.
- o **Project Manager:** Seismic evaluations of diesel generator building fire protection piping for Boston Edison's Pilgrim Nuclear Power Plant. Seismic review/modification of sprinkler & deluge fire protection systems.
- o **Structural Engineer:** In charge of design of new diesel generator building for Boston City Hall. Project included structural design, drawing preparation, cost estimates, and preparation of construction specifications. Interior building renovations were also performed as part of this project.
- o **Project Manager:** Structural design of modifications to the BioEnergy wood-burning power plant. Projects included design of catalytic converter stack and ductwork modifications, and building floor strengthening for addition of water treatment tank and clean-up system. Projects included structural design, specification, and drawing preparation.
- o **Project Engineer:** Responsible for seismic review and design modifications for control room electrical cabinets and panels for the Consolidated Edison Indian Point Power Plant.
- o **Project Manager:** Seismic qualification of skid-mounted 12-cylinder diesel generators for SEI/PEICO. Seismic analysis and review of diesel generator anchorage and installation at five different power facilities.
- o **Structural Engineer:** Responsible for structural evaluation of 500 MW power plant structure for Boston Edison's balanced draft stack conversion project. Structural analysis of ten-story structural steel boiler support structure for wind, seismic, and operating loading conditions.
- o **Structural Engineer:** Investigation of structural cracking and deterioration of swimming pool/gymnasium building at the Brackton Veterans Administration Hospital. Design and review of structural renovations and repair work including construction drawings and specifications.

PROFESSIONAL EXPERIENCE (Continued)

- o **Project Engineer:** Seismic evaluation of bridge cranes and structures for Electricity de France power plants. Project required site inspection and seismic evaluation of various bridge cranes and crane structures.
- o **Structural Engineer:** Responsible for due diligence review of several commercial buildings for a King of Prussia, Pennsylvania, realty company. Project included the structural review of large warehouse type buildings for commercial office space.

EDUCATION

TUFTS UNIVERSITY, Medford, Massachusetts: B.S. Civil Engineering, 1970

REGISTRATION

Professional Engineer: Massachusetts

Professional Engineer: Maine

Civil Engineer: Vermont

JAMES R. DISSER

PROFESSIONAL HISTORY

EQE International, Stratham, New Hampshire, Project Engineer, 1993-present

Mitchell, Jobe & Company, Dallas, Texas, Senior Engineer, 1992-1993

TU Electric, Glen Rose, Texas, Senior Engineer, 1987-1992

Stone & Webster Engineering Corporation, Engineering Supervisor, 1980-1987

PROFESSIONAL EXPERIENCE

Mr. Disser has over 14 years of experience in civil and structural engineering, earthquake engineering, field engineering, construction and project management. His responsibilities have included seismic design and analysis of nuclear power piping, piping support systems, cable tray, conduit and HVAC support systems; seismic qualification of equipment; analysis of structures and development of design criteria, design procedures, test procedures and construction specifications. He has also been active in the implementation of several USI A-46 projects, a major material condition upgrade program, various MSIV leakage path seismic evaluation projects and seismic margins evaluations. Mr. Disser has supervised engineering design teams and successfully managed a variety of engineering and test projects. Selected project accomplishments include the following:

- *USI A-46 Seismic Verification Program and IPEEE Seismic Margins Assessment for TVA Browns Ferry Units 2 and 3.* Seismic verification of BWR safe shutdown equipment using the Seismic Qualification Utilities Group (SQUG) Generic Implementation Procedure (GIP) and EPRI NP-6041 methodology. Performed walkdowns, anchorage calculations, outlier evaluations and HCLPF calculations. Participated in Safe Shutdown Equipment List (SSEL) evaluation to ensure completeness and development of the A-46 and IPEEE response spectra.
- *MSIV Leakage Path Seismic Verification Program for TVA Browns Ferry Unit 3.* Performed walkdowns and evaluation of piping, active valves and equipment in the BWR Main Steam Isolation Valve leakage path boundary to the condenser using earthquake experience data and seismic margins evaluation criteria. Participated in identification of system boundary valves/equipment and production of the walkdown report.
- *MSIV Leakage Path Seismic Verification Program for CP&L Brunswick Nuclear Plant Unit 1.* Performed walkdowns and evaluation of piping, active valves and equipment in the BWR Main Steam Isolation Valve leakage path boundary to the condenser using earthquake experience data and seismic margins evaluation criteria. Also performed calculations for the evaluation of the anchorage for the main turbine stop and control valves, the bypass valve chest and the main condenser. Outlier evaluations, analysis of the main steam drain supports and development and design of modifications were also performed. Participated in production of the walkdown report.
- *USI A-46 Seismic Verification Program and IPEEE Seismic Margins Assessment for CP&L Brunswick Nuclear Plant Units 1 and 2.* Seismic verification of BWR safe shutdown equipment using the GIP and EPRI NP-6041. Performed walkdowns, anchorage calculations, outlier evaluations and HCLPF calculations.

PROFESSIONAL EXPERIENCE (Continued)

Also performed the A-46 conduit and cable tray walkdowns, and selected the worst case representative samples for the Limited Analytical Review. Participated in completing the SVDS, and the final evaluation of outliers in preparation for the NRC submittal.

- *MSIV Leakage Path Seismic Verification Program for WPPSS WNP Unit 2.* Performed walkdowns and evaluation of piping, piping supports, active valves and equipment in the BWR Main Steam Isolation Valve leakage path boundary to the condenser using earthquake experience data and seismic margins evaluation criteria. Prepared walkdown and outlier documentation. Provided recommendations for evaluation or modification of outliers. Participated in production of the walkdown report.
- *USI A-46 Seismic Verification Program and IPEEE Seismic Margins Assessment for Duke Power Oconee Units 1, 2 and 3.* Seismic verification of selected PWR safe shutdown equipment. The equipment involved was a subset of the SSEL which for the most part could not be seismically verified strictly by database comparison. The project scope included development of A-46 and IPEEE seismic floor response spectra for the areas involved, walkdowns of the equipment previously identified as problems by the utility, research into existing documentation, performance of anchorage calculations and resolution of outliers. Performed the outlier evaluation and A-46 verification by calculation of the CCW vertical deepwell pumps, and the A-46 and IPEEE verification by calculation of the anchorage for the steam turbine driven feedwater pumps. HCLPF calculations were performed for the CCW pumps. Walkdowns were performed using the GIP and EPRI NP-6041 methodology.
- *USI A-46 Seismic Verification Program and IPEEE Seismic Margins Assessment for Toledo Edison Davis-Besse Nuclear Plant.* Seismic verification of PWR safe shutdown equipment using the GIP and EPRI NP-6041 methodology. Performed walkdowns and anchorage calculations considering A-46 and IPEEE seismic response for a large group of mechanical and electrical equipment including the 4.16 kv switchgear.
- *USI A-46 Seismic Verification Program and IPEEE Seismic Margins Assessment for GPU Oyster Creek Nuclear Generating Station.* Seismic verification of BWR safe shutdown equipment using the SQUG Generic Implementation Procedure and EPRI NP-6041 methodology. Performed walkdowns, anchorage calculations and outlier evaluations considering A-46 and IPEEE seismic response for a large group of electrical and mechanical equipment including the station's RHR Service Water Pumps. Lead Walkdown Engineer for the A-46 Cable Tray and Conduit walkdowns. Selected the worst case bounding samples and performed the calculations for the Raceway Limited Analytical Review.
- *USI A-46 Seismic Verification Program for CP&L Robinson Nuclear Plant.* Walkdown Engineer for the A-46 Cable Tray and Conduit Walkdown. Performed walkdowns, selected cases for the bounding sample and reviewed the calculations for the conduit and cable tray Limited Analytical Review. Also reviewed SSEL equipment anchorage calculations.
- *MSIV Leakage Path Seismic Verification Program for PP&L Susquehanna Unit 2.* Performed walkdowns and evaluation of piping, active valves and equipment

PROFESSIONAL EXPERIENCE (Continued)

in the BWR Main Steam Isolation Valve leakage path boundary to the condenser using earthquake experience data and seismic margins evaluation criteria. Prepared walkdown and outlier documentation. Provided recommendations for evaluation or modification of outliers.

- *MSIV Leakage Path Seismic Verification Program for Iowa Electric Duane Arnold Energy Center.* Prepared and reviewed load path calculations for the main steam drain support system and anchorage calculations for the SJAEs and other equipment included in the MSIV steam leakage boundary in support of the effort to seismically qualify the drain path piping using seismic margins evaluation criteria.
- *Material Condition Upgrade Program at CP&L Brunswick Nuclear Plant Units 1 and 2.* Provided engineering resolutions to ensure short-term structural integrity (STSI) for a wide variety of plant equipment, including structural elements of the plant buildings, suspended systems, and mechanical and electrical equipment. STSI resolutions were provided using established plant short-term acceptance criteria; accepted USI A-46 methodology; and/or other sound, short-term engineering qualification methods. Performed in-plant walkdowns to identify potential material condition deficiencies; research of design documentation related to the identified concerns; evaluation of the structural condition, production, review, and design verification of supporting calculations; initiation and design of any modifications to support the STSI resolutions; and engineering support of construction or maintenance crews in the installation of the modifications. The project was also responsible for follow-up engineering to provide long-term qualification of the STSI resolutions within the Plant Design Basis. This included additional engineering work and/or plant modifications for long-term qualification of the equipment and commodities involved. The project's STSI and long-term resolutions qualified the equipment and commodities for operational, seismic, and postulated accident conditions as required by the Plant's current Design Basis. Also performed the STSI seismic qualification evaluation for the BNP vertical deepwell Service Water pumps and the long term seismic qualification for the replacement vertical deepwell Service Water Pumps.
- *Unit 2 Construction Completion Project for TU Electric Comanche Peak Steam Electric Station.* TU Electric Unit 2 Civil/Structural, Engineering Mechanics, and Suspended Support Systems Engineering Manager. Provided oversight and management of the A/E performing engineering services for CPSES Unit 2 for the civil, structural, engineering mechanics, seismic equipment qualification, protective coatings, HVAC supports, conduit and conduit supports, cable tray and cable tray supports, instrumentation tubing and supports, non-ASME piping and support, pipe rupture and commodity clearance disciplines. Also oversaw and managed the subcontractor performing the CPSES Unit 2 Seismic Category II/I Adequacy Evaluation. Reviewed and approved budgets; provided technical management of the architect/engineer and subcontractor; conducted detailed technical assessments of the contractors' products and programs; reviewed and approved design criteria and process procedures; and was responsible for interface with project management, construction, startup, Quality Assurance (QA)/Quality Control (QC), CPSES Unit 1, and the NRC.
- *TU Electric CPSES Unit 2 Reactor Containment Structural Integrity Test (SIT) Milestone Project.* Project Manager of the SIT. Responsible for all aspects of the

PROFESSIONAL EXPERIENCE (Continued)

Unit 2 SIT and directed all related activities performed by the Civil/Structural Engineer, Startup, and Construction. Developed the schedule and budget; revised the engineering specification; wrote and obtained approval of the test procedures; directed pre-test preparations, engineering and startup test activities and the restoration of the Containment building after completion of the test; reviewed and approved the SIT test report; and was responsible for coordination with personnel associated with the concurrently conducted Integrated Leakage Rate Test. Also performed the Volume Calculations for the Containment Integrated Leakage Rate Test.

- *TU Electric CPSES Unit 2 Construction Restart Estimating Project.* Member of the project group that developed the engineering baseline scope, man-hour estimate, and budget for the Unit 2 Completion Project that preceded restart of CPSES Unit 2 engineering activities in 1990. Responsibilities included Project Lead Engineer for development of the baseline scope for the ASME and non-ASME piping and supports analysis scope, the Unit 2 Seismic Category II/I Adequacy Evaluation; project member for preparation of the baseline scope for the civil/structural, engineering mechanics, mechanical systems, and NSSS Engineering scopes of work; preparation of the technical requirements and workscope sections of the contracts; and member of the committees charged with selection of the ASME Pipe Stress and Supports A/E and the Civil Structural A/E.
- *TU Electric CPSES Unit 2 in Unit 1 Seismic Evaluation Project.* TU Electric Project Manager for the seismic evaluation of incomplete Unit 2 construction in Unit 1 areas in support of the Unit 1 operating license. The project performed walkdowns of the Unit 2/Unit 1 common areas, documented seismically inadequate incomplete construction, performed engineering evaluations and recommended hardware resolutions to ensure seismic integrity or removal of inadequate partial installations.
- *TU Electric CPSES Seismic Evaluation of Non-Seismic and Seismic Category II Piping in Seismic Category I Areas Program.* Lead Engineer for the engineering group performing the seismic qualification of the piping and supports evaluated in this program. Performed detailed seismic analysis of piping systems selected as bounding samples during walkdowns performed in all seismic areas of the plant. The walkdown program and qualifying calculations were reviewed in detail by the NRC, which eventually accepted the program as justification for closure of one of the major issues that delayed the issuance of the CPSES operating license.
- *TU Electric CPSES Balance of Plant Piping Completion Project.* Performed analysis of non-seismic piping and designed their support systems in support of the construction completion of CPSES. Also performed analysis in support of modifications to structures, ASME piping and seismic suspended systems in TU Electric Operations custody.
- *Comanche Peak Review Team (CPRT) QA/QC Review of TU Electric Comanche Peak Steam Electric Station.* Engineer in the CPRT Mechanical Safety Significance Evaluation Group. Performed evaluations of deviation reports generated as a result of inspections for construction deviations from design requirements. The evaluations determined the safety significance of the deviations through research into design requirements in effect during the construction phase of Comanche Peak Unit 1. Analyzed the design and

PROFESSIONAL EXPERIENCE (Continued)

construction evolution of the deviating item and performed calculations, as required, to determine the effects of the deviation on the integrity of the item.

- *Duquesne Light Company Beaver Valley Nuclear Power Station Unit 2 Project.* Engineering Supervisor responsible for final qualification of pipe stress calculations in support of the BVPS-2 ASME III N-5 Certification Program. Responsibilities included preparation and independent review of the final stress calculations for ASME III Class 2 and 3 piping. Also performed analysis and calculation reviews for ASME buried piping.

Site Engineering Supervisor responsible for special tasks related to pipe and duct supports including maintenance of the pipe and duct support installation specifications, resolution of construction problems, disposition of nonconformances, development and implementation of backfit construction and inspection programs, resolution of NRC Infractions and Open Items related to pipe supports, resolution of vendor problems, and supervision of all pipe support engineering activities of the Site Engineering Group. Also responsible for engineering evaluation of deviations documented in the Commodity Clearance Program.

Engineering/Design Supervisor responsible for pipe support engineering and design activities in the home office for the BV-2 Project. Responsibilities included redesign of supports in support of construction, support of licensing activities related to pipe supports, engineering support of the site instrumentation tubing stress analysis and support group, design support of the stress reconciliation program, and general pipe support engineering support of the Site Engineering Group, Toronto and New York offices. Developed and implemented project design criteria for piping, tubing and supports.

Site Engineering/Design Supervisor responsible for pipe, duct, and instrumentation tubing support engineering activities at the BV-2 site. Responsible for technical direction and supervision of all BV-2 site assigned Engineering Mechanics Division support engineers and all design personnel engaged in the instrumentation tubing stress analysis and support design effort. Also developed field construction procedures and installation specifications for supports, provided generic resolution of construction problems with support installations, and was responsible for interface with NRC personnel during site inspections.

- *Final Safety Analysis Report (FSAR) Development Project for Duquesne Light Company Beaver Valley Nuclear Power Station Unit 2.* Lead Engineer for a project group responsible for writing and developing the BV-2 FSAR sections related to Civil/Structural and Engineering Mechanics plant design. Also responsible for technical review of BV-2 resolutions to licensing issues (NRC infractions, open items, etc.).
- *Shoreham Nuclear Power Station Project for Long Island Lighting Company.* Performed ASME III Class 1 pipe stress analysis.

EDUCATION

University of Michigan: B.S. Civil Engineering, 1980

TRAINING

Seismic Qualification Utility Group Walkdown Screening and Seismic Evaluation Training , January, 1994

AFFILIATIONS

Past Utility Representative, ASME Section IX Subgroup for Repairs and Replacements

Past Alternate Member, NCIG-14, Seismic Evaluation and Design of Small Bore Piping Advisory Group

PUBLICATIONS

With T. Roche, C. Abou-Jaoude, and J. P. Conoscente. "Comparison Between Analytical and Test Results for Transformer Base Details." ASME Pressure Vessel and Piping Conference, Seismic Engineering, July 1993.

CARL R. NELMAN

PROFESSIONAL HISTORY

EQE International, Inc., Irvine, California, Lead Engineer, 1990-present

Rockwell International Corporation, Downey, California, Stress Analyst, 1987-1989;

Project Engineer, 1984-1987

Bechtel Power Corporation, Norwalk, California, Piping Engineer, 1983-1984

PROFESSIONAL EXPERIENCE

At EQE Mr. Nelman is Lead Engineer for various seismic interaction, analysis, and seismic qualification efforts for nuclear facility systems, piping, and equipment. The efforts involve review of data from past earthquake investigations, post earthquake investigations, development of criteria based on the EQE Earthquake Experience Database, analysis, field investigations, and retrofit design. The systems and components evaluated include mechanical, electrical, instrumentation, electrical raceways, and piping systems. Major programs have included seismic interaction evaluation for both Comanche Peak Steam Electric Station and Watts Bar Nuclear Plant equipment, piping, HVAC, and electrical raceways, and piping evaluation for the Beznau Facility in Switzerland.

As a mechanical engineer for Rockwell International from 1987 to 1990, Mr. Nelman performed duties as a Stress Analyst for the Space Shuttle program. He performed various analysis reports for numerous components of the Stabilized Payload Deployment System; and performed numerous NASTRAN analyses for many and varied components of payload integration mounting hardware, and Shuttle component systems, payloads, and hardware kits.

Mr. Nelman also served as a Project Engineer for Rockwell from 1984 to 1987. His primary responsibility was for the design, development, manufacture, and installation of an MX Missile Guidance and Control Assembly (GCA) Insertion/Removal Trainer for the Air Force. In addition, he provided project engineer services for design, development, and manufacture of coolant hoses and test equipment fixtures for the Small ICBM GCA.

As a Piping Engineer for Bechtel Power Corp. from 1983 to 1984 Mr. Nelman was assigned to the Palo Verde Nuclear Power Plant project. He was responsible for specifying piping and valves for installation, performing material suitability studies, and researching ASME B & PV Code interpretations.

In addition to his work in the private sector, Mr. Nelman is a member of the Naval Reserve Civil Engineer Corps. He holds the rank of Commander, and has a Secret security clearance. Mr. Nelman, a registered Professional and Mechanical engineer in the State of California, has several years of professional engineering experience. As Stress Analyst for the Space Shuttle Program for Rockwell International, he performed various stress analysis calculations for numerous components of Stabilized Payload Deployment, performed NASTRAN stress analysis for numerous components of payload

PROFESSIONAL EXPERIENCE (Continued)

integration mounting hardware, performed stress analysis and prepared final report for various Shuttle components, payloads, and hardware "kits." For the MX and Small ICBM Missile Programs, he was also the Project Engineer responsible for the design, development, manufacturing, and installation of an MX Missile Guidance and Control Assembly (GCA) Insertion/Removal Trainer and Coolant Hoses for the Small ICBM GCA.

EDUCATION

SAN DIEGO STATE UNIVERSITY, San Diego, CA: B.S. Mechanical Engineering, 1982
UNIVERSITY OF SOUTHERN CALIFORNIA, Los Angeles, CA: B.A. Psychology, 1974

AFFILIATIONS

Society of American Military Engineers
Tau Beta Pi
Pi Tau Sigma

REGISTRATION

Professional Engineer: California
Mechanical Engineer: California

RICHARD D. AUGUSTINE

PROFESSIONAL HISTORY

EQE Incorporated, Stratham, New Hampshire, Principal Engineer, 1987-present
Impell Corporation, New York, New York, Project Engineer, 1986-1987
Cygn Energy Services, Boston, Massachusetts, Structural Engineer, 1985-1986
Butler Service Group, Charlotte, North Carolina, Structural Engineer, 1984-1985
Pullman-Higgins, Seabrook, New Hampshire, Field Engineer, 1983-1984
Butler Service Group, Braintree, Massachusetts, Design Engineer, 1981-1982
Bechtel Power Corporation, San Francisco, California, Design Engineer, 1980-1981

PROFESSIONAL EXPERIENCE

Since joining EQE, Mr. Augustine has been involved in various projects relating to the EQE seismic experience data base. In the field he has used the data base to seismically qualify electrical and mechanical equipment and various piping systems in nuclear power plants. Similar evaluation work has been performed on nuclear-plant cranes. He has used his extensive knowledge of nuclear piping in conjunction with data base experience to perform piping qualification tasks and develop performance criteria. In addition he has been involved in organizing and updating the seismic experience data base.

Mr. Augustine was assigned as USI A-46 Task Leader at Indian Point Unit 2. He has completed the SQUG Seismic Capability Training required for USI A-46 evaluations. In addition to work at Indian Point, he has performed IPEEE/A-46 walkdowns as an SCE at the TMI, Savannah River, Oyster Creek, Calvert Cliffs 1 and 2, and Keonee facilities. His work has included seismic screening of equipment, tanks and heat exchangers; conduit and cable tray screening and analytical reviews; and outlier resolutions.

Mr. Augustine has participated in various piping and equipment evaluation projects for DOE facilities including work at the Savannah River Plant and Princeton Plasma Physics Laboratory. At Savannah River, Mr. Augustine was a member of seismic review teams who reviewed relays, raceways, control panels, piping, and equipment in the K, L, and P reactors. At Princeton, he was project engineer for the seismic evaluation of Tritium handling systems.

Other assignments have included acting as project lead for the seismic verification of the diesel air start system at the Ginna Nuclear Plant, cable tray verification at TMI Unit 1, seismic II/I interaction review at Browns Ferry Unit 2 and Salem Unit 1, equipment seismic verification at Surry and North Anna, and seismic verification of HVAC duct and isolation dampers at Oyster Creek. Mr. Augustine has also participated as a seismic capability engineer on seismic review teams for seismic verification of equipment at several nuclear power plants.

Before joining EQE, Mr. Augustine was involved in the evaluation of anchorage for safety-related rotating equipment at the Comanche Peak Nuclear Station. Mr. Augustine has also participated in a number of conduit projects. At the Fitzpatrick

PROFESSIONAL EXPERIENCE (CONTINUED)

Nuclear Station in upstate New York, he provided engineering solutions to conduit routing and support problems. At the Pilgrim Nuclear station he contributed to the design of a conduit support framework in the cable spreading room.

Also at Pilgrim, Mr. Augustine was involved in the seismic requalification of the main fuel pool hoist and trolley. In another project at this facility, he participated in the design of a reinforced concrete shield-wall to be placed on the operating floor of the turbine building.

At the Seabrook Nuclear Station, he was involved in reconciliation of ASME Class 1, 2, and 3 piping and pipe supports. This effort required determining from design change documents for each support the capacity of these components to withstand deadweight, thermal, seismic, and transient loads imposed by the piping systems.

In a prior assignment at Seabrook, Mr. Augustine was responsible for overseeing the installation of piping and supports in the diesel generator building. Work involved checking the layout and structural configurations of piping and restraints, instructing staff on both drawing interpretation and procedural requirements, and resolving interferences encountered during construction. He also supervised completion of as-built drawings.

At the Brunswick Steam Electric Plant, Mr. Augustine worked in the engineering support group during refueling and plant modification outages. He participated in the design of new pipe supports and the redesign of existing ones. Following design, he supervised installation of supports and resolved interference problems. Non-outage work consisted primarily of routing and supporting Class IE conduit.

Mr. Augustine designed the supporting structure framework for the mainstream, feedwater, and pressurizer piping systems at the McGuire Nuclear Station. The design included seismic analysis, field measurement and layout, and base plate analysis.

While with Bechtel, Mr. Augustine supervised the piping simplified stress analysis group for the Susquehanna Nuclear project. In this capacity he managed the stress review and new design of piping systems and supports. He also performed seismic and gravity stress calculations. During this period, he also designed both large and small bore supports, including snubbers, struts, anchors, and springs.

EDUCATION

COLORADO STATE UNIVERSITY: B.S. Civil Engineering, 1979

REGISTRATIONS

Civil Engineer: New Hampshire

Structural Engineer: New Hampshire

JOHN O. DIZON

PROFESSIONAL HISTORY

EQE International, San Francisco, California, Associate, 1986-present
Engineering Decision Analysis Company, Cupertino, California, Project Engineer, 1984-1986
General Electric Company, San Jose, California, Senior Engineer, 1984
URS/John A. Blume Associates, San Francisco, California, Senior Engineer, 1982-1984; Associate Engineer, 1977-1980
Structural Systems Engineering, Inc., Lafayette, California, Senior Engineer, 1980-1982
Stanford University, John A. Blume Earthquake Engineering Center, Palo Alto, California, Teaching and Research Assistant, 1975-1977

PROFESSIONAL EXPERIENCE

Mr. Dizon has over 15 years of experience in seismic analyses and design assessments of primary structures and piping systems, and seismic qualification of mechanical and electrical systems. As a Principal Engineer for EQE's Engineering Consultants Division, he has taken primary responsibility for the technical development of several seismic evaluation programs. These include acting as Group Manager for evaluating essential systems and components at the Savannah River Site; developing alternate analysis criteria for Category I small bore piping at the Donald C. Cook plant, alternate design criteria to the Tennessee Valley Authority (TVA) for the Sequoyah Nuclear Plant, and alternate design criteria for Category I HVAC duct systems and supports at TVA Browns Ferry Nuclear Plant; and providing guidance to the seismic equipment qualification program for the Plutonium Handling Facility at Lawrence Livermore National Laboratory.

Mr. Dizon recently served as the responsible Project Manager for the resolution of USI A-46 using the SQUG GIP methodology, and IPEEE using the EPRI margin assessment methodology for Toledo Edison (Davis-Besse) and Tennessee Valley Authority (Browns Ferry 2 and 3) nuclear power plants. As Group Manager for EQE at the Savannah River Site, Mr. Dizon was responsible for the seismic verification program of safety-related mechanical and electrical systems and components. His tasks included developing seismic evaluation criteria and procedures for restart and long-term seismic programs, consistent with the SQUG Generic Implementation Procedure for use in USI A-46 plants; managing the seismic walkdown and evaluation efforts; providing technical support in resolving seismic issues; and serving as an interface with the client.

Mr. Dizon has participated in the seismic evaluation of the High Flux Isotope Reactor at Oak Ridge National Laboratory. This project involved performing seismic analyses and upgrades for the primary coolant piping system and related equipment and the reactor and control buildings. He was responsible for the raceway evaluation program for Cooper Nuclear Station and Browns Ferry Nuclear Plant, and participated in the seismic piping reevaluation programs for Sequoyah Nuclear Plant and Comanche Peak Nuclear Plant where he performed plant walkdowns and pipe stress analyses for piping systems.

PROFESSIONAL EXPERIENCE (Continued)

With General Electric Company, Mr. Dizon was responsible for stress analysis and code conformation of main steam and recirculation piping systems for BWR power plants. He was involved in the evaluation and development work on a pipe support optimization program.

At EDAC, Mr. Dizon was responsible for the evaluation and development of a pipe support optimization program (OPTPIPE). He was responsible for the snubber reduction pilot program for Commonwealth Edison's La Salle County Station Unit 1. Other areas of his involvement consisted of finite element analyses of MX-missile launch tube components and systems for thermal and pressure loads, equipment qualification of major mechanical and electrical components, and seismic evaluation of cooling towers for the Vermont Yankee Power Plant.

At URS/Blume & Associates, Mr. Dizon was responsible for the development and maintenance of in-house computer programs for both linear and nonlinear analyses of structural and piping systems. He was also involved in the seismic analysis and evaluation of the reactor, turbine and administration buildings for Nine Mile Point Unit 1 in New York. He helped develop a soil-structure interaction computer program using a three-dimensional finite element technique to evaluate the dynamic response of structures due to arbitrary plane body and surface wave excitations. He performed a research study involving soil-structure interaction analysis using the finite element FLUSH program to investigate the dynamic response of typical containment structures due to underground blast excitations. He was also involved in the linear and nonlinear dynamic analyses, finite element modeling, and generation of floor response spectra for the containment and turbine buildings at the Diablo Canyon Nuclear Power plant near San Luis Obispo, California.

Mr. Dizon worked as a consultant to Bechtel Power Corporation with Structural Systems Engineering, Inc. He performed structural analyses and design assessments of the primary containment structure and the reactor/control buildings of Limerick Generating Station in Pennsylvania for various types of hydrodynamic loads. He was involved in the Limerick in-plant test procedures, data reduction and correlation study to determine the dynamic response, including soil-structure interaction of the reactor/control buildings during Mark II hydrodynamic load actuation in the primary containment.

At Stanford University, Mr. Dizon performed statistical analyses of earthquake acclerograms and various response parameters. He conducted seismic risk analyses and formulated seismic design criteria for Nicaragua. In addition, he was involved in the dynamic testing of structural models and equipment.

EDUCATION

STANFORD UNIVERSITY, Palo Alto, California: Engineer Degree, 1977

STANFORD UNIVERSITY, Palo Alto, California: M.S. Structural Engineering, 1975

MAPUA INSTITUTE OF TECHNOLOGY, Manila, Philippines: B.S. Civil Engineering, 1973

REGISTRATION

California: Civil Engineer
Philippines: Civil Engineer

PUBLICATIONS

With E. J. Frevold and P. D. Osborne. 1993. "Seismic Qualification of Safety-related HVAC Duct Systems and Supports." Presented at the 1993 ASME Pressure Vessel and Piping Division Conference, Denver, Colorado, July 1993.

With S. J. Eder. 1991. "Advancement in Design Standards for Raceway Supports and Its Applicability to Piping Systems." Presented at the 1991 American Society of Mechanical Engineer (ASME) Pressure Vessel and Piping Division Conference, San Diego, California, June 1991.

With R. D. Campbell and L. W. Tiong. 1990 "Response Predictions for Piping Systems Which Have Experienced Strong Motion Earthquakes." ASME Pressure Vessel and Piping Conference, Nashville, Tennessee, June 17-21, 1990.

With S. P. Harris, R. S. Hashimoto, and R. L. Stover. 1989. "Seismic, High Wind, and Probabilistic Risk Assessments of the High Flux Isotope Reactor." Second DOE Natural Phenomena Hazards Mitigation Conference.

With D. Ray and A. Kabir. 1979. "A 3-D Seismic Analysis for Arbitrary Plane Body and Surface Wave Excitations." American Society of Civil Engineers Nuclear Specialty Conference, Boston, Massachusetts.

With D. Ray and A. Zebarjadian. 1978. "Dynamic Response of Surface and Embedded Disk Foundations for SH, SV, P and Rayleigh Wave Excitations." Sixth Indian Symposium on Earthquake Engineering, Roorkee, India.

"A Statistical Analysis of Earthquake Accelerograms and Response Parameters." 1977. Thesis, Stanford University, Palo Alto, California,

With H. Shah, T. Zsutty, H. Krawinkler, and L. Padilla. 1977. "A Seismic Design Procedure for Nicaragua." Paper presented at the Sixth World Conference on Earthquake Engineering, New Delhi, India.

With H. Shah, T. Zsutty, H. Krawinkler, C. P. Mortgat, and A. Kiremidjian. 1976. "A Study of Seismic Risk for Nicaragua, Part II, Summary and Commentary." John A. Blume Earthquake Engineering Center, Report No. 12A and 12B. Stanford University, Palo Alto, California.

BASILIO N. SUMODOBILA, JR.

PROFESSIONAL HISTORY

EQE Incorporated, San Francisco, California, Principal Engineer, 1986-present
East Bay Municipal Utility District, Oakland, California, Associate Engineer, 1984-1986
URS/John A. Blume and Associates, San Francisco, California, Senior Engineer,
1982-1984
Bechtel Power Corporation, San Francisco, California, Senior Engineer 1979-1982
URS/John A. Blume and Associates, San Francisco, California, Senior Engineer,
1973-1979

PROFESSIONAL EXPERIENCE

Mr. Sumodobila has over 19 years of experience in seismic evaluations, structural dynamic analysis, seismic analysis, structural design, linear and nonlinear analysis, and finite element software development. As Principal Engineer for EQE's Engineering Consultants Division, he provided support for the equipment qualification at the Savannah River Site. Mr. Sumodobila is responsible as a seismic capability engineer for Toledo Edison. This includes resolution of USI A-46 using the SQUG GIP methodology, and IPEEE using the EPRI margin assessment methodology at the Davis-Besse nuclear power plant.

At EQE Mr. Sumodobila has performed various aspects of seismic evaluation and analysis of a variety of electrical, mechanical and structural components. He has extensive experience in seismic evaluation of electrical raceways and components, mechanical equipment, piping, and structures. He has also performed seismic interaction evaluations, including II/I interaction, and seismic-induced spray hazards evaluation. In addition, he has performed building structure analysis and evaluation, including soil-structure interaction effects. He is well versed with the actual performance of industrial components and structures in actual earthquake, and has applied the seismic experience approach in qualification of equipment.

For the Browns Ferry Nuclear Plant, Cooper Station, and Savannah River Plant, Mr. Sumodobila was involved with the seismic evaluation of electrical raceways. For the Browns Ferry Nuclear Plant, and Savannah River Plant he has performed II/I interaction hazards evaluation. For the Sequoyah Nuclear Power Plant, Beznau Nuclear Power Plant (Switzerland), High Flux Isotope Reactor (HFIR-Oakridge), and Savannah River Plant he has performed piping analysis and evaluation. For the Winfrith Generating Station (UK), and Savannah River Plant he was involved with the seismic evaluation of confinement system. For the Browns Ferry Nuclear Power Plant, he was involved with seismic induced spray hazards evaluation.

Mr. Sumodobila has also performed a number of seismic analysis of structures, including soil-structure interaction effects. For the SRS 105-K, L, and P Reactors, he performed the structural analysis of the VTS monorail frames. He performed the seismic analysis including soil-structure interaction for the Tower Shielding Reactor (TSR-Oak Ridge), Surry Nuclear Power Plant, N-Reactor Intake Pump Structure, and the Bellene Nuclear Plant (Bulgaria). He also performed the seismic analysis and evaluation of the HFIR Reactor Building.

PROFESSIONAL EXPERIENCE (Continued)

At East Bay Municipal Utility District, Mr. Sumodobila was responsible for seismic analysis of Water Storage Tanks. He developed a computer code for seismic analysis and design of water storage tanks per AWWA D-100 Code. He was also involved with layout of filter plants for the San Ramon Valley Filter Plant.

As a senior engineer at URS/Blume, he was responsible for the dynamic analysis of structures using finite element methods, which included mathematical modeling, calculation of structural response, and determination of critical sections. In addition, he provided modifications to structures to reduce stresses.

He completed the analysis of several nuclear power plant structures. For the Diablo Canyon Nuclear Plant, he completed the analysis of the Turbine Buildings for the Hosgri Earthquake load. As a lead engineer, his responsibilities included mathematical modeling for finite element analysis, time history analysis, calculation of dynamic time history response, generation of response spectra, preparation of calculations and reports, and supervision of other engineers working on the specified task. He was also responsible for the dynamic seismic analysis of the Turbine and Administration buildings of the Nine Mile Point Unit 1 Power Plant.

While employed at Bechtel Power Corporation, he completed several aspects of design, structural analysis, and stress evaluation for the Limerick Nuclear Power Plant. He was involved in the stress analysis of various structural components such as the containment primary structures, suppression chamber columns, downcomers and downcomer bracing system for dead, seismic and various hydrodynamic loads such as safety relief valve actuation, chugging, condensation oscillation and thermal loads. Tasks included the development of mathematical models for ANSYS, BSAP (a Bechtel program), STRUDL and NASTRAN computer programs. He also performed design assessment of these structural components and was responsible for the complete analysis and design of the downcomer bracing system constructed of stainless steel, which was designed by analysis iterative process due to the numerous loadings. Various methods were developed in the analysis for the hydrodynamic loads. Some unusual design approaches were used. He developed a computer program to check member stresses for numerous loading combinations for acceptability.

He was also involved in the stress evaluation of the concrete slab and walls for the spent fuel pool for the Limerick Plant for dead, seismic and thermal loads. Performed a finite element nonlinear analysis of the spent fuel pool to determine the stress distribution and the capacities of the critical sections in the concrete slab and walls of the spent fuel pool.

While employed at URS/Blume, he was responsible for the seismic and stress analysis of structures, equipment, and piping systems of nuclear facilities.

For the Diablo Canyon Nuclear Power Plant, he performed the dynamic analysis of the containment structure, (using axisymmetric finite element method) the auxiliary building, (including torsional modes of vibration) and the turbine building, as well as performing the seismic analysis of piping systems for the DE and DDE.

He was involved in the stress analysis of several underground waste storage tanks for the Hanford Reservation in Washington, for dead, live, and thermal loads and earthquake ground motions, and evaluated stresses at the steel tank shell in accordance with the ASME Section VIII Division 2 code.

PROFESSIONAL EXPERIENCE (Continued)

Also, he assisted in the development and debugging of various computer programs for structural analysis. He developed a module for direct integration and modal superposition time history analysis for a piping analysis program and other algorithms for time series analysis.

In addition, he is proficient in the use of the following computer programs: SAPIV, ANSYS, BSAP, STRUDL, AXIDYN, NASTRAN, DRAIN-2D, STARDYNE.

EDUCATION

MAPUA INSTITUTE OF TECHNOLOGY, Manila, Philippines: B.S. Environmental Engineering, 1973

MAPUA INSTITUTE OF TECHNOLOGY, Manila, Philippines: B.S. Civil Engineering, 1970

U.C. BERKELEY EXTENSION: Courses in structural dynamics, design and computer programming

REGISTRATION

California: Civil Engineer

Philippines: Civil Engineer

HONORS

Philippine Board Examination for Civil Engineers, First Place, 1970

Philippine Association of Civil Engineers, Certificate of Merit, 1971

PUBLICATIONS

With J. J. Johnson and R. L. Stover. 1989 "Seismic and Cask Drop Excitation Evaluations of the Tower Shielding Reactor." Second DOE Natural Phenomena Hazards Mitigation Conference.

With S. J. Eder and J. P. Conoscente. 1989. "Seismic Fatigue Evaluation of Rod Hung Systems." Tenth Conference on Structural Mechanics in Reactor Technology.

With S. P. Harris, P. S. Hashimoto, J. O. Dizon, G. M. Zaharoff, and L. J. Bragagnolo. March 1988. "Seismic Evaluation of the High Flux Isotope Reactor Primary Containment System." Report prepared for Martin Marietta Energy Systems, Inc. San Francisco: EQE Engineering.

OCONEE NUCLEAR STATION

USI A-46 SEISMIC EVALUATION REPORT

Volume 2 of 2



A Duke Energy Company

December 1997

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Appendix B

Composite Safe Shutdown Equipment List Oconee Units 1,2 & 3

Appendix B

COMPOSITE SAFE SHUTDOWN EQUIPMENT LIST (SSEL) OCONEE UNITS 1,2 & 3

The following Composite Safe Shutdown List (SSEL) represents all components identified as part of the SSEL exclusive of contact devices. See Section 5 of the Relay Evaluation Report for these items. All components requiring a seismic evaluation are identified within Appendix B by either a "S" or "S,R" under "Eval. Type". Equipment which was evaluated by "Rule of the Box" with another component is designated with a "RB" in the Signature Group field. The seismic evaluation for these items can be found with the equipment listed in the "Walkdown Host" field. The results of the seismic evaluations for all equipment comprising the Seismic Review SSEL can be found in the SVDS forms located in Appendix D. These items are grouped within Appendix D by their SVDS signature group. All outliers are addressed in Table 8.1 and 8.2. Outliers can be identified within the Composite SSEL by their Outlier Reference Number. Outliers in Tables 8.1 & 8.2 are indexed by their Outlier Ref. No.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

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Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
18	N/A	0CCWCD0001 U0 SSF HVAC	SSF HVAC CONDENSER 1	N/A	OFD-133A-2.5 (J9)	SSF	817'	Not Used Not Used	NO	N/A	N/A	S
18	N/A	0CCWCD0002 U0 SSF HVAC	SSF HVAC CONDENSER 1	N/A	OFD-133A-2.5 (H9)	SSF	817'	Not Used Not Used	NO	N/A	N/A	S
N/A	N/A	0CCWFL0001 U0 Service Water	SERVICE WATER STRAINER	N/A	OFD-133A-2.5 (J3)	SSF	N/A	Not Used Not Used	NO	N/A	N/A	NONE
10	N/A	0CCWPU0001 U0 Auxiliary Service Water	AUX SERVICE WATER PUMP	N/A	OFD-121D-1.2 (E3)	AB	771'	Off On	YES	O-702-A1	ASWS-06B	S,R
10	N/A	0CCWPU0002 U0 SSF AUX Service Water	SSF AUX SERVICE WATER PUMP	N/A	OFD-133A-2.5 (J6)	SSF	754'	Off Off	NO	N/A	N/A	S,R
10	N/A	0CCWPU0003 U0 SSF HVAC	SSF HVAC COOLING WATER PUMP 1	N/A	OFD-133A-2.5 (H4)	SSF	754'	Off Off	NO	N/A	N/A	S,R
10	N/A	0CCWPU0004 U0 SSF HVAC	SSF HVAC COOLING WATER PUMP 2	N/A	OFD 133A-2.5 (J4)	SSF	754'	Off Off	NO	N/A	N/A	S,R
10	N/A	0CCWPU0005 U0 SSF DIESEL	SSF DIESEL WATER JACKET PUMP	N/A	OFD-133A-2.5 (G5)	SSF	754'	Off Off	NO	N/A	N/A	S,R
N/A	N/A	0CCWVA0277	3-WAY PRESS REG VALVE	N/A	OFD-133A-2.5 (J8)	SSF	N/A	Closed Either	NO	N/A	N/A	NONE

Notes:

- Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
- Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
- Evaluation type "S" indicates that a seismic evaluation was performed.
- Evaluation type "R" indicates that a relay evaluation was performed.
- Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
- Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
- Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
- The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
- All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

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Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U0 Condenser Circulating Water										
N/A	N/A	0CCWVA0280 U0 Condenser Circulating Water	3-WAY PRESS REG VALVE	N/A	OFD-133A-2.5 (H8)	SSF	N/A	Closed Either	NO	N/A	N/A	NONE
10	N/A	0DJWHX000A U0 Standby Shutdown Facility	SSF DJW HEAT EXCHANGER A	N/A	OFD-133A-2.5 (G7)	SSF	777'	Not Used Not Used	NO	N/A	N/A	S
10	N/A	0DJWHX000B U0 Standby Shutdown Facility	SSF DJW HEAT EXCHANGER B	N/A	OFD-133A-2.5 (G9)	SSF	777'	Not Used Not Used	NO	N/A	N/A	S
1	N/A	0LPSVA0139 U1 Low Pressure Service Water	NONESSENTIAL HEADER ISOLATION VALVE	N/A	OFD-124A-1.1 (C9)	TB	775'	Open Closed	YES	O-1703-G	2XS3-05A	S,R
20	1	0VSAH0014 U0 Plant Heating	AIR HANDLING UNIT 0.14	N/A	OFD-124A-3.2 (E10)	TB	850'	In Service Either	NO	N/A	N/A	S
20	1	0VSAH0015 U0 Plant Heating	AIR HANDLING UNIT 0.15	N/A	OFD-124A-3.2 (C10)	TB	850'	In Service Either	NO	N/A	N/A	S
51	N/A	0VSMN0001 HVAC	CHLORINE DETECTOR MONITOR PANEL	N/A	OEE-131-66	AB	838'	In Service In Service	YES	O-704	1KG-34	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
Evaluation type "S" indicates that a seismic evaluation was performed.
Evaluation type "R" indicates that a relay evaluation was performed.
Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
52	185	1&2POWDEXPANEL U1 Condensate	1&2 POWDEX PANEL	1&2 POWDEX PANEL	O-1013	TB	775'	Either Either	NO	N/A	N/A	S,R
9	3	1A/1B/SW U1 240/120V AC PWR	1A/1B REG XFER SW	N/A	O-705-A	AB	796'	In Service In Service	YES	O-703-F	1XO-F01E	S,R
9	3	1A/MCB U1 240/120V AC PWR	240/120V 1A REGULATOR OUTPUT BKR	N/A	O-705-A	AB	796'	Closed Closed	YES	O-703-F	1XO-F01E	S,R
10	4	1A/REG U1 240/120V AC PWR	REGULATED PWR SUPP REG 1A	N/A	O-705-A	AB	796'	In Service In Service	YES	O-703-F	1XO-F01E	S,R
11	163	1A/XFMR U1 240/120V AC PWR	XFMR 1A (600V TO 240V)	N/A	O-705-A	AB	796'	In Service In Service	YES	O-703-F	1XO-F01E	S
10	N/A	1ADA U1 125/250V DC PWR	ISOL DIODE ASSEMBLY 1ADA	N/A	O-705	AB	796'	In Service In Service	YES	O-705	1DCA-03A	S,R
10	164	1ADB U1 125/250V DC PWR	ISOL DIODE ASSEMBLY 1ADB	N/A	O-705	AB	796'	In Service In Service	YES	O-705	1DCA-03B	S,R
10	N/A	1ADC U1 125/250V DC PWR	ISOL DIODE ASSEMBLY 1ADC	N/A	O-705	AB	796'	In Service In Service	YES	O-705	1DCB-03A	S,R
10	N/A	1ADD U1 125/250V DC PWR	ISOL DIODE ASSEMBLY 1ADD	N/A	O-705	AB	796'	In Service In Service	YES	O-705	1DCB-03B	S,R
10	N/A	1ADE U1 240/120V AC PWR	ISOL DIODE ASSEMBLY 1ADE	N/A	O-705-A	AB	796'	In Service In Service	YES	O-2705	3DCA-04B	S,R
10	N/A	1ADF	ISOL DIODE ASSEMBLY	N/A	O-705-A	AB	796'	In Service	YES	O-2705	3DCA-03E	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

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Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 240/120V AC PWR	1ADF					In Service				
10	N/A	1ADG U1 240/120V AC PWR	ISOL DIODE ASSEMBLY 1ADG	N/A	O-705-A	AB	796'	In Service In Service	YES	O-2705	3DCA-03F	S,R
1	165	1AHCC HVAC	AIR HANDLING UNITS 11 & 12 CONTROL PANEL	N/A	OEE-131	AB	838'	In Service In Service	YES	O-703-F/O-1703-C	1XR-04E/2X	S,R
1	N/A	1ASP U1 Control Boards	AUX SHUTDOWN PANEL	N/A	O-769-D	TB	822'	In Service In Service	NO	N/A	N/A	S,R
52	N/A	1ASPT0117P U1 Main Steam	AUX STEAM PRESSURE TRANSMITTER (MS-126 & MS-129)	N/A	OEE-145-85	TB	796'	In Service In Service	YES	O-705	1KVID-10	S,R
52	166	1AT3 U1 Control Cabinet	AREA TERM CAB 1AT3	N/A	N/A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
1	N/A	1AT5 U2 Control Cabinet	AREA TERM CAB 1AT5	N/A	N/A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
31	N/A	1AT8 U1 Control Cabinet	AREA TERM CAB 1AT8	N/A	N/A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
1	N/A	1ATWSCP U1 Control Panel	U1 ATWS CONTROL PANEL	N/A	N/A	AB	838'	In Service In Service	N/A	N/A	N/A	S,R
14	167	1B U1 Pressurizer Heaters	600V PPB 1B (FOR PZR HTR GROUP B BANK 2)	N/A	O-885A	RB	818'	In Service In Service	YES	O-703-K	1XSF-F03B	S,R
9	3	1B/MCB U1 240/120V AC PWR	240/120V 1B REGULATOR OUTPUT BKR	N/A	O-705-A	AB	796'	Closed Closed	YES	O-703-E	1XP-F01AB	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
10	4	1B/REG U1 240/120V AC PWR	REGULATED PWR SUPP REG 1B	N/A	O-705-A	AB	796'	In Service In Service	YES	O-703-E	1XP-F01AB	S,R
10	187	1B/XFMR U1 240/120V AC PWR	XFMR 1B (600V TO 240V)	N/A	O-705-A	AB	796'	In Service In Service	YES	O-703-E	1XP-F01AB	S
1	N/A	1BSPS0018 U1 Engineered Safeguards	RB PRESS SWITCH (ES CH 1A)	N/A	OFD-103A-1.1	AB	809'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	1BSPS0019 U1 Engineered Safeguards	RB PRESS SWITCH (ES CH 1A)	N/A	OFD-103A-1.1	AB	809'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	1BSPS0020 U1 Engineered Safeguards	RB PRESS SWITCH (ES CH 1B)	N/A	OFD-103A-1.1	AB	809'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	1BSPS0021 U1 Engineered Safeguards	RB PRESS SWITCH (ES CH 1B)	N/A	OFD-103A-1.1	AB	809'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	1BSPS0022 U1 Engineered Safeguards	RB PRESS SWITCH (ES CH 1C)	N/A	OFD-103A-1.1	AB	809'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	1BSPS0023 U1 Engineered Safeguards	RB PRESS SWITCH (ES CH 1C)	N/A	OFD-103A-1.1	AB	809'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	1BSPT0004P U1 Engineered Safeguards	RB PRESS XMTR (ES CH 1A)	N/A	O-422A-8	AB	809'	In Service In Service	YES	O-705	1KVIA-02	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

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Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
1	N/A	1BSPT0005P U1 Engineered Safeguards	RB PRESS XMTR (ES CH 1B)	N/A	O-422A-8	AB	809'	In Service In Service	YES	O-705	1KVIB-02	S,R
1	N/A	1BSPT0006P U1 Engineered Safeguards	RB PRESS XMTR (ES CH 1C)	N/A	O-422A-8	AB	809'	In Service In Service	YES	O-705	1KVIC-02	S,R
10	N/A	1BSPU0001 U1 Reactor Building Spray	RBS PUMP 1A	N/A	OFD-103A-1.1 (J5)	AB	758'	Not Used Not Used	NO	N/A	N/A	NONE
10	N/A	1BSPU0002 U1 Reactor Building Spray	RBS PUMP 1B	N/A	OFD-103A-1.1 (E5)	AB	758'	Not Used Not Used	NO	N/A	N/A	NONE
1	N/A	1BSVA0001 U1 Reactor Building Spray	RB SPRAY HEADER 1A ISOLATION	N/A	OFD-103A-1.1 (J8)	AB	809'	Closed Closed	NO	N/A	N/A	R
1	N/A	1BSVA0002 U1 Reactor Building Spray	RB SPRAY HEADER 1B ISOLATION	N/A	OFD-103A-1.1 (E8)	AB	809'	Closed Closed	NO	N/A	N/A	R
1	N/A	1BSVA0003 U1 Reactor Building Spray	RBS PUMP SUCTION ISOL	N/A	OFD-102A-1.1 (E12)	AB	758'	Open Open	NO	N/A	N/A	S,R
1	N/A	1BSVA0004 U1 Reactor Building Spray	RBS PUMP SUCTION ISOL	N/A	OFD-102A-1.1 (C12)	AB	758'	Open Open	NO	N/A	N/A	S,R
32	N/A	1C U1 Pressurizer Heaters	600V PPB 1C (FOR PRESSURIZER HEATERS)	N/A	O-885A	RB	818'	In Service In Service	YES	O-703-E	1XI-02A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

11/11/97

Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
			GROUP C BANK 2)									
18	2	1CA/BB U1 125/250V DC PWR	CONTROL BATT 1CA	N/A	OEE-130-02	AB	809'	In Service In Service	YES	O-705	1CA/BC	S
10	N/A	1CA/BC U1 125/250V DC PWR	CONTROL BATT CHGR 1CA	N/A	O-705	AB	796'	In Service In Service	YES	O-703-G	1XS1-F04A	S,R
10	N/A	1CAP U1 Control Panel	CHEMICAL ADDITION PANEL	N/A	O-18-A	AB	771'	In Service In Service	N/A	N/A	N/A	S,R
18	2	1CB/BB U1 125/250V DC PWR	CONTROL BATT 1CB	N/A	OEE-130-03	AB	809'	In Service In Service	YES	O-705	1CB/BC	S
10	N/A	1CB/BC U1 125/250V DC PWR	CONTROL BATT CHGR 1CB	N/A	O-705	AB	796'	In Service In Service	YES	O-703-G	1XS2-F04D	S,R
N/A	N/A	1CCWMJ0001 U1 Condenser Circulating Water	CCW PUMP EXP JOINT	N/A	OFD-133A-1.1 (K2)	YD	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	1CCWMJ0002 U1 Condenser Circulating Water	CCW PUMP EXP JOINT	N/A	OFD-133A-1.1 (K5)	YD	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	1CCWMJ0003 U1 Condenser Circulating Water	CCW PUMP EXP JOINT	N/A	OFD-133A-1.1 (K7)	YD	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	1CCWMJ0004	CCW PUMP EXP JOINT	N/A	OFD-133A-1.1 (K10)	YD	N/A	In Service In Service	NO	N/A	N/A	NONE

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 Condenser Circulating Water										
N/A	N/A	1CCWMJ0005 U1 Condenser Circulating Water	COND INLET EXP JOINT	N/A	OFD-133A-1.2 (K2)	TB	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	1CCWMJ0006 U1 Condenser Circulating Water	COND INLET EXP JOINT	N/A	OFD-133A-1.2 (K4)	TB	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	1CCWMJ0007 U1 Condenser Circulating Water	COND INLET EXP JOINT	N/A	OFD-133A-1.2 (K5)	TB	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	1CCWMJ0008 U1 Condenser Circulating Water	COND INLET EXP JOINT	N/A	OFD-133A-1.2 (K8)	TB	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	1CCWMJ0009 U1 Condenser Circulating Water	COND INLET EXP JOINT	N/A	OFD-133A-1.2 (K9)	TB	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	1CCWMJ0010 U1 Condenser Circulating Water	COND INLET EXP JOINT	N/A	OFD-133A-1.2 (K11)	TB	N/A	In Service In Service	NO	N/A	N/A	NONE
20	5	1CCWPU0001	CCW PUMP 1A	N/A	OFD-133A-1.1 (K3)	YD	810'	On/off	YES	O-702	1TC-05	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 Condenser Circulating Water						On				
20	5	1CCWPU0002 U1 Condenser Circulating Water	CCW PUMP 1B	N/A	OFD-133A-1.1 (K5)	YD	810'	On/off On	YES	O-702	1TD-04	S,R
20	5	1CCWPU0003 U1 Condenser Circulating Water	CCW PUMP 1C	N/A	OFD-133A-1.1 (K8)	YD	810'	On/off On	YES	O-702	1TE-04	S,R
20	5	1CCWPU0004 U1 Condenser Circulating Water	CCW PUMP 1D	N/A	OFD-133A-1.1 (K9)	YD	810'	On/off On	YES	O-702	1TC-06	S,R
10	N/A	1CCWPU0024 U1 Condenser Circulating Water	EFWPT OIL COOLER PUMP	N/A	OFD-133A-1.2 (K13)	TB	775'	Off On	YES	O-703-G	1XS3-04C	S,R
20	N/A	1CCWVA0001 U1 Condenser Circulating Water	CCW EM DISCH ISOL	N/A	OFD-133A-1.2 (I2)	YD	796'	Closed Open	YES	O-705-B	1MVC2-01A	S,R
20	N/A	1CCWVA0002 U1 Condenser Circulating Water	CCW EM DISCH ISOL	N/A	OFD-133A-1.2 (I4)	YD	796'	Closed Open	YES	O-705-B	1MVC2-01B	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSF" indicates that the equipment is part of the NSSF system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
20	N/A	1CCWVA0003 U1 Condenser Circulating Water	CCW EM DISCH ISOL	N/A	OFD-133A-1.2 (I6)	YD	796'	Closed Open	YES	O-705-B	1MVC2-01C	S,R
20	N/A	1CCWVA0004 U1 Condenser Circulating Water	CCW EM DISCH ISOL	N/A	OFD-133A-1.2 (I7)	YD	796'	Closed Open	YES	O-705-B	1MVC2-01D	S,R
20	N/A	1CCWVA0005 U1 Condenser Circulating Water	CCW EM DISCH ISOL	N/A	OFD-133A-1.2 (I9)	YD	796'	Closed Open	YES	O-705-B	1MVC2-02A	S,R
20	N/A	1CCWVA0006 U1 Condenser Circulating Water	CCW EM DISCH ISOL	N/A	OFD-133A-1.2 (I11)	YD	796'	Closed Open	YES	O-705-B	1MVC2-02B	S,R
20	N/A	1CCWVA0008 U1 Condenser Circulating Water	EM DISCHARGE VALVE	N/A	OFD-133A-3.2 (B1)	YD	730'	Closed Open	YES	O-705-B	1DP-F05C	S,R
20	N/A	1CCWVA0010 U1 Condenser Circulating Water	DISCH ISOL VALVE	N/A	OFD-133A-1.1 (K2)	YD	796'	Open/Closed Open	YES	O-703-G	1XS1-F02C	S,R
20	N/A	1CCWVA0011 U1 Condenser Circulating Water	DISCH ISOL VALVE	N/A	OFD-133A-1.1 (K5)	YD	796'	Open/Closed Open	YES	O-703-G	1XS2-F02D	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
20	N/A	1CCWVA0012 U1 Condenser Circulating Water	DISCH ISOL VALVE	N/A	OFD-133A-1.1 (K7)	YD	796'	Open/Closed Open	YES	O-703-G	1XS3-02E	S,R
20	N/A	1CCWVA0013 U1 Condenser Circulating Water	DISCH ISOL VALVE	N/A	OFD-133A-1.1 (K10)	YD	796'	Open/Closed Open	YES	O-703-G	1XS1-F03C	S,R
N/A	N/A	1CCWVA0026 U1 Condenser Circulating Water	CCW VENT VALVE	N/A	OFD-133A-1.1 (I3)	YD	815'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	1CCWVA0027 U1 Condenser Circulating Water	CCW VENT VALVE	N/A	OFD-133A-1.1 (H5)	YD	796'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	1CCWVA0028 U1 Condenser Circulating Water	CCW VENT VALVE	N/A	OFD-133A-1.1 (H7)	YD	815'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	1CCWVA0029 U1 Condenser Circulating Water	CCW VENT VALVE	N/A	OFD-133A-1.1 (I10)	YD	796'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	1CCWVA0268 U1 Condenser Circulating Water	SSF ASW PUMP DISCH ISOL	N/A	OFD-133A-2.5 (H14)	SSF	N/A	Closed Either	NO	N/A	N/A	NONE

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
N/A	N/A	1CCWVA0269 U1 Condenser Circulating Water	CROSSOVER ISOLATION TO A	N/A	OFD-121D-1.1 (G13)	AB	771'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	1CCWVA0287 U1 Condenser Circulating Water	SSF ISOL VALVE	N/A	OFD-133A-2.5 (G14)	SSF	754'	Closed Closed	NO	N/A	N/A	R
18	6	1CDM000A U1 Polishing Demineralizer	POLISHING DEMINERALIZER 1A	N/A	OFD-121A-1.5 (I3)	TB	775'	In Service Either	NO	N/A	N/A	S
18	6	1CDM000B U1 Polishing Demineralizer	POLISHING DEMINERALIZER 1B	N/A	OFD-121A-1.5 (I5)	TB	775'	In Service Either	NO	N/A	N/A	S
18	6	1CDM000C U1 Polishing Demineralizer	POLISHING DEMINERALIZER 1C	N/A	OFD-121A-1.5 (I8)	TB	775'	In Service Either	NO	N/A	N/A	S
18	6	1CDM000D U1 Polishing Demineralizer	POLISHING DEMINERALIZER 1D	N/A	OFD-121A-1.5 (I10)	TB	775'	In Service Either	NO	N/A	N/A	S
18	6	1CDM000E U1 Polishing Demineralizer	POLISHING DEMINERALIZER 1E	N/A	OFD-121A-1.5 (I13)	TB	775'	In Service Either	NO	N/A	N/A	S
N/A	N/A	1CFL0002 U1 Condensate	RESIN TRAP	N/A	OFD-121A-1.5 (F7)	TB	775'	In Service Not Used	NO	N/A	N/A	S*

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSF" indicates that the equipment is part of the NSSF system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

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Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
N/A	N/A	1CFL000A U1 Condensate	HOTWELL PUMP STRAINER A	N/A	OFD-121A-1.4 (L3)	TB	775'	In Service Not Used	NO	N/A	N/A	S*
N/A	N/A	1CFL000B U1 Condensate	HOTWELL PUMP STRAINER B	N/A	OFD-121A-1.4 (J3)	TB	775'	In Service Not Used	NO	N/A	N/A	S*
N/A	N/A	1CFL000C U1 Condensate	HOTWELL PUMP STRAINER C	N/A	OFD-121A-1.4 (I3)	TB	775'	In Service Not Used	NO	N/A	N/A	S*
16	N/A	1CFTK000A U1 Core Flood	CORE FLOOD TANK 1A	N/A	0-6	RB	797'	In Service In Service	NO	N/A	N/A	S,R
16	N/A	1CFTK000B U1 Core Flood	CORE FLOOD TANK 1B	N/A	0-10	RB	818'	In Service In Service	NO	N/A	N/A	S,R
10	7	1CHX002A U1 Condensate	CONDENSATE COOLER 1A	N/A	OFD-121A-1.4 (D3)	TB	775'	In Service Either	NO	N/A	N/A	S
10	7	1CHX002B U1 Condensate	CONDENSATE COOLER 1B	N/A	OFD-121A-1.4 (C3)	TB	775'	In Service Either	NO	N/A	N/A	S
52	8	1CLT0015A U1 ICCM	UST 1B LEVEL	N/A	OFD-121A-1.7 (J11)	TB	838'	In Service In Service	YES	O-705	1KVIA-08	S,R
52	8	1CLT0036	UST 1A LEVEL	N/A	OFD-121A-1.7 (J2)	TB	838'	In Service In Service	YES	O-705	1KVIB-13	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 ICCM										
N/A	N/A	1CMJ0007 U1 Emergency Feedwater	UST DOME TO 1A UST EXP JOINT	N/A	OFD-121A-1.7 (J5)	TB	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	1CMJ0008 U1 Emergency Feedwater	UST DOME TO 1B UST EXP JOINT	N/A	OFD-121A-1.7 (J7)	TB	N/A	In Service In Service	NO	N/A	N/A	NONE
52	8	1CPS0015 U1 Condensate	UST MAKEUP LEVEL CONTROL (PS-15)	N/A	OEE-145-73	TB	838'	In Service Not Used	N/A	N/A	N/A	S,R
52	8	1CPS0036 U1 Condensate	UST MAKEUP LEVEL CONTROL (PS-36)	N/A	OEE-145-73	TB	838'	In Service Not Used	N/A	N/A	N/A	S,R
1	N/A	1CPS0227 U1 Condensate DC Interlocks	CONDENSATE BOOSTER PUMP SUCTION HEADER PRESS LOW	N/A	OEE-145-00-A	TB	775'	In Service Not Used	N/A	N/A	N/A	S,R
20	9	1CPU0010 U1 Condensate	HOTWELL PUMP 1A	N/A	OFD-121A-1.4 (L5)	TB	775'	On Off	NO	N/A	N/A	S,R
20	9	1CPU0011 U1 Condensate	HOTWELL PUMP 1B	N/A	OFD-121A-1.4 (J5)	TB	775'	On Off	NO	N/A	N/A	S,R
20	9	1CPU0012 U1 Condensate	HOTWELL PUMP 1C	N/A	OFD-121A-1.4 (I5)	TB	775'	On Off	NO	N/A	N/A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

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11/11/97

Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
10	N/A	1CPU0019 U1 Condensate	HOLDING PUMP 1A	N/A	OFD-121A-1.5 (H3)	TB	775'	In Service Not Used	NO	N/A	N/A	S
10	N/A	1CPU0020 U1 Condensate	HOLDING PUMP 1B	N/A	OFD-121A-1.5 (H5)	TB	775'	In Service Not Used	NO	N/A	N/A	S
10	N/A	1CPU0021 U1 Condensate	HOLDING PUMP 1C	N/A	OFD-121A-1.5 (H8)	TB	775'	In Service Not Used	NO	N/A	N/A	S
10	N/A	1CPU0022 U1 Condensate	HOLDING PUMP 1D	N/A	OFD-121A-1.5 (H10)	TB	775'	In Service Not Used	NO	N/A	N/A	S
10	N/A	1CPU0023 U1 Condensate	HOLDING PUMP 1E	N/A	OFD-121A-1.5 (H13)	TB	775'	In Service Not Used	NO	N/A	N/A	S
10	N/A	1CRDACBKRCAB U1 Reactor Trip	CRD SYSTEM AC BKR CAB	N/A	O-710-A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
11	N/A	1CRDDCBKRCAB U1 Reactor Trip	CRD SYSTEM DC BKR CAB	N/A	O-710-A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
10	N/A	1CRDLC U1 Reactor Trip	CONTROL ROD DRIVE LOGIC CABINETS	N/A	O-710-A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
1	11	1CREL U1 Emergency Lighting	UNIT 1 CONTROL ROOM EMERGENCY LIGHTS	N/A	O-846	AB	822'	N/A N/A	N/A	O-705-B	1DL2-06	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
10	168	1CTK0003 U1 Condensate	SLURRY TANK	N/A	OFD-121A-1.5 (D5)	TB	775'	In Service In Service	NO	N/A	N/A	S
34	169	1CTK000A U1 Condensate	UPPER SURGE TANK 1A	N/A	OFD-121A-1.7 (J8)	TB	838'	In Service In Service	NO	N/A	N/A	S
18	169	1CTK000B U1 Condensate	UPPER SURGE TANK 1B	N/A	OFD-121A-1.7 (J3)	TB	838'	In Service In Service	NO	N/A	N/A	S
16	170	1CTK000C U1 Condensate	UPPER SURGE TANK DOME	N/A	OFD-121A-1.7 (K6)	TB	838+	In Service In Service	NO	N/A	N/A	S
N/A	N/A	1CVA0001 U1 Condensate	HOTWELL PUMP INLET ISOL VALVE	N/A	OFD-121A-1.4 (J2)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1CVA0003 U1 Condensate	HOTWELL PUMP OUTLET ISOL VLV	N/A	OFD-121A-1.4 (J7)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1CVA0004 U1 Condensate	HOTWELL PUMP INLET ISOL VALVE	N/A	OFD-121A-1.4 (J2)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1CVA0006 U1 Condensate	HOTWELL PUMP OUTLET ISOL VLV	N/A	OFD-121A-1.4 (J7)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1CVA0007	HOTWELL PUMP INLET ISOL VALVE	N/A	OFD-121A-1.4 (L2)	TB	N/A	Open Either	NO	N/A	N/A	NONE

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

11/11/97

Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 Condensate										
N/A	N/A	1CVA0009 U1 Condensate	HOTWELL PUMP OUTLET ISOL VLV	N/A	OFD-121A-1.4 (L7)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1CVA0010 U1 Condensate	HOTWELL PUMP ISOLATION VALVE	N/A	OFD-121A-1.4 (H7)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1CVA0014 U1 Condensate	HOTWELL PUMP THROTTLE VALVE	N/A	OFD-121A-1.4 (H5)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1CVA0015 U1 Condensate	HWP BYPASS VALVE	N/A	OFD-121A-1.4 (H5)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1CVA0017 U1 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-1.5 (K3)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1CVA0018 U1 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-1.5 (G3)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1CVA0019 U1 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-1.5 (K5)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1CVA0020 U1 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-1.5 (G5)	TB	N/A	Open Either	NO	N/A	N/A	NONE

Notes:

- Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
- Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
- Evaluation type "S" indicates that a seismic evaluation was performed.
- Evaluation type "R" indicates that a relay evaluation was performed.
- Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
- Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
- Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
- The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
- All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
N/A	N/A	1CVA0021 U1 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-1.5 (K8)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1CVA0022 U1 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-1.5 (G8)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1CVA0023 U1 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-1.5 (K10)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1CVA0024 U1 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-1.5 (G10)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1CVA0025 U1 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-1.5 (K13)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1CVA0026 U1 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-1.5 (G13)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1CVA0148 U1 Condensate	CST PUMPS CONTROL	N/A	OFD-121A-1.7 (C12)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1CVA0152 U1 Condensate	UST RISER ISOLATION	N/A	OFD-121A-1.7 (I7)	TB	775'	Open Open	NO	N/A	N/A	R
N/A	N/A	1CVA0153	UST RISER ISOLATION	N/A	OFD-121A-1.7 (I5)	TB	822'	Open Open	NO	N/A	N/A	R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 Condensate										
N/A	N/A	1CVA0156 U1 Condensate	UST RISER ISOLATION	N/A	OFD-121A-1.7 (I7)	TB	822'	Open Open	NO	N/A	N/A	R
N/A	N/A	1CVA0158 U1 Condensate	UST RISER ISOLATION	N/A	OFD-121A-1.7 (I5)	TB	822'	Open Open	NO	N/A	N/A	R
N/A	N/A	1CVA0160 U1 Condensate	UST SUPPLY ISOL TO TDEFWP	N/A	OFD-121A-1.8 (E8)	TB	775'	Closed Closed	NO	N/A	N/A	R
52	N/A	1CVA0176 U1 Condensate	UST TO COND ISOL VALVE	N/A	OFD-121A-1.8 (H7)	TB	775'	Open/closed Closed	YES	O-704-E	1SKK-24	S,R
52	N/A	1CVA0187 U1 Condensate	UST TO COND ISOL VALVE	N/A	OFD-121A-1.8 (G7)	TB	771'	Open/closed Closed	YES	O-704	1KA-26	S,R
52	N/A	1CVA0192 U1 Condensate	UST TO COND ISOL VALVE	N/A	OFD-121A-1.8 (J7)	TB	775'	Open/closed Closed	YES	O-704	1KA-26	S,R
N/A	N/A	1CVA0225 U1 Condensate	POL DEMIN ISOL VALVE (BACKWASH INLET W/A VALVE)	N/A	OFD-121A-1.5 (H4)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	1CVA0229 U1 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-1.5 (I2)	TB	N/A	Open Either	NO	N/A	N/A	NONE

Notes:

- Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
- Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
- Evaluation type "S" indicates that a seismic evaluation was performed.
- Evaluation type "R" indicates that a relay evaluation was performed.
- Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
- Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
- Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
- The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
- All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

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Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
N/A	N/A	1CVA0230 U1 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-1.5 (I2)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1CVA0232 U1 Condensate	POL DEMIN ISOL VALVE (DRAIN U/A VALVE)	N/A	OFD-121A-1.5 (K2)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	1CVA0233 U1 Condensate	POL DEMIN ISOL VALVE (BACKWASH INLET W/B VALVE)	N/A	OFD-121A-1.5 (H6)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	1CVA0237 U1 Condensate	POL DEMIN ISOL VALVE (DRAIN U/B VALVE)	N/A	OFD-121A-1.5 (K5)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	1CVA0238 U1 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-1.5 (I5)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1CVA0239 U1 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-1.5 (I5)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1CVA0240 U1 Condensate	POL DEMIN ISOL VALVE (BACKWASH INLET W/C VALVE)	N/A	OFD-121A-1.5 (H9)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	1CVA0244 U1 Condensate	POL DEMIN ISOL VALVE (DRAIN U/C VALVE)	N/A	OFD-121A-1.5 (K7)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	1CVA0245	POL DEMIN ISOL VALVE	N/A	OFD-121A-1.5 (I7)	TB	N/A	Open Either	NO	N/A	N/A	NONE

Notes:

- Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
- Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
- Evaluation type "S" indicates that a seismic evaluation was performed.
- Evaluation type "R" indicates that a relay evaluation was performed.
- Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
- Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
- Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
- The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
- All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 Condensate										
N/A	N/A	1CVA0246 U1 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-1.5 (I7)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1CVA0247 U1 Condensate	POL DEMIN ISOL VALVE (BACKWASH INLET W/D VALVE)	N/A	OFD-121A-1.5 (H11)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	1CVA0251 U1 Condensate	POL DEMIN ISOL VALVE (DRAIN U/D VALVE)	N/A	OFD-121A-1.5 (K10)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	1CVA0252 U1 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-1.5 (I10)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1CVA0253 U1 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-1.5 (I10)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1CVA0254 U1 Condensate	POL DEMIN ISOL VALVE (BACKWASH INLET W/E VALVE)	N/A	OFD-121A-1.5 (H14)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	1CVA0258 U1 Condensate	POL DEMIN ISOL VALVE (DRAIN U/E VALVE)	N/A	OFD-121A-1.5 (K12)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	1CVA0259 U1 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-1.5 (I12)	TB	N/A	Open Either	NO	N/A	N/A	NONE

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
N/A	N/A	1CVA0260 U1 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-1.5 (I12)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1CVA0262 U1 Condensate	SLURRY TANK ISOLATION VALVE (Z VALVE)	N/A	OFD-121A-1.5 (E5)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	1CVA0263 U1 Condensate	POL DEMIN ISOL VALVE (X VALVE)	N/A	OFD-121A-1.5 (F5)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	1CVA0264 U1 Condensate	SLURRY TANK ISOLATION VALVE (L VALVE)	N/A	OFD-121A-1.5 (D3)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	1CVA0265 U1 Condensate	SLURRY TANK ISOLATION VALVE (D VALVE)	N/A	OFD-121A-1.5 (D3)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	1CVA0266 U1 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-1.5 (F4)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1CVA0267 U1 Condensate	POL DEMIN ISOL VALVE (VR VALVE)	N/A	OFD-121A-1.5 (F3)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	1CVA0268 U1 Condensate	POL DEMIN ISOL VALVE (QR VALVE)	N/A	OFD-121A-1.5 (F11)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	1CVA0271	POL DEMIN ISOL VALVE	N/A	OFD-121A-1.5 (K2)	TB	N/A	Closed Either	NO	N/A	N/A	NONE

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSF" indicates that the equipment is part of the NSSF system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 Condensate										
N/A	N/A	1CVA0272 U1 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-1.5 (K5)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
N/A	N/A	1CVA0273 U1 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-1.5 (K7)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
N/A	N/A	1CVA0274 U1 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-1.5 (K10)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
N/A	N/A	1CVA0275 U1 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-1.5 (K12)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
21	N/A	1CVA0391 U1 Condensate	HOTWELL SUPPLY ISOL TO TDEFW	N/A	OFD-121A-1.8 (K12)	TB	775'	Closed Open	NO	N/A	N/A	S,R
N/A	N/A	1CVA0826 U1 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-1.5 (K3)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
N/A	N/A	1CVA0829 U1 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-1.5 (K6)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
N/A	N/A	1CVA0832 U1 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-1.5 (K8)	TB	N/A	Closed Either	NO	N/A	N/A	NONE

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
N/A	N/A	1CVA0835 U1 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-1.5 (K11)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
N/A	N/A	1CVA0838 U1 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-1.5 (K13)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
32	N/A	1D U1 Pressurizer Heaters	600V PPB 1D (FOR PRESSURIZER HEATERS GROUP D BANK 2)	N/A	O-885A	RB	818'	In Service In Service	YES	O-703-F	1XJ-02A	S,R
35	23	1DCA U1 125/250V DC PWR	125V DC 1DCA	N/A	O-705	AB	796'	In Service In Service	YES	O-703-G	1XS1-F04A	S,R
35	24	1DCB U1 125/250V DC PWR	125V DC 1DCB	N/A	O-705	AB	796'	In Service In Service	YES	O-703-G	1XS2-F04D	S,R
10	N/A	1DIA/INV U1 240/120V AC PWR	120V STATIC INV 1DIA	N/A	O-705	AB	796'	In Service In Service	YES	O-705	1DIA-33	S,R
36	N/A	1DIA/PPB U1 125/250V DC PWR	125V PPB 1DIA	N/A	O-705	AB	809'	In Service In Service	YES	O-705	1ADA	S,R
10	N/A	1DIB/INV U1 240/120V AC PWR	120V STATIC INV 1DIB	N/A	O-705	AB	796'	In Service In Service	YES	O-705	1DIB-33	S,R
36	N/A	1DIB/PPB U1 125/250V DC PWR	125V PPB 1DIB	N/A	O-705	AB	809'	In Service In Service	YES	O-705	1ADB	S,R
10	N/A	1DIC/INV	120V STATIC INV 1DIC	N/A	O-705	AB	796'	In Service	YES	O-705	1DIC-33	S,R

Notes:

- Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
- Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
- Evaluation type "S" indicates that a seismic evaluation was performed.
- Evaluation type "R" indicates that a relay evaluation was performed.
- Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
- Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
- Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
- The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
- All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 240/120V AC PWR						In Service				
36	N/A	1DIC/PPB U1 125/250V DC PWR	125V PPB 1DIC	N/A	O-705	AB	809'	In Service In Service	YES	O-705	1ADC	S,R
10	N/A	1DID/INV U1 240/120V AC PWR	120V STATIC INV 1DID	N/A	O-705	AB	796'	In Service In Service	YES	O-705	1DID-33	S,R
36	N/A	1DID/PPB U1 125/250V DC PWR	125V PPB 1DID	N/A	O-705	AB	809'	In Service In Service	YES	O-705	1ADD	S,R
1	N/A	1DL2/PPB U1 125/250V DC PWR	250V DC 1DL2 PPB	N/A	O-705-B	AB	796'	In Service In Service	YES	O-705-B	1DP-F03CL	S,R
35	25	1DP U1 125/250V DC PWR	125/250V DC 1DP	N/A	O-705-B	TB	796'	In Service In Service	YES	O-703-F	1XO-F01B	S,R
59	27	1EB1-8,EF1-8 U1 Control Boards	ELECTRICAL BOARDS 1EB1-8,EF1-8	N/A	O-710	AB	822'	In Service In Service	N/A	N/A	N/A	S,R
RB	N/A	1EHC1 U1 Control Cabinets	EHC CAB 1EHC1	1EHC1,2,3	O-710-A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
10	29	1EHC1,2,3 U1 Control Cabinets	EHC CONTROL CABINET 1EHC1,2,3	N/A	N/A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
RB	N/A	1EHC2	EHC CAB 1EHC2	1EHC1,2,3	O-710-A	AB	809'	In Service	N/A	N/A	N/A	S,R

Notes:

- Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
- Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
- Evaluation type "S" indicates that a seismic evaluation was performed.
- Evaluation type "R" indicates that a relay evaluation was performed.
- Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
- Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
- Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
- The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
- All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 Control Cabinets						In Service				
RB	N/A	1EHC3 U1 Control Cabinets	EHC CAB 1EHC3	1EHC1,2,3	O-710-A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
10	30	1EHTC1 U1 Control Cabinets	EHC TERM CAB 1EHTC1	N/A	O-710-A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
1	31	1EPSLP1 U1 Emergency Power Switching Logic	EPSL PANEL 1EPSLP1	N/A	N/A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
1	N/A	1EPSLP2 U1 Emergency Power Switching Logic	EPSL PANEL 1EPSLP2	N/A	N/A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
58	32	1ESFAS U1 Control Cabinet	ESFAS CABINETS	N/A	O-710	AB	822'	In Service In Service	N/A	N/A	N/A	S,R
RB	N/A	1ESTC1 U1 Control Cabinet	ESFAS ODD CH TERM CAB 1ESTC1	1ESTC1,2	O-2710-A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
10	N/A	1ESTC1,2 U1 Control Cabinet	ESFAS CABINETS ESTC1,2	N/A	N/A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
RB	N/A	1ESTC2 U1 Control Cabinet	ESFAS EVEN CH TERM CAB 1ESTC2	1ESTC1,2	O-710-A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
63	N/A	1ESTC2A U1 Control Cabinet	ESFAS AUX RLY CAB 1ESTC2A	N/A	O-710-A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
11	33	1ESTC3 U1 Control Cabinet	ESFAS EVEN/ODD TERM CAB 1ESTC3	N/A	O-710-A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

11/11/97

Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
N/A	N/A	1FDWFE0153 U1 Emergency Feedwater	1A EFW HEADER FLOW	N/A	OFD-121D-1.1 (K9)	AB	783'	Not Used In Service	NO	N/A	N/A	S*,R
N/A	N/A	1FDWFE0154 U1 Emergency Feedwater	1B EFW HEADER FLOW	N/A	OFD-121D-1.1 (D9)	AB	796'	Not Used In Service	NO	N/A	N/A	S*,R
52	N/A	1FDWFT0129 U1 Emergency Feedwater	1A EFW HEADER FLOW	N/A	OFD-121D-1.1 (K9)	AB	775'	Not Used In Service	YES	O-705	1KVIC-09	S,R
52	N/A	1FDWFT0130 U1 Emergency Feedwater	1B EFW HEADER FLOW	N/A	OFD-121D-1.1 (D9)	AB	796'	Not Used In Service	YES	O-2705	3KVIC-09	S,R
52	N/A	1FDWFT0153 U1 Emergency Feedwater	1A EFW HEADER FLOW TRANSMITTER	N/A	OFD-121D-1.1 (K9)	AB	783'	Not Used In Service	YES	O-705	1KVIB-09	S,R
52	N/A	1FDWFT0154 U1 Emergency Feedwater	1B EFW HEADER FLOW TRANSMITTER	N/A	OFD-121D-1.1 (D9)	AB	783'	Not Used In Service	YES	O-705	1KVIB-09	S,R
RB	N/A	1FDWHX0004 U1 Feedwater	EFW PUMP 1A MOTOR COOLER	1FDWPU0004	OFD-124A-1.3(K3)	TB	775'	Not Used In Service	NO	N/A	N/A	S
RB	N/A	1FDWHX0005 U1 Feedwater	EFW PUMP 1B MOTOR COOLER	1FDWPU0005	OFD-124A-1.3(I3)	TB	775'	Not Used In Service	NO	N/A	N/A	S
10	N/A	1FDWLT0080	SG 1A LEVEL TRANSMITTER	N/A	OFD-121B-1.3 (J12)	RB	777'	In Service In Service	YES	O-705	1KVIA-08	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
Evaluation type "S" indicates that a seismic evaluation was performed.
Evaluation type "R" indicates that a relay evaluation was performed.
Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 Emergency Feedwater										
10	N/A	1FDWLT0081 U1 Emergency Feedwater	SG 1B LEVEL TRANSMITTER	N/A	OFD-121B-1.3 (F12)	RB	777'	In Service In Service	YES	O-705	1KVIA-08	S,R
10	N/A	1FDWLT0082 U1 Emergency Feedwater	SG 1A LEVEL TRANSMITTER	N/A	OFD-121B-1.3 (J14)	RB	777'	In Service In Service	YES	O-705	1KVIB-13	S,R
10	N/A	1FDWLT0083 U1 Emergency Feedwater	SG 1B LEVEL TRANSMITTER	N/A	OFD-121B-1.3 (F14)	RB	777'	In Service In Service	YES	O-705	1KVIB-13	S,R
1	N/A	1FDWPS0300 U1 Emergency Feedwater	1EFPT LOW HYDRAULIC OIL PRESS SWITCH	N/A	OEE-147-05	TB	775'	In Service In Service	NO	N/A	N/A	S,R
39	N/A	1FDWPS0382 U1 Emergency Feedwater	FWP 1B CONTROL OIL PRESS SWITCH	N/A	OEE-117-90	TB	775'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	1FDWPS0383 U1 Emergency Feedwater	FWPT 1B CONTROL OIL PRESS LOW	N/A	OEE-117-91	TB	775'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	1FDWPS0384 U1 Emergency Feedwater	FWP 1A CONTROL OIL PRESS SWITCH	N/A	OEE-117-90	TB	775'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	1FDWPS0385 U1 Emergency Feedwater	FWPT 1B CONTROL OIL PRESS LOW	N/A	OEE-117-91	TB	775'	In Service In Service	NO	N/A	N/A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

11/11/97

Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
1	N/A	1FDWPS0386 U1 Emergency Feedwater	MDEFWP 1A DISCH PRESS LOW	N/A	OFD-121B-1.1	TB	775'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	1FDWPS0387 U1 Emergency Feedwater	MDEFWP 1A DISCH PRESS LOW	N/A	OFD-121B-1.1	TB	775'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	1FDWPS0388 U1 Emergency Feedwater	FWPT 1B DISCH PRESS LOW	N/A	OFD-121B-1.1	TB	775'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	1FDWPS0389 U1 Emergency Feedwater	FWPT 1B DISCH PRESS LOW	N/A	OFD-121B-1.1	TB	775'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	1FDWPS1009 U1 Emergency Feedwater	MAIN FWP DISCH HDR PRESS SWITCH	N/A	OEE-147-02	TB	775'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	1FDWPS1010 U1 Emergency Feedwater	MAIN FWP B DISCHARGE PRESSURE SWITCH	N/A	OEE-147-02	TB	775'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	1FDWPS1011 U1 Emergency Feedwater	FWP 1A CONTROL OIL PRESSURE SWITCH	N/A	OEE-147-02	TB	775'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	1FDWPS1012 U1 Emergency Feedwater	FWP 1B CONTROL OIL PRESS SWITCH	N/A	OEE-147-02	TB	775'	In Service In Service	NO	N/A	N/A	S,R
10	N/A	1FDWPU0003	TDEFW PUMP	N/A	OFD-121D-1.1 (E3)	TB	775'	Off On	N/A	N/A	STEAM	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
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Evaluation type "R" indicates that a relay evaluation was performed.
Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 Emergency Feedwater										
10	N/A	1FDWPU0004 U1 Emergency Feedwater	MDEFW PUMP 1A	N/A	OFD-121D-1.1 (K2)	TB	775'	Off On	YES	O-702	1TD-00	S,R
10	N/A	1FDWPU0005 U1 Emergency Feedwater	MDEFW PUMP 1B	N/A	OFD-121D-1.1 (C2)	TB	775'	Off On	YES	O-702	1TE-00	S,R
RB	N/A	1FDWTR0003 U1 Emergency Feedwater	EFWP TURBINE	1FDWPU0003	OFD-122A-1.4 (G10)	TB	775'	Off Throttled	NO	N/A	N/A	S
40	N/A	1FDWVA0086 U1 Emergency Feedwater	PRESS REG TD PUMP SEALS	N/A	OFD-121D-1.1 (G3)	TB	775'	Closed Throttled	NO	N/A	N/A	S
40	N/A	1FDWVA0087 U1 Emergency Feedwater	PRESS REG TD PUMP SEALS	N/A	OFD-121D-1.1 (G3)	TB	775'	Closed Throttled	NO	N/A	N/A	S
35	N/A	1FDWVA0105 U1 Emergency Feedwater	SG 1A SAMPLE ISOLATION	N/A	OFD-110A-1.1 (D3)	RB	808'	Open/closed Closed	YES	O-703-G	1XS1-R06D	S,R
1	N/A	1FDWVA0106 U1 Emergency Feedwater	SG 1A SAMPLE ISOLATION	N/A	OFD-110A-1.1 (D6)	AB	809'	Open/closed Closed	YES	O-705	1DIB-25	S,R
24	N/A	1FDWVA0107 U1 Emergency Feedwater	SG 1B SAMPLE ISOLATION	N/A	OFD-110A-1.1 (F3)	RB	808'	Open/closed Closed	YES	O-703-G	1XS1-R06E	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

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Appendix B

11/11/97

Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
1	N/A	1FDWVA0108 U1 Emergency Feedwater	SG 1B SAMPLE ISOLATION	N/A	OFD-110A-1.1 (F6)	AB	809'	Open/closed Closed	YES	O-705	1DIB-25	S,R
40	N/A	1FDWVA0129 U1 Emergency Feedwater	PRESS REG TD PUMP SEALS	N/A	OFD-121D-1.1 (G3)	TB	775'	Closed Throttled	NO	N/A	N/A	S
40	N/A	1FDWVA0218 U1 Emergency Feedwater	PRESS REG TD PUMP SEALS	N/A	OFD-121D-1.1 (G3)	TB	775'	Closed Throttled	NO	N/A	N/A	S
1	N/A	1FDWVA0315 U1 Emergency Feedwater	MDEFW PUMP 1A ISOLATION	N/A	OFD-121D-1.1 (K10)	AB	809'	Closed Throttled	YES	O-705	1DIB-10	S,R
1	N/A	1FDWVA0316 U1 Emergency Feedwater	MDEFW PUMP 1B ISOLATION	N/A	OFD-121D-1.1 (D10)	AB	809'	Closed Throttled	YES	O-705	1DIC-13	S,R
N/A	N/A	1FDWVA0347 U1 Emergency Feedwater	MDEFW PUMP 1B ISOLATION	N/A	OFD-121D-1.1 (D13)	AB	822'	Open Open	NO	N/A	N/A	R
N/A	N/A	1FDWVA0368 U1 Emergency Feedwater	TDEFWP HEADER 1A ISOLATION	N/A	OFD-121D-1.1 (J5)	TB	775'	Open Open	NO	N/A	N/A	R
N/A	N/A	1FDWVA0369 U1 Emergency Feedwater	TDEFWP HEADER 1B ISOLATION	N/A	OFD-121D-1.1 (D6)	TB	775'	Open Open	NO	N/A	N/A	R
N/A	N/A	1FDWVA0372	MDEFW PUMP 1A ISOLATION	N/A	OFD-121D-1.1 (K7)	TB	775'	Open Open	NO	N/A	N/A	R

Notes:

- Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
- Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
- Evaluation type "S" indicates that a seismic evaluation was performed.
- Evaluation type "R" indicates that a relay evaluation was performed.
- Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
- Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
- Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
- The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
- All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 Emergency Feedwater										
N/A	N/A	1FDWVA0374 U1 Emergency Feedwater	STARTUP HEADER ISOLATION	N/A	OFD-121D-1.1 (J7)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	1FDWVA0382 U1 Emergency Feedwater	MDEFW PUMP 1B ISOLATION	N/A	OFD-121D-1.1 (D7)	TB	775'	Open Open	NO	N/A	N/A	R
N/A	N/A	1FDWVA0384 U1 Emergency Feedwater	STARTUP HEADER ISOLATION	N/A	OFD-121D-1.1 (D7)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	1FDWVA0549 U1 Emergency Feedwater	1A MDEFDWP RECIRC REGULATOR	N/A	OFD-121D-1.1 (J2)	TB	775'	Open Open	NO	N/A	N/A	S
N/A	N/A	1FDWVA0550 U1 Emergency Feedwater	1B MDEFDWP RECIRC REGULATOR	N/A	OFD-121D-1.1 (E1)	TB	775'	Open Open	NO	N/A	N/A	S
1	N/A	1HBP U1 Control Panel	UNIT 1 HEATER BLANKETING PANEL	N/A	O-748	TB	822'	In Service In Service	N/A	N/A	N/A	S,R
1	N/A	1HDPS0377 U1 Main Steam	1ST STAGE RH PRESS SWITCH	N/A	OEE-154-05	TB	822'	In service In service	YES	O-703-H	1XA-A-F02A	S,R
1	N/A	1HPIEP0002 U1 High Pressure Injection	1HP-31 VALVE POSITIONER (1HP11-E/P)	N/A	OFD-101A-1.4	AB	775'	In service In service	YES	O-705-A	1KU-19	S,R
N/A	N/A	1HPIFE0007	HPI A TRAIN INJ FLOW	N/A	OFD-101A-1.3 (J12)	AB	N/A	Not Used	NO	N/A	N/A	NONE

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 High Pressure Injection	ELEMENT					In Service				
N/A	N/A	1HPIFE0008 U1 High Pressure Injection	HPI B TRAIN INJ FLOW ELEMENT	N/A	OFD-101A-1.3 (C12)	AB	N/A	Not Used In Service	NO	N/A	N/A	NONE
N/A	N/A	1HPIFE0075 U1 High Pressure Injection	RCP SEAL INJ FLOW ELEMENT	N/A	OFD-101A-1.4 (G5)	AB	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	1HPIFE0162 U1 High Pressure Injection	B LOOP INJ FLOW ELEMENT	N/A	OFD-101A-1.4 (E8)	AB	N/A	Not Used In Service	NO	N/A	N/A	NONE
21	34	1HPIFL000A U1 High Pressure Injection	RCP SEAL SUPPLY FILTER	N/A	OFD-101A-1.4 (E4)	AB	783'	In Service In Service	NO	N/A	N/A	S
21	34	1HPIFL000B U1 High Pressure Injection	RCP SEAL SUPPLY FILTER	N/A	OFD-101A-1.4 (G4)	AB	783'	In Service In Service	NO	N/A	N/A	S
1	N/A	1HPIFT0007A U1 High Pressure Injection	HPI A TRAIN INJ FLOW TRANS	N/A	OFD-101A-1.3 (J12)	AB	758'	Not Used In Service	YES	O-705	1KVIA-08	S,R
1	N/A	1HPIFT0008A U1 High Pressure Injection	HPI B TRAIN INJ FLOW TRANS	N/A	OFD-101A-1.3 (C12)	AB	758'	Not Used In Service	YES	O-705	1KVIB-13	S,R
10	N/A	1HPIFT0075 U1 High Pressure Injection	RCP SEAL INJ FLOW TRANSMITTER	N/A	OFD-101A-1.4 (G5)	AB	783'	In Service In Service	YES	O-705-A	ICS POWER	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
1	N/A	1HPIFT0101 U1 High Pressure Injection	RC PUMP SEAL INLET FLOW XMTR	N/A	OEE-151-53	AB	783'	In Service In Service	YES	O-704	1KE-20	S,R
1	N/A	1HPIFT0102 U1 High Pressure Injection	RC PUMP SEAL INLET FLOW XMTR	N/A	OEE-151-53	AB	783'	In Service In Service	YES	O-704	1KE-20	S,R
1	N/A	1HPIFT0103 U1 High Pressure Injection	RC PUMP SEAL INLET FLOW XMTR	N/A	OEE-151-53	AB	783'	In Service In Service	YES	O-704	1KE-20	S,R
1	N/A	1HPIFT0104 U1 High Pressure Injection	RC PUMP SEAL INLET FLOW XMTR	N/A	OEE-151-53	AB	783'	In Service In Service	YES	O-704	1KE-20	S,R
1	N/A	1HPIFT0160 U1 High Pressure Injection	B LOOP INJ FLOW TRANSMITTER	N/A	OFD-101A-1.4 (E8)	AB	809'	Not Used In Service	YES	O-705	1KVIC-13	S,R
RB	N/A	1HPIHX0001 U1 High Pressure Injection	HPI PUMP 1A MOTOR COOLER	1HPIPU0001	OFD-124B-1.1(K11)	AB	758'	In Service In Service	NO	N/A	N/A	S
RB	N/A	1HPIHX0002 U1 High Pressure Injection	HPI PUMP 1B MOTOR COOLER	1HPIPU0002	OFD-124B-1.1(I11)	AB	758'	In Service In Service	NO	N/A	N/A	S
RB	N/A	1HPIHX0003 U1 High Pressure Injection	HPI PUMP 1C MOTOR COOLER	1HPIPU0003	OFD-124B-1.1(H11)	AB	758'	Not Used In Service	NO	N/A	N/A	S
10	N/A	1HPIHX000A	LETDOWN COOLER 1A	N/A	OFD-101A-1.1 (L4)	RB	777'	In Service Not Used	NO	N/A	N/A	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 High Pressure Injection										
10	N/A	1HPIHX000B U1 High Pressure Injection	LETDOWN COOLER 1B	N/A	OFD-101A-1.1 (J4)	RB	777'	Not Used Not Used	NO	N/A	N/A	S
52	N/A	1HPILT0033P1 U1 High Pressure Injection	LDST Level #1	N/A	OFD-101A-1.2 (C5)	AB	771'	In Service In Service	YES	O-705-A	1KI-01	S
52	N/A	1HPILT0033P2 U1 High Pressure Injection	LDST Level #2	N/A	OFD-101A-1.2 (C5)	AB	771'	In Service In Service	YES	O-705-A	1KI-01	S
52	N/A	1HPIPS0357 U1 High Pressure Injection	LETDOWN FLOW TEMP HIGH INTERLOCK	N/A	OEE-151-03	AB	783'	In Service In Service	YES	O-705	1DIB-25	S,R
10	N/A	1HPIPU0001 U1 High Pressure Injection	HPI PUMP 1A	N/A	OFD-101A-1.3 (J8)	AB	758'	On/Off On	YES	O-702	1TC-09	S,R
10	N/A	1HPIPU0002 U1 High Pressure Injection	HPI PUMP 1B	N/A	OFD-101A-1.3 (G8)	AB	758'	On/Off On	YES	O-702	1TE-10	S,R
10	N/A	1HPIPU0003 U1 High Pressure Injection	HPI PUMP 1C	N/A	OFD-101A-1.3 (D8)	AB	758'	Off On	YES	O-702	1TD-09	S,R
RB	N/A	1HPISR0160 U1 High Pressure Injection	HPI CROSSOVER FLOW SQRT EXT B LOOP	1MTC1,2,3,4	OEE-151-33-A	AB	809'	In Service In Service	YES	O-705	1KVIC-13	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
26	35	1HPITK0001 U1 High Pressure Injection	LETDOWN STORAGE TANK	N/A	OFD-101A-1.2 (D6)	AB	771'	In Service In Service	NO	N/A	N/A	S
N/A	N/A	1HPSVA0184 U1 High Pressure Service Water	TDEFWP OIL COOLER ISOL VALVE	N/A	OFD-124C-1.2 (G6)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
35	N/A	1HPVA0001 U1 High Pressure Injection	LETDOWN INLET ISOLATION	N/A	OFD-101A-1.1 (K2)	RB	777'	Open/Closed Either	NO	N/A	N/A	NONE
35	N/A	1HPVA0002 U1 High Pressure Injection	LETDOWN INLET ISOLATION	N/A	OFD-101A-1.1 (J2)	RB	777'	Open/Closed Either	NO	N/A	N/A	NONE
35	N/A	1HPVA0003 U1 High Pressure Injection	LETDOWN ISOLATION	N/A	OFD-101A-1.1 (L6)	RB	777'	Open/Closed Closed	YES	O-703-K	1XSF-F01C	S,R
35	N/A	1HPVA0004 U1 High Pressure Injection	LETDOWN ISOLATION	N/A	OFD-101A-1.1 (J6)	RB	777'	Open/Closed Closed	YES	O-703-K	1XSF-F01D	S,R
52	N/A	1HPVA0005 U1 High Pressure Injection	LETDOWN ISOLATION	N/A	OFD-101A-1.1 (K8)	AB	809'	Open Closed	YES	O-705	1DIB-25	S,R
24	N/A	1HPVA0020 U1 High Pressure Injection	RCP SEAL RETURN ISOLATION	N/A	OFD-101A-1.1 (F5)	RB	808'	Open Closed	YES	O-703-K	1XSF-F02C	S,R
1	N/A	1HPVA0021	RCP SEAL RETURN	N/A	OFD-101A-1.1 (F7)	RB	809'	Open	YES	O-705	1DIB-25	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 High Pressure Injection	ISOLATION					Closed				
N/A	N/A	1HPVA0022 U1 High Pressure Injection	LDST DRAIN	N/A	OFD-101A-1.2 (C8)	AB	783'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	1HPVA0023 U1 High Pressure Injection	HPI LDST SUCTION ISOLATION	N/A	OFD-101A-1.2 (D13)	AB	783'	Open Open	NO	N/A	N/A	R
1	N/A	1HPVA0024 U1 High Pressure Injection	BWST SUCTION ISOLATION	N/A	OFD-101A-1.3 (I3)	AB	771'	Closed Open	YES	O-703-G	1XS1-R01D	S,R
1	N/A	1HPVA0025 U1 High Pressure Injection	BWST SUCTION ISOLATION	N/A	OFD-101A-1.3 (F3)	AB	771'	Closed Open	YES	O-703-G	1XS2-R01A	S,R
1	N/A	1HPVA0026 U1 High Pressure Injection	HPI TRAIN 1A INJECTION	N/A	OFD-101A-1.4 (I7)	AB	809'	Closed Open	YES	O-703-G	1XS1-R02A	S,R
1	N/A	1HPVA0027 U1 High Pressure Injection	HPI TRAIN 1B (EMERGENCY) INJECTION	N/A	OFD-101A-1.4 (D7)	AB	809'	Open Open	YES	O-703-G	1XS2-R01B	S,R
10	N/A	1HPVA0031 U1 High Pressure Injection	RCP SEAL INJ FLOW CONTROL	N/A	OFD-101A-1.4 (F6)	AB	796'	Open/Closed Open/Closed	YES	O-705-A	ICS POWER	S,R
N/A	N/A	1HPVA0098 U1 High Pressure Injection	HPI SUCTION CROSSOVER	N/A	OFD-101A-1.3 (I3)	AB	758'	Open Open	NO	N/A	N/A	R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
N/A	N/A	1HPVA0115 U1 High Pressure Injection	HPI DISCH HEADER SEPARATION	N/A	OFD-101A-1.3 (H11)	AB	758'	Open Open	NO	N/A	N/A	R
N/A	N/A	1HPVA0226 U1 High Pressure Injection	RCP SEAL RETURN ISOL VALVE	N/A	OFD-101A-1.1 (G2)	RB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1HPVA0228 U1 High Pressure Injection	RCP SEAL RETURN ISOL VALVE	N/A	OFD-101A-1.1 (F2)	RB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1HPVA0230 U1 High Pressure Injection	RCP SEAL RETURN ISOL VALVE	N/A	OFD-101A-1.1 (I2)	RB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1HPVA0232 U1 High Pressure Injection	RCP SEAL RETURN ISOL VALVE	N/A	OFD-101A-1.1 (H2)	RB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1HPVA0275 U1 High Pressure Injection	RCP SEAL RETURN ISOL VALVE	N/A	OFD-101A-1.1 (E5)	RB	797'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	1HPVA0276 U1 High Pressure Injection	RCP SEAL RETURN ISOL VALVE	N/A	OFD-101A-1.1 (E5)	RB	797'	Closed Closed	NO	N/A	N/A	R
1	N/A	1HPVA0355 U1 High Pressure Injection	HPI AUX SPRAY THROTTLE	N/A	OFD-101A-1.4 (L6)	AB	809'	Open/Closed Open/Closed	YES	O-705	1KVIC-07	S,R
N/A	N/A	1HPVA0405	ALT LETDOWN BOUNDARY	N/A	OFD-101A-1.5 (H10)	RB	777'	Closed Closed	NO	N/A	N/A	R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 High Pressure Injection										
1	N/A	1HPVA0409 U1 High Pressure Injection	HPI CROSSOVER ISOLATION	N/A	OFD-101A-1.4 (E8)	AB	809'	Closed Open/Closed	YES	O-703-G	1XS3-02D	S,R
1	N/A	1HPVA0410 U1 High Pressure Injection	HPI CROSSOVER ISOLATION	N/A	OFD-101A-1.4 (H7)	AB	809'	Closed Open/Closed	YES	O-703-G	1XS3-02D	S,R
N/A	N/A	1HPVA0417 U1 High Pressure Injection	ALT LETDOWN BOUNDARY	N/A	OFD-101A-1.5 (I9)	RB	777'	Closed Closed	NO	N/A	N/A	R
10	36	1HPVA0426 U1 High Pressure Injection	ALT LETDOWN PATH ISOLATION	N/A	OFD-101A-1.5 (J10)	RB	777'	Closed Open/Closed	YES	O-703-K	1XSF-F04B	S,R
10	36	1HPVA0428 U1 High Pressure Injection	ALT LETDOWN PATH ISOLATION	N/A	OFD-101A-1.5 (I13)	RB	777'	Closed Open	YES	O-703-K	1XSF-1-02B	S,R
1	N/A	1ICCMA U1 Core Exit TC	UNIT 1 ICCM TRAIN A CABINET	N/A	O-710	AB	822'	In Service In Service	YES	N/A	N/A	S,R
1	N/A	1ICCMB U1 Reactor Coolant	UNIT 1 ICCM TRAIN B CABINET	N/A	O-710	AB	822'	In Service In Service	YES	N/A	N/A	S,R
RB	N/A	1ICSCABS U1 Control Cabinets	INTEGRATED CONTROL SYSTEM CABINETS	1ICS CABS	O-710	AB	822'	In Service In Service	YES	N/A	N/A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
32	N/A	1K U1 Pressurizer Heaters	600V PPB 1K (FOR PRESSURIZER HEATERS GROUP K BANK 2)	N/A	OEE-149-11	RB	818'	In Service In Service	YES	N/A	N/A	S,R
52	N/A	1KA U1 Condensate	120V PPB 1KA	N/A	OEE-145-74	TB	775'	In Service Not Used	YES	O-703-C	1XC-F02AB	S,R
1	N/A	1KC U1 208V PWR (PPB)	120V PPB 1KC	N/A	O-704	TB	796'	In Service In Service	YES	O-703	1XGB-F04BB	S,R
1	N/A	1KC/XFMR U1 208V PWR (PPB)	XFMR 1KC (600:208:120V)	N/A	O-704	TB	796'	In Service In Service	YES	O-703	1XGB-F04BB	S
10	N/A	1KE U1 208V PWR (PPB)	120V PPB 1KE	N/A	O-704	AB	796'	In Service In Service	YES	O-703-E	1XP-R03AT	S,R
16	N/A	1KESP U1 Control Panel	KEOWEE EM START PANEL	N/A	O-753-K	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
1	37	1KG U1 208V PWR (PPB)	120V PPB 1KG	N/A	O-704	AB	838'	In Service In Service	YES	O-703-F	1XR-06BT	S,R
1	N/A	1KI U1 240/120V AC PWR	120V PPB 1KI	N/A	O-705-A	AB	809'	In Service In Service	YES	O-705-A	INV 1KI	S,R
10	N/A	1KI/INV U1 240/120V AC PWR	STATIC INVERTER 1KI (INCLUDES STATIC XFER SW)	N/A	O-705-A	AB	796'	In Service In Service	YES	O-705-A	1ADF	S,R
1	N/A	1KI/SW/BP U1 240/120V AC PWR	STATIC SWITCH AND INVERTER BYPASS SWITCH 1KI	N/A	O-705-A	AB	796'	In Service In Service	YES	O-705-A	INV 1KI	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
1	N/A	1KI/SW/T U1 240/120V AC PWR	TRANSFER SWITCH 1KI	N/A	O-705-A	AB	796'	In Service In Service	YES	O-705-A	INV 1KI	S,R
1	N/A	1KI/XFMR U1 240/120V AC PWR	ISOLATION XFMR SHIELED 1KI	N/A	O-705-A	AB	796'	In Service In Service	YES	O-705-A	INV 1KI	S
1	N/A	1KRA U1 240/120V AC PWR	120V PPB 1KRA	N/A	O-705-A	AB	809'	In Service In Service	YES	O-705-A	1A	S,R
36	N/A	1KRB U1 240/120V AC PWR	120V PPB 1KRB	N/A	O-705-A	AB	809'	In Service In Service	YES	O-705-A	1A	S,R
1	N/A	1KSG U1 208V PWR (PPB)	208/120V POWER PANELBOARD 1KSG	N/A	O-704-A	BH	796'	In Service In Service	YES	O-703-G	1XS1-F04C	S,R
1	N/A	1KSG/XFMR U1 208V PWR (PPB)	600/120V PPB 1KSG TRANSFORMER	N/A	O-704-A	BH	796'	In Service In Service	YES	O-703-G	1XS1-F04C	S
1	N/A	1KU U1 240/120V AC PWR	120V PPB 1KU	N/A	O-705-A	AB	809'	In Service In Service	YES	O-705-A	INV 1KU	S,R
10	N/A	1KU/INV U1 240/120V AC PWR	STATIC INVERTER 1KU (INCLUDES STATIC XFER SWITCH)	N/A	O-705-A	AB	796'	In Service In Service	YES	O-705-A	1ADE	S,R
1	N/A	1KU/SW/BP U1 240/120V AC PWR	STATIC SWITCH AND INVERTER BYPASS SWITCH 1KU	N/A	O-705-A	AB	796'	In Service In Service	YES	O-705-A	INV 1KU	S,R
1	N/A	1KU/SW/T	TRANSFER SWITCH 1KU	N/A	O-705-A	AB	796'	In Service In Service	YES	O-705-A	INV 1KU	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 240/120V AC PWR										
1	N/A	1KU/XFMR U1 240/120V AC PWR	ISOLATION XFMR SHIELDED 1KU	N/A	O-705-A	AB	796'	In Service In Service	YES	O-705-A	INV 1KU	S
36	N/A	1KVIA U1 240/120V AC PWR	120V PPB 1KVIA	N/A	O-705	AB	809'	In Service In Service	YES	O-705	INV 1DIA	S,R
36	N/A	1KVIB U1 240/120V AC PWR	120V PPB 1KVIB	N/A	O-705	AB	809'	In Service In Service	YES	O-705	INV 1DIB	S,R
36	N/A	1KVIC U1 240/120V AC PWR	120V PPB 1KVIC	N/A	O-705	AB	809'	In Service In Service	YES	O-705	INV 1DIC	S,R
36	N/A	1KVID U1 240/120V AC PWR	120V PPB 1KVID	N/A	O-705	AB	809'	In Service In Service	YES	O-705	INV 1DID	S,R
36	N/A	1KX U1 240/120V AC PWR	120V PPB 1KX	N/A	O-705-A	AB	809'	In Service In Service	YES	O-705-A	INV 1KX	S,R
10	N/A	1KX/INV U1 240/120V AC PWR	STATIC INVERTER 1KX (INCLUDES STATIC XFER SWITCH)	N/A	O-705-A	AB	796'	In Service In Service	YES	O-705-A	1ADG	S,R
1	N/A	1KX/SW/BP U1 240/120V AC PWR	STATIC SWITCH AND INVERTER BYPASS SWITCH 1KX	N/A	O-705-A	AB	796'	In Service In Service	YES	O-705-A	INV 1KX	S,R
1	N/A	1KX/SW/T U1 240/120V AC PWR	TRANSFER SWITCH 1KX	N/A	O-705-A	AB	796'	In Service In Service	YES	O-705-A	INV 1KX	S,R
10	38	1L2	120V PPB 1L2	N/A	O-839	AB	771'	In Service	YES	O-703-E	1XN-10AB	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

11/11/97

Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 Post Accident Sample						In Service				
1	39	1L21/PPB U1 Emergency Lighting	125V DC PPB 1L21	N/A	O-931	AB	822'	In Service In Service	YES	O-705-B	1DL2-06	S,R
N/A	N/A	1LPIFE0004 U1 Low Pressure Injection	LPI TRAIN 1B INJ FLOW ELEMENT	N/A	OFD-102A-1.2 (E12)	AB	N/A	Not Used In Service	NO	N/A	N/A	NONE
N/A	N/A	1LPIFE0005 U1 Low Pressure Injection	LPI TRAIN 1A INJ FLOW ELEMENT	N/A	OFD-102A-1.2 (K12)	AB	N/A	Not Used In Service	NO	N/A	N/A	NONE
1	N/A	1LPIFT0004P U1 Low Pressure Injection	LPI TRAIN 1B INJ FLOW TRANS (Powered by ICCM)	N/A	OFD-102A-1.2 (E12)	AB	809'	Not Used In Service	YES	O-705	1KVIB-13	S,R
1	N/A	1LPIFT0005P U1 Low Pressure Injection	LPI TRAIN 1A INJ FLOW TRANS (Powered by ICCM)	N/A	OFD-102A-1.2 (K12)	AB	809'	Not Used In Service	YES	O-705	1KVIA-08	S,R
10	N/A	1LPIHX000A U1 Low Pressure Injection	LPI COOLER 3A	N/A	OFD-102A-1.2 (K9)	AB	771'	Not Used In Service	NO	N/A	N/A	S
10	N/A	1LPIHX000B U1 Low Pressure Injection	LPI COOLER 3B	N/A	OFD-102A-1.2 (E9)	AB	771'	Not Used In Service	NO	N/A	N/A	S
10	N/A	1LPIPU0001 U1 Low Pressure Injection	1LPI PUMP A	N/A	OFD-102A-1.2 (K3)	AB	758'	Off On	YES	O-702	1TC-10	S,R
10	N/A	1LPIPU0002	1LPI PUMP B	N/A	OFD-102A-1.2 (G3)	AB	758'	Off	YES	O-702	1TD-10	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 Low Pressure Injection						On				
10	N/A	1LPIPU0003 U1 Low Pressure Injection	1LPI PUMP C	N/A	OFD-102A-1.2 (E4)	AB	758'	Off On	YES	O-702	1TE-10	S,R
1	N/A	1LPITE0209 U1 Low Pressure Injection	LPI COOLER 1B OUTLET TEMP (ICS Input)	N/A	OFD-102A-1.2 (E12)	AB	809'	Not Used In Service	YES	O-705-A	1KI-25	S,R
1	N/A	1LPITE0210 U1 Low Pressure Injection	LPI COOLER 1A OUTLET TEMP (ICS Input)	N/A	OFD-102A-1.2 (L10)	AB	771'	Not Used In Service	YES	O-705-A	1KI-25	S,R
18	N/A	1LPITK0001 U1 Low Pressure Injection	BWST	N/A	OFD-102A-1.1 (I10)	YD	796'	In Service In Service	NO	N/A	N/A	S
1	N/A	1LPSEP0022 U1 Low Pressure Service Water	DECAY HEAT COOLER E/P CONVERTER (1LPSW-251)	N/A	OFD-124B-1.1	TB	775'	In Service In Service	YES	O-705	1KVIB-11	S,R
1	N/A	1LPSEP0023 U1 Low Pressure Service Water	DECAY HEAT COOLER E/P CONVERTER (1LPSW-252)	N/A	OFD-124B-1.1	TB	775'	In Service In Service	YES	O-705	1KVIC-10	S,R
N/A	N/A	1LPSFL0001 U1 Low Pressure Service Water	NORMAL SUPPLY FILTER TO HPI PUMP	N/A	OFD-124B-1.1 (L5)	AB	783'	In Service In Service	NO	N/A	N/A	S*

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
N/A	N/A	1LPSFL0002 U1 Low Pressure Service Water	EM SUPPLY FILTER TO HPI PUMP	N/A	OFD-124B-1.1 (F8)	AB	783'	In Service In Service	NO	N/A	N/A	S*
N/A	N/A	1LPSFL0003 U1 Low Pressure Service Water	LPSW PUMP A PACKING SEAL FILTER	N/A	OFD-124A-1.1 (J6)	TB	775'	In Service In Service	NO	N/A	N/A	S*
N/A	N/A	1LPSFL0004 U1 Low Pressure Service Water	LPSW PUMP B PACKING SEAL FILTER	N/A	OFD-124A-1.1 (I6)	TB	775'	In Service In Service	NO	N/A	N/A	S*
N/A	N/A	1LPSFL0005 U1 Low Pressure Service Water	LPSW PUMP C PACKING SEAL FILTER	N/A	OFD-124A-1.1 (D6)	TB	775'	In Service In Service	NO	N/A	N/A	S*
10	N/A	1LPSFL000A U1 Low Pressure Service Water	LPSW PUMP A STRAINER	N/A	OFD-124A-1.1(J3)	TB	775'	In Service In Service	NO	N/A	N/A	S
10	N/A	1LPSFL000B U1 Low Pressure Service Water	LPSW PUMP B STRAINER	N/A	OFD-124A-1.1(G3)	TB	775'	In Service In Service	NO	N/A	N/A	S
10	N/A	1LPSFL000C U1 Low Pressure Service Water	LPSW PUMP C STRAINER	N/A	OFD-124A-1.1 (D3)	TB	775'	In Service In Service	NO	N/A	N/A	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
1	N/A	1LPSFT0124 U1 Low Pressure Service Water	LPI COOLER 1A FLOW XMTR (1LPSW-251)	N/A	OFD-124B-1.1	AB	771'	In Service In Service	YES	O-705	1KVIB-11	S,R
1	N/A	1LPSFT0125 U1 Low Pressure Service Water	LPI COOLER 1B FLOW XMTR (1LPSW-252)	N/A	OFD-124B-1.1	AB	771'	In Service In Service	YES	O-705	1KVIC-10	S,R
N/A	N/A	1LPSMJ0009 U1 Low Pressure Service Water	LPSW PUMP A EXP JOINT	N/A	OFD-124A-1.1 (J4)	TB	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	1LPSMJ0010 U1 Low Pressure Service Water	LPSW PUMP B EXP JOINT	N/A	OFD-124A-1.1 (G4)	TB	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	1LPSMJ0011 U1 Low Pressure Service Water	LPSW PUMP C EXP JOINT	N/A	OFD-124A-1.1 (D4)	TB	N/A	In Service In Service	NO	N/A	N/A	NONE
1	N/A	1LPSPS0095 U1 Low Pressure Service Water	LPSW HEADER PRESSURE	N/A	OFD-124A-1.1(C8)	TB	775'	In Service In Service	YES	O-704	1KE-08	S,R
1	N/A	1LPSPS0096 U1 Low Pressure Service Water	LPSW HEADER PRESSURE	N/A	OFD-124A-1.1(J8)	TB	775'	In Service In Service	YES	O-704	1KE-08	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
 Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
 Evaluation type "S" indicates that a seismic evaluation was performed.
 Evaluation type "R" indicates that a relay evaluation was performed.
 Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
 Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
 Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
 The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
 All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
10	N/A	1LPSPU0001 U1 Low Pressure Service Water	LPSW PUMP A	N/A	OFD-124A-1.1(J5)	TB	775'	On/off On	YES	O-702	1TC-12	S,R
10	N/A	1LPSPU0002 U1 Low Pressure Service Water	LPSW PUMP B	N/A	OFD-124A-1.1(G5)	TB	775'	On/off On	YES	O-702	1TD-15/2TD-	S,R
10	N/A	1LPSPU0003 U1 Low Pressure Service Water	LPSW PUMP C	N/A	OFD-124A-1.1 (D5)	TB	775'	On/off On	YES	O-1702	2TC-11	S,R
N/A	N/A	1LPSPA0001 U1 Low Pressure Service Water	LPSW PUMP A SUCTION ISOL VALVE	N/A	OFD-124A-1.1 (D2)	TB	775'	Open Open	NO	N/A	N/A	R
N/A	N/A	1LPSPA0002 U1 Low Pressure Service Water	LPSW PUMP B SUCTION ISOL VALVE	N/A	OFD-124A-1.1 (J2)	TB	775'	Open Open	NO	N/A	N/A	R
N/A	N/A	1LPSPA0003 U1 Low Pressure Service Water	LPSW PUMP C SUCTION ISOL VALVE	N/A	OFD-124A-1.1 (G2)	TB	775'	Open Open	NO	N/A	N/A	R
10	N/A	1LPSPA0004 U1 Low Pressure Service Water	LPI COOLER 1A ISOLATION VALVE	N/A	OFD-124B-1.1(K6)	AB	783'	Closed Open	YES	O-703-G	1XS1-R03D	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
1	N/A	1LPSVA0005 U1 Low Pressure Service Water	LPI COOLER 1B ISOLATION VALVE	N/A	OFD-124B-1.1(H6)	AB	783'	Closed Open	YES	O-703-G	1XS2-R02C	S,R
N/A	N/A	1LPSVA0006 U1 Low Pressure Service Water	SUPPLY ISOL TO RC PUMP COOLERS	N/A	OFD-124B-1.4 (L2)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1LPSVA0007 U1 Low Pressure Service Water	RCP COOLER ISOLATION VALVE	N/A	OFD-124B-1.4 (K7)	RB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1LPSVA0008 U1 Low Pressure Service Water	RCP COOLER ISOLATION VALVE	N/A	OFD-124B-1.4 (G8)	RB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1LPSVA0009 U1 Low Pressure Service Water	RCP COOLER ISOLATION VALVE	N/A	OFD-124B-1.4 (F7)	RB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1LPSVA0010 U1 Low Pressure Service Water	RCP COOLER ISOLATION VALVE	N/A	OFD-124B-1.4 (B8)	RB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1LPSVA0011 U1 Low Pressure Service Water	RCP COOLER ISOLATION VALVE	N/A	OFD-124B-1.4 (G11)	RB	N/A	Open Either	NO	N/A	N/A	NONE

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
N/A	N/A	1LPSVA0012 U1 Low Pressure Service Water	RCP COOLER ISOLATION VALVE	N/A	OFD-124B-1.4 (C11)	RB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1LPSVA0013 U1 Low Pressure Service Water	RCP COOLER ISOLATION VALVE	N/A	OFD-124B-1.4 (L8)	RB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1LPSVA0014 U1 Low Pressure Service Water	RCP COOLER ISOLATION VALVE	N/A	OFD-124B-1.4 (G9)	RB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1LPSVA0015 U1 Low Pressure Service Water	RETURN ISOL FROM RC PUMP COOLERS	N/A	OFD-124B-1.4 (G14)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1LPSVA0016 U1 Low Pressure Service Water	RBCU 1A SUPPLY VALVE	N/A	OFD-124B-1.2(K3)	AB	809'	Open Open	NO	N/A	N/A	R
1	N/A	1LPSVA0018 U1 Low Pressure Service Water	RBCU 1A RETURN VALVE	N/A	OFD-124B-1.2(D3)	AB	809'	Thrtld Open	YES	O-703-G	1XS1-R03E	S,R
N/A	N/A	1LPSVA0019 U1 Low Pressure Service Water	RBCU 1B SUPPLY VALVE	N/A	OFD-124B-1.2(K8)	AB	809'	Open Open	NO	N/A	N/A	R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSF" indicates that the equipment is part of the NSSF system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
1	N/A	1LPSVA0021 U1 Low Pressure Service Water	RBCU 1B RETURN VALVE	N/A	OFD-124B-1.2(D8)	AB	809'	Thrtld Open	YES	O-703-G	1XS3-05C	S,R
N/A	N/A	1LPSVA0022 U1 Low Pressure Service Water	RBCU 1C SUPPLY VALVE	N/A	OFD-124B-1.2(K12)	AB	809'	Open Open	NO	N/A	N/A	R
1	N/A	1LPSVA0024 U1 Low Pressure Service Water	RBCU 1C RETURN VALVE	N/A	OFD-124B-1.2(D12)	AB	809'	Thrtld Open	YES	O-703-G	1XS2-R02D	S,R
21	N/A	1LPSVA0137 U1 Low Pressure Service Water	TDEFW ISOLATION VALVE	N/A	OFD-124A-1.3(K11)	TB	775'	Closed Open	YES	O-703-C	1XC-R05D	S,R
N/A	N/A	1LPSVA0138 U1 Low Pressure Service Water	TDEFW ISOLATION VALVE	N/A	OFD-124A-1.3(L11)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
44	N/A	1LPSVA0175 U1 Low Pressure Service Water	LPSW PUMP A SEAL FLOW REG	N/A	OFD-124A-1.1 (K5)	TB	775'	Throttled Throttled	NO	N/A	N/A	S
44	N/A	1LPSVA0182 U1 Low Pressure Service Water	LPSW PUMP B SEAL FLOW REG	N/A	OFD-124A-1.1 (H5)	TB	775'	Throttled Throttled	NO	N/A	N/A	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
44	N/A	1LPSVA0189 U1 Low Pressure Service Water	LPSW PUMP C SEAL FLOW REG	N/A	OFD-124A-1.1 (E5)	TB	775'	Throttled Throttled	NO	N/A	N/A	S
21	N/A	1LPSVA0251 U1 Low Pressure Service Water	LPI COOLER 1A CONTROL VALVE	N/A	OFD-124B-1.1(K8)	TB	775'	Closed Open	YES	O-705	1KVIB-11	S,R
21	N/A	1LPSVA0252 U1 Low Pressure Service Water	LPI COOLER 1B CONTROL VALVE	N/A	OFD-124B-1.1(H7)	TB	775'	Closed Open	YES	O-705	1KVIC-10	S,R
9	N/A	1LPSVA0284 U1 Low Pressure Service Water	CONT VAC PRIMING ISOL VALVE	N/A	OFD-124A-1.3 (J8)	TB	775'	Open Closed	YES	O-703-A	1XB-03B	S,R
44	N/A	1LPSVA0290 U1 Low Pressure Service Water	CONT VAC PRIMING ISOL VALVE	N/A	OFD-124A-1.3 (J9)	TB	775'	Open Closed	YES	O-703-A	1XB-03C	S,R
N/A	N/A	1LPSVA0302 U1 Low Pressure Service Water	LPSW TO CHILLER COND ISOL	N/A	OFD-124A-1.2 (J2)	TB	N/A	Open Either	NO	N/A	N/A	NONE
21	N/A	1LPSVA0516 U1 Emergency Feedwater	EFW PUMP 1A LPSW ISOLATION VALVE	N/A	OFD-124A-1.3(K5)	TB	775'	Closed Open	YES	O-705	1DIB-32	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
21	N/A	1LPSVA0525 U1 Emergency Feedwater	EFW PUMP 1B LPSW ISOLATION VALVE	N/A	OFD-124A-1.3(I5)	TB	775'	Closed Open	YES	O-705	1DIC-28	S,R
24	N/A	1LPSVA0565 U1 Low Pressure Service Water	RB AUX COOLERS SUPPLY VALVE	N/A	OFD-124B-1.2(J8)	RB	797'	Open Closed	YES	O-703-G	1XS3-03CT	S,R
10	N/A	1LPSVA0566 U1 Low Pressure Service Water	RBCU 3B INLET VALVE	N/A	OFD-124B-1.2(I8)	RB	797'	Closed Open	YES	O-703-G	1XS3-03CB	S,R
N/A	N/A	1LPSVA0772 U1 Low Pressure Service Water	RBCU TO RIA ISOL VALVE	N/A	OFD-124B-1.2 (D4)	AB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1LPSVA0773 U1 Low Pressure Service Water	RBCU TO RIA ISOL VALVE	N/A	OFD-124B-1.2 (D8)	AB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	1LPSVA0774 U1 Low Pressure Service Water	RBCU TO RIA ISOL VALVE	N/A	OFD-124B-1.2 (D13)	AB	N/A	Open Either	NO	N/A	N/A	NONE
52	N/A	1LPVA0001 U1 Low Pressure Injection	LPI DROPLINE ISOL FROM RCS	N/A	OFD-102A-1.1 (H2)	RB	797'	Closed Open	YES	O-703-G	1XS1-F04D	S,R
52	N/A	1LPVA0002	LPI DROPLINE ISOL	N/A	OFD-102A-1.1 (H2)	RB	797'	Closed	YES	O-703-G	1XS1-F05C	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 Low Pressure Injection	FROM RCS					Open				
1	N/A	1LPVA0003 U1 Low Pressure Injection	LPI HOT LEG SUCTION	N/A	OFD-102A-1.1 (H5)	AB	809'	Closed Open	YES	O-703-F	1XO-R03E	S,R
N/A	N/A	1LPVA0005 U1 Low Pressure Injection	LPI PUMP 1A SUCTION	N/A	OFD-102A-1.1 (F10)	AB	758'	Open Open	NO	N/A	N/A	R
1	N/A	1LPVA0006 U1 Low Pressure Injection	LPI SUCTION CROSSOVER	N/A	OFD-102A-1.1 (E8)	AB	758'	Closed Open	YES	O-703-D	1XL-08E	S,R
1	N/A	1LPVA0007 U1 Low Pressure Injection	LPI SUCTION CROSSOVER	N/A	OFD-102A-1.1 (D8)	AB	758'	Closed Open	YES	O-703-E	1XN-08E	S,R
N/A	N/A	1LPVA0008 U1 Low Pressure Injection	LPI PUMP 1B SUCTION	N/A	OFD-102A-1.1 (C8)	AB	758'	Open Open	NO	N/A	N/A	R
N/A	N/A	1LPVA0009 U1 Low Pressure Injection	LPI CROSSOVER	N/A	OFD-102A-1.2 (I7)	AB	758'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	1LPVA0010 U1 Low Pressure Injection	LPI CROSSOVER	N/A	OFD-102A-1.2 (G7)	AB	758'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	1LPVA0011 U1 Low Pressure Injection	LPI COOLER 1A ISOLATION	N/A	OFD-102A-1.2 (K7)	AB	771'	Open Open	NO	N/A	N/A	R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
10	N/A	1LPVA0012 U1 Low Pressure Injection	LPI COOLER 1A ISOLATION	N/A	OFD-102A-1.2 (K11)	AB	771'	Open Throttled	YES	O-703-G	1XS1-R01A	S,R
N/A	N/A	1LPVA0013 U1 Low Pressure Injection	LPI COOLER 3B ISOLATION	N/A	OFD-102A-1.2 (E7)	AB	771'	Open Open	NO	N/A	N/A	R
10	N/A	1LPVA0014 U1 Low Pressure Injection	LPI COOLER 1B ISOLATION	N/A	OFD-102A-1.2 (E11)	AB	771'	Open Throttled	YES	O-703-G	1XS2-R02A	S,R
10	N/A	1LPVA0015 U1 Low Pressure Injection	LPI TO HPI/RBS PIGGYBACK TRAIN 1A	N/A	OFD-102A-1.2 (K11)	AB	771'	Closed Open/Closed	YES	O-703-D	1XL-09D	S,R
10	N/A	1LPVA0016 U1 Low Pressure Injection	LPI TO HPI/RBS PIGGYBACK TRAIN 1B	N/A	OFD-102A-1.2 (D11)	AB	771'	Closed Open/Closed	YES	O-703-E	1XN-09D	S,R
1	N/A	1LPVA0017 U1 Low Pressure Injection	LPI TRAIN 1A INJECTION ISOLATION	N/A	OFD-102A-1.2 (K13)	AB	809'	Closed Open	YES	O-703-G	1XS1-F04E	S,R
1	N/A	1LPVA0018 U1 Low Pressure Injection	LPI TRAIN 1B INJECTION ISOLATION	N/A	OFD-102A-1.2 (E13)	AB	809'	Closed Open	YES	O-703-G	1XS2-F04E	S,R
1	N/A	1LPVA0019 U1 Low Pressure Injection	RB EM SUMP SUCTION	N/A	OFD-102A-1.1 (D5)	AB	758'	Closed Open	YES	O-703-G	1XS3-05D	S,R
1	N/A	1LPVA0020	RB EM SUMP SUCTION	N/A	OFD-102A-1.1 (D5)	AB	758'	Closed Open	YES	O-703-G	1XS2-R04C	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 Low Pressure Injection										
52	N/A	1LPVA0021 U1 Low Pressure Injection	BWST SUCTION ISOLATION	N/A	OFD-102A-1.1 (F7)	AB	771'	Open Closed	NO	N/A	N/A	S,R
52	N/A	1LPVA0022 U1 Low Pressure Injection	BWST SUCTION ISOLATION	N/A	OFD-102A-1.1 (C7)	AB	771'	Open Closed	NO	N/A	N/A	S,R
52	N/A	1LPVA0061 U1 Low Pressure Injection	BWST VACUUM BREAKER	N/A	OFD-102A-1.1 (J10)	YD	796'	Closed Open	NO	N/A	N/A	S
1	N/A	1LPVA0069 U1 Low Pressure Injection	LPI SWITCHOVER FLOW CONTROL	N/A	OFD-102A-1.2 (H7)	AB	758'	Closed Open/Closed	YES	O-703-E	1XN-09E	S,R
N/A	N/A	1LPVA0103 U1 Low Pressure Injection	BORON DILUTION ISOLATION	N/A	OFD-102A-1.1 (H2)	RB	797'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	1LPVA0104 U1 Low Pressure Injection	BORON DILUTION ISOLATION	N/A	OFD-102A-1.1 (G2)	RB	797'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	1LPVA0105 U1 Low Pressure Injection	BORON DILUTION ISOLATION	N/A	OFD-102A-1.1 (H2)	RB	777'	Closed Closed	NO	N/A	N/A	R
1	N/A	1LPVA0126 U1 Low Pressure Injection	LPI POST ACCIDENT SAMPLE ISOL	N/A	OFD-110A-1.4 (I5)	AB	758'	Closed Open/Closed	YES	O-839	1L2-39	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
1	N/A	1MC-20 U1 Main Steam	INSTRUMENT RACK 1MC-M20	N/A	O-422A-3	TB	796'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	1MC-E16 U1 Main Steam	INSTRUMENT RACK 1MC-E16	N/A	O-422A-3	TB	796'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	1MC-F15 U1 Main Steam	INSTRUMENT RACK 1MC-F15	N/A	O-422A-3	TB	796'	In Service In Service	NO	N/A	N/A	S,R
16	N/A	1MFBMRP U1 Main Feeder Bus Monitor	MAIN FDR BUS MONITOR RLY PANEL	N/A	O-710-A	AB	809'	In Service In Service	YES	O-705	1DIA-05/1DI	S,R
1	N/A	1MSPS0086 U1 Main Steam	MAIN STEAM PRESS SWITCH (1MS-19)	N/A	OEE-145-56	TB	796'	In Service In Service	YES	O-705-A	1KI-01	S,R
1	N/A	1MSPS0087 U1 Main Steam	MAIN STEAM PRESS SWITCH (1MS-22)	N/A	OEE-145-56	TB	796'	In Service In Service	YES	O-705-A	1KI-01	S,R
1	N/A	1MSPS0088 U1 Main Steam	MAIN STEAM PRESS SWITCH (1MS-28)	N/A	OEE-145-56	TB	796'	In Service In Service	YES	O-705-A	1KI-01	S,R
1	N/A	1MSPS0089 U1 Main Steam	MAIN STEAM PRESS SWITCH (1MS-31)	N/A	OEE-145-56	TB	796'	In Service In Service	YES	O-705-A	1KI-01	S,R
10	N/A	1MSPT0024P U1 Main Steam	SG 1A PRESSURE	N/A	OFD-122A-1.1 (I2)	RB	825'	In Service In Service	YES	O-705-A	1KI-05	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
10	N/A	1MSPT0025P U1 Main Steam	SG 1A PRESSURE	N/A	OFD-122A-1.1 (J2)	RB	825'	In Service In Service	YES	O-705-A	1KI-05	S,R
10	N/A	1MSPT0026P U1 Main Steam	SG 1B PRESSURE	N/A	OFD-122A-1.1 (D2)	RB	825'	In Service In Service	YES	O-705-A	1KI-05	S,R
10	N/A	1MSPT0027P U1 Main Steam	SG 1B PRESSURE	N/A	OFD-122A-1.1 (D2)	RB	825'	In Service In Service	YES	O-705-A	1KI-05	S,R
9	12	1MSPY0042 U1 Emergency Feedwater	UNIT 1 UPS (1MSS0042 - 1MS-87)	N/A	OEE-147-02-A	AB	796'	In Service In Service	YES	O-704	1KC-31	S,R
27	N/A	1MSVA0001 U1 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-1.1 (J9)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	1MSVA0002 U1 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-1.1 (J4)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	1MSVA0003 U1 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-1.1 (J8)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	1MSVA0004 U1 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-1.1 (J5)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	1MSVA0005	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-1.1 (J8)	YD	813'	Closed Open	NO	N/A	N/A	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 Main Steam										
27	N/A	1MSVA0006 U1 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-1.1 (J5)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	1MSVA0007 U1 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-1.1 (J7)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	1MSVA0008 U1 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-1.1 (J6)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	1MSVA0009 U1 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-1.1 (D9)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	1MSVA0010 U1 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-1.1 (D4)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	1MSVA0011 U1 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-1.1 (D7)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	1MSVA0012 U1 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-1.1 (D5)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	1MSVA0013 U1 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-1.1 (D8)	YD	813'	Closed Open	NO	N/A	N/A	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSF" indicates that the equipment is part of the NSSF system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
27	N/A	1MSVA0014 U1 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-1.1 (D5)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	1MSVA0015 U1 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-1.1 (D7)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	1MSVA0016 U1 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-1.1 (D6)	YD	813'	Closed Open	NO	N/A	N/A	S
1	N/A	1MSVA0017 U1 Main Steam	TURBINE BYPASS ISOLATION	N/A	OFD-122A-1.2 (D4)	TB	796'	Open Closed	YES	O-703	1XGB-R01A	S,R
1	N/A	1MSVA0019 U1 Main Steam	TURBINE BYPASS VALVE	N/A	OFD-122A-1.2 (I8)	TB	796'	Open/Closed Closed	YES	O-705-A	1KI-01	S,R
1	N/A	1MSVA0022 U1 Main Steam	TURBINE BYPASS VALVE	N/A	OFD-122A-1.2 (K8)	TB	796'	Open/Closed Closed	YES	O-705-A	1KI-01	S,R
1	N/A	1MSVA0024 U1 Main Steam	AS ISOLATION	N/A	OFD-122A-1.2 (H3)	TB	796'	Open Closed	YES	O-703	1XGB-R01C	S,R
44	N/A	1MSVA0026 U1 Main Steam	TURBINE BYPASS ISOLATION	N/A	OFD-122A-1.2 (I4)	TB	796'	Open Closed	YES	O-703	1XGB-R01B	S,R
1	N/A	1MSVA0028	TURBINE BYPASS VALVE	N/A	OFD-122A-1.2 (F8)	TB	796'	Open/Closed Closed	YES	O-705-A	1KI-01	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 Main Steam										
1	N/A	1MSVA0031 U1 Main Steam	TURBINE BYPASS VALVE	N/A	OFD-122A-1.2 (D8)	TB	796'	Open/Closed Closed	YES	O-705-A	1KI-01	S,R
1	N/A	1MSVA0033 U1 Main Steam	AS ISOLATION	N/A	OFD-122A-1.2 (E3)	TB	796'	Open Closed	YES	O-703-B	N/A	S,R
44	N/A	1MSVA0035 U1 Main Steam	FWPT ISOLATION	N/A	OFD-122A-1.3 (L1)	TB	796'	Open Closed	YES	O-703	1XA-R06A	S,R
21	N/A	1MSVA0036 U1 Main Steam	FWPT ISOLATION	N/A	OFD-122A-1.3 (F1)	TB	796'	Open Closed	YES	O-703	1XA-R06B	S,R
21	N/A	1MSVA0040 U1 Condensate	FWPT STOP VALVE	N/A	OFD-122A-1.3 (L8)	TB	775'	Open Closed	YES	O-705-B	1DP-F06BR	S,R
21	N/A	1MSVA0043 U1 Condensate	FWPT STOP VALVE	N/A	OFD-122A-1.3 (F8)	TB	775'	Open Closed	YES	O-705-B	1DP-F06DC	S,R
N/A	N/A	1MSVA0046 U1 Main Steam	EMERGENCY SAE ISOL VALVE	N/A	OFD-121C-1.1 (H3)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
21	N/A	1MSVA0047 U1 Main Steam	MS TO CSAE	N/A	OFD-122A-1.3 (E4)	TB	796'	Open Closed	YES	O-703-C	1XC-R04F	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSF" indicates that the equipment is part of the NSSF system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
50	N/A	1MSVA0076 U1 Main Steam	MS RH ISOLATION	N/A	OFD-122A-1.1 (I11)	TB	796'	Open Closed	YES	O-703	1XA-R06C	S,R
21	N/A	1MSVA0077 U1 Main Steam	MS TO 2ND STAGE RHTR ISOL	N/A	OFD-122C-1.2 (K4)	TB	796'	Open Closed	YES	O-703-H	1XA-A-F02A	S,R
21	N/A	1MSVA0078 U1 Main Steam	MS TO 2ND STAGE RHTR ISOL	N/A	OFD-122C-1.2 (K8)	TB	796'	Open Closed	YES	O-703-H	1XA-A-F02B	S,R
40	N/A	1MSVA0079 U1 Main Steam	MS RH ISOLATION	N/A	OFD-122A-1.1 (C11)	TB	796'	Open Closed	YES	O-703	1XA-R06D	S,R
1	N/A	1MSVA0080 U1 Main Steam	MS TO 2ND STAGE RHTR ISOL	N/A	OFD-122C-1.2 (F4)	TB	796'	Open Closed	YES	O-703-H	1XA-A-F02D	S,R
9	N/A	1MSVA0081 U1 Main Steam	MS TO 2ND STAGE RHTR ISOL	N/A	OFD-122C-1.2 (F8)	TB	796'	Open Closed	YES	O-703-H	1XA-A-F02C	S,R
N/A	N/A	1MSVA0082 U1 Emergency Feedwater	TDEFW STEAM SUPPLY	N/A	OFD-122A-1.4 (I2)	TB	796'	Open Open	NO	N/A	N/A	R
N/A	N/A	1MSVA0084 U1 Emergency Feedwater	TDEFW STEAM SUPPLY	N/A	OFD-122A-1.4 (F2)	TB	796'	Open Open	NO	N/A	N/A	R
9	N/A	1MSVA0087	TDEFW MS ISOLATION VALVE	N/A	OFD-122A-1.4 (G4)	TB	796'	Throttled Throttled	YES	O-704	1KC-31	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 Emergency Feedwater										
21	N/A	1MSVA0093 U1 Emergency Feedwater	TDEFW MS ISOLATION VALVE	N/A	OFD-122A-1.4 (G7)	TB	775'	Closed Open	YES	O-705	1KVID-09	S,R
N/A	N/A	1MSVA0094 U1 Emergency Feedwater	EFW TURBINE STOP VALVE	N/A	OFD-122A-1.4 (G8)	TB	775'	Open Open	NO	N/A	N/A	R
9	N/A	1MSVA0095 U1 Emergency Feedwater	TDEFW CONTROL VALVE	N/A	OFD-122A-1.4 (G9)	TB	775'	Throttled Throttled	N/A	OM-200A-0010-001	STEAM	S,R
20	125	1MSVA0102 U1 Main Steam	TURBINE STOP VALVE	N/A	OFD-122B-1.1 (I3)	TB	796'	Open Closed	YES	O-705	1DIA-07	S,R
20	125	1MSVA0103 U1 Main Steam	TURBINE STOP VALVE	N/A	OFD-122B-1.1 (I4)	TB	796'	Open Closed	YES	O-705	1DIA-07	S,R
20	125	1MSVA0104 U1 Main Steam	TURBINE STOP VALVE	N/A	OFD-122B-1.1 (I5)	TB	796'	Open Closed	YES	O-705	1DIA-07	S,R
20	125	1MSVA0105 U1 Main Steam	TURBINE STOP VALVE	N/A	OFD-122B-1.1 (I5)	TB	796'	Open Closed	YES	O-705	1DIA-07	S,R
20	125	1MSVA0106 U1 Main Steam	MAIN STEAM CONTROL VALVE	N/A	OFD-122B-1.1 (E3)	TB	796'	Open Closed	YES	O-705	1DIA-07	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
20	126	1MSVA0107 U1 Main Steam	MAIN STEAM CONTROL VALVE	N/A	OFD-122B-1.1 (G5)	TB	796'	Open Closed	YES	O-705	1DIA-07	S,R
20	126	1MSVA0108 U1 Main Steam	MAIN STEAM CONTROL VALVE	N/A	OFD-122B-1.1 (F4)	TB	796'	Open Closed	YES	O-705	1DIA-07	S,R
20	126	1MSVA0109 U1 Main Steam	MAIN STEAM CONTROL VALVE	N/A	OFD-122B-1.1 (G5)	TB	796'	Open Closed	YES	O-705	1DIA-07	S,R
21	N/A	1MSVA0112 U1 Main Steam	MS TO 2ND STAGE RHTR ISOL	N/A	OFD-122C-1.2 (K5)	TB	796'	Open Closed	NO	N/A	N/A	S,R
52	N/A	1MSVA0126 U1 Main Steam	MS TO AS CONTROL VALVE	N/A	OFD-128A-3.1 (I6)	TB	796'	Open/Closed Closed	YES	O-705	1KVID-10	S,R
52	13	1MSVA0129 U1 Main Steam	MS TO AS CONTROL VALVE	N/A	OFD-128A-3.1 (I7)	TB	796'	Open/Closed Closed	YES	O-705	1KVID-10	S,R
21	N/A	1MSVA0173 U1 Main Steam	MS TO 2ND STAGE RHTR ISOL	N/A	OFD-122C-1.2 (F5)	TB	796'	Open Closed	YES	O-422N-28	Pnumatic	S,R
RB	N/A	1MTC1 U1 Control Cabinets	MISC TERM CAB 1MTC1	1MTC1,2,3,4	O-710-A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
16	N/A	1MTC1,2,3,4 U1 Control Cabinets	MISCELLANEOUS TERMINAL CABINETS (1MTC'S)	N/A	N/A	AB	809'	N/A N/A	N/A	N/A	N/A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
RB	N/A	1MTC2 U1 Control Cabinets	MISC TERM CAB 1MTC2	1MTC1,2,3,4	O-710-A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
RB	N/A	1MTC3 U1 Control Cabinets	MISC TERM CAB 1MTC3	1MTC1,2,3,4	O-710-A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
RB	N/A	1MTC4 U1 Control Cabinets	MISC TERM CAB 1MTC4	1MTC1,2,3,4	O-710-A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
35	14	1MVC2 U1 125/250V DC PWR	250V DC MCC 1MVC2	N/A	O-705-B	TB	775'	In Service In Service	YES	O-705-B	1DP-F05AC	S,R
35	15	1MVC3 U1 125/250V DC PWR	250V DC MCC 1MVC3	N/A	O-705-B	TB	775'	In Service In Service	YES	O-705-B	1DP-F05BT	S,R
18	N/A	1PA/BB U1 125/250V DC PWR	PWR BATT 1PA	N/A	OEE-130-01	TB	796'	In Service In Service	YES	O-705-B	1PA/BC	S
10	16	1PA/BC U1 125/250V DC PWR	PWR BATT CHGR 1PA	N/A	O-705-B	TB	796'	In Service In Service	YES	O-703-F	1XO-F01B	S,R
52	N/A	1PAMLT0090 U1 Post Accident Monitoring	RB Containment Water Level Train A	N/A	OEE-158-21	RB	777'	Not Used In Service	YES	O-705-A	1KI-20	S,R
52	N/A	1PAMLT0091 U1 Post Accident Monitoring	RB Containment Water Level Train B	N/A	OEE-158-21	RB	777'	Not Used In Service	YES	O-705-A	1KI-20	S,R
10	N/A	1PASCP U1 Reactor Coolant	POST ACCIDENT SAMPLE CONT PANEL (IRC-179)	N/A	OEE-162-02	AB	771'	In Service In Service	YES	O-839	1L2-39	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
18	N/A	1PB/BB U1 125/250V DC PWR	PWR BATT 1PB	N/A	OEE-130-01	TB	796'	In Service In Service	YES	O-705-B	1PB/BC	S
10	16	1PB/BC U1 125/250V DC PWR	PWR BATT CHGR 1PB	N/A	O-705-A	TB	796'	In Service In Service	YES	O-1705-E	2XP-F01C	S,R
63	N/A	1PIR U1 Control Panels	UNIT 1 PNEUMATIC INSTR RACK	N/A	O-710-A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
RB	N/A	1PRZ U1 Pressurizer Heaters	U1 PRESSURIZER	1PZR		RB	818'			N/A		NSSS
1	18	1PS157AB/PS101 U1 Main Turbine	LOW HYDRAULIC PRESSURE SWITCH	N/A	OEE-121-05	TB	775'	In Service In Service	YES	O-705	1DIA-27	S,R
10	N/A	1RBCAH0020A U1 Reactor Building Cooling	RBCU FAN 1A	N/A	OFD-116E-1.1 (H-6)	RB	825'	On-high On-low	YES	O-703-G	1X08-06C	S,R
10	N/A	1RBCAH0020B U1 Reactor Building Cooling	RBCU FAN 1B	N/A	OFD-116E-1.1 (H-8)	RB	825'	Off On-low	YES	O-703-G	1XS3-01A	S,R
10	N/A	1RBCAH0020C U1 Reactor Building Cooling	RBCU FAN 1C	N/A	OFD-116E-1.1 (H-10)	RB	825'	On-high On-low	YES	O-703-G	1X09-06C	S,R
10	N/A	1RBCHX000A U1 Reactor Building	RB COOLING UNIT 1A	N/A	OFD-124B-1.2(G3)	RB	825'	In Service In Service	NO	N/A	N/A	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

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All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		Cooling										
10	N/A	1RBCHX000B U1 Reactor Building Cooling	RB COOLING UNIT 1B	N/A	OFD-124B-1.2(G8)	RB	797'	In Service In Service	NO	N/A	N/A	S
10	N/A	1RBCHX000C U1 Reactor Building Cooling	RB COOLING UNIT 1C	N/A	OFD-124B-1.2(G12)	RB	797'	In Service In Service	NO	N/A	N/A	S
RB	N/A	1RBCHX00A1 U1 Reactor Building Cooling	RB VENTILATION COOLING COIL 1A1	1ARBCU_A	OFD-124B-1.3 (K6)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	1RBCHX00A2 U1 Reactor Building Cooling	RB VENTILATION COOLING COIL 1A2	1ARBCU_A	OFD-124B-1.3 (J6)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	1RBCHX00A3 U1 Reactor Building Cooling	RB VENTILATION COOLING COIL 1A3	1ARBCU_A	OFD-124B-1.3 (I6)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	1RBCHX00A4 U1 Reactor Building Cooling	RB VENTILATION COOLING COIL 1A4	1ARBCU_A	OFD-124B-1.3 (H6)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	1RBCHX00B1	RB VENTILATION COOLING COIL 1B1	1ARBCU_B	OFD-124B-1.3 (K11)	RB	844'	In Service Either	NO	N/A	N/A	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 Reactor Building Cooling										
RB	N/A	1RBCHX00B2 U1 Reactor Building Cooling	RB VENTILATION COOLING COIL 1B2	1ARBCU_B	OFD-124B-1.3 (J11)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	1RBCHX00B3 U1 Reactor Building Cooling	RB VENTILATION COOLING COIL 1B3	1ARBCU_B	OFD-124B-1.3 (I11)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	1RBCHX00B4 U1 Reactor Building Cooling	RB VENTILATION COOLING COIL 1B4	1ARBCU_B	OFD-124B-1.3 (H11)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	1RBCHX00C1 U1 Reactor Building Cooling	RB VENTILATION COOLING COIL 1C1	1ARBCU_C	OFD-124B-1.3 (F6)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	1RBCHX00C2 U1 Reactor Building Cooling	RB VENTILATION COOLING COIL 1C2	1ARBCU_C	OFD-124B-1.3 (E6)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	1RBCHX00C3 U1 Reactor Building Cooling	RB VENTILATION COOLING COIL 1C3	1ARBCU_C	OFD-124B-1.3 (D6)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	1RBCHX00C4	RB VENTILATION	1ARBCU_C	OFD-124B-1.3 (C6)	RB	844'	In Service	NO	N/A	N/A	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 Reactor Building Cooling	COOLING COIL 1C4					Either				
RB	N/A	1RBCHX00D1 U1 Reactor Building Cooling	RB VENTILATION COOLING COIL 1D1	1ARBCU_D	OFD-124B-1.3 (F11)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	1RBCHX00D2 U1 Reactor Building Cooling	RB VENTILATION COOLING COIL 1D2	1ARBCU_D	OFD-124B-1.3 (E11)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	1RBCHX00D3 U1 Reactor Building Cooling	RB VENTILATION COOLING COIL 1D3	1ARBCU_D	OFD-124B-1.3 (D11)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	1RBCHX00D4 U1 Reactor Building Cooling	RB VENTILATION COOLING COIL 1D4	1ARBCU_D	OFD-124B-1.3 (C11)	RB	844'	In Service Either	NO	N/A	N/A	S
10	N/A	1RCLT0004P1 U1 Reactor Coolant	PRZ LEVEL TRANSMITTER	N/A	OFD-100A-1.2 (G8)	RB	797'	In Service In Service	YES	O-705	1KVIA-08	S,R
10	N/A	1RCLT0004P3 U1 Reactor Coolant	PRZ LEVEL TRANSMITTER	N/A	OFD-100A-1.2 (G8)	RB	797'	In Service In Service	YES	O-705	1KVIB-13	S,R
52	N/A	1RCLT0123	1A RCS HOT LEG LVL (ICCM A)	N/A	OFD-100A-1.1 (I2)	RB	809'	Not Used In Service	YES	O-705	1KVIA-08	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 ICCM										
52	N/A	1RCLT0124 U1 ICCM	1B RCS HOT LEG LVL (ICCM B)	N/A	OFD-100A-1.1 (I13)	RB	809'	Not Used In Service	YES	O-705	1KVIB-13	S,R
52	N/A	1RCLT0125 U1 ICCM	RV HEAD LEVEL (ICCM A)	N/A	OFD-100A-1.1 (I7)	RB	809'	Not Used In Service	YES	O-705	1KVIA-08	S,R
52	N/A	1RCLT0126 U1 ICCM	RV HEAD LEVEL (ICCM B)	N/A	OFD-100A-1.1 (I8)	RB	809'	Not Used In Service	YES	O-705	1KVIB-13	S,R
26	N/A	1RCPS0364 U1 Low Pressure Injection	RC PRESS SWITCH	N/A	OFD-100A-3.2	RB	825'	In Service In Service	YES	O-703-G	1XSI-F05C	S,R
26	N/A	1RCPT0017P U1 Reactor Coolant	RCS LOOP A PRESS TRANS	N/A	OFD-100A-1.1 (H5)	RB	825'	In Service In Service	YES	O-705	1KVIA-01	S,R
1	N/A	1RCPT0021P U1 Engineered Safeguards	RC PRESS XMTR (ES CH A)	N/A	OFD-100A-1.1	RB	825'	In Service In Service	YES	O-705	1KVIA-02	S,R
26	N/A	1RCPT0022P U1 Engineered Safeguards	RC PRESS XMTR (ES CH B)	N/A	OFD-100A-1.1	RB	825'	In Service In Service	YES	O-705	1KVIC-02	S,R
26	N/A	1RCPT0023P U1 Engineered Safeguards	RC PRESS XMTR (ES CH C)	N/A	OFD-100A-1.1	RB	825'	In Service In Service	YES	O-705	1KVIB-02	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
26	N/A	1RCPT0166P U1 Reactor Coolant	RCS LOOP B PRESS TRANS	N/A	OFD-100A-1.1 (H9)	RB	825'	In Service In Service	YES	O-705-A	1KI-10	S,R
52	N/A	1RCPT0244 U1 ICCM	WR RCS PRESS TRAIN A (ICCM)	N/A	OFD-100A-1.1 (H2)	AB	809'	In Service In Service	YES	O-705	1KVIA-08	S,R
52	N/A	1RCPT0245 U1 ICCM	WR RCS PRESS TRAIN B (ICCM)	N/A	OFD-100A-1.1 (H7)	AB	809'	In Service In Service	YES	O-705	1KVIB-13	S,R
10	N/A	1RCRD0005B U1 Reactor Coolant	A2 COLD LEG RTD	N/A	OFD-100A-1.1 (E5)	RB	797'	In Service In Service	YES	O-705-A	1KI-18	S,R
10	N/A	1RCRD0006A U1 Reactor Coolant	A1 COLD LEG RTD	N/A	OFD-100A-1.1 (D5)	RB	797'	In Service In Service	YES	O-705-A	1KI-18	S,R
1	N/A	1RCRD0007B U1 Reactor Coolant	B2 COLD LEG RTD	N/A	OFD-100A-1.1 (D10)	RB	797'	In Service In Service	YES	O-705-A	1KI-18	S,R
1	N/A	1RCRD0008A U1 Reactor Coolant	B1 COLD LEG RTD	N/A	OFD-100A-1.1 (C11)	RB	797'	In Service In Service	YES	O-705-A	1KI-18	S,R
24	N/A	1RCRD0043A U1 Reactor Coolant	PRZ RTD	N/A	OFD-100A-1.2 (G6)	RB	797'	In Service In Service	YES	O-705	1KVIA-08	S,R
24	N/A	1RCRD0043B	PRZ RTD	N/A	OFD-100A-1.2 (G6)	RB	797'	In Service In Service	YES	O-705	1KVIB-13	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSF" indicates that the equipment is part of the NSSF system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 Reactor Coolant										
1	N/A	1RCRD0084B U1 Reactor Coolant	A HOT LEG RTD	N/A	OFD-100A-1.1 (H5)	RB	844'	In Service In Service	YES	O-705-A	1KI-18	S,R
1	N/A	1RCRD0085B U1 Reactor Coolant	B HOT LEG RTD	N/A	OFD-100A-1.1 (H11)	RB	844'	In Service In Service	YES	O-705-A	1KI-18	S,R
N/A	N/A	1RCVA0001 U1 Reactor Coolant	PRESSURIZER SPRAY VALVE	N/A	OFD-100A-1.2 (G9)	RB	N/A	Closed Either	NO	N/A	N/A	NONE
1	19	1RCVA0003 U1 Reactor Coolant	PRZ SPRAY ISOLATION	N/A	OFD-100A-1.2 (H9)	RB	850'	Open Open/Closed	YES	O-703-F	1XO-R03D	S,R
1	19	1RCVA0004 U1 Reactor Coolant	PRZ PORV BLOCK VALVE	N/A	OFD-100A-1.2 (J9)	RB	850'	Open Open/Closed	YES	O-703-K	1XSF-F06C	S,R
52	N/A	1RCVA0005 U1 Reactor Coolant	PRZ STEAM SAMPLE ISOLATION	N/A	OFD-110A-1.1 (I3)	RB	810'	Open/Closed Closed	NO	N/A	N/A	S,R
52	N/A	1RCVA0006 U1 Reactor Coolant	PRZ WATER SAMPLE ISOLATION	N/A	OFD-110A-1.1 (H3)	RB	810'	Open/Closed Closed	NO	N/A	N/A	S,R
52	N/A	1RCVA0007 U1 Reactor Coolant	PRZ WATER SAMPLE ISOLATION	N/A	OFD-110A-1.1 (H3)	AB	809'	Open/Closed Closed	NO	N/A	N/A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
1	20	1RCVA0066 U1 Reactor Coolant	PRZ PORV	N/A	OFD-100A-1.2 (K9)	RB	850'	Closed Open/Closed	YES	O-705	1DIB-24	S,R
1	20	1RCVA0067 U1 Reactor Coolant	PRZ CODE SAFETY	N/A	OFD-100A-1.2 (K8)	RB	850'	Closed Open/Closed	NO	N/A	N/A	S
1	21	1RCVA0068 U1 Reactor Coolant	PRZ CODE SAFETY	N/A	OFD-100A-1.2 (K7)	RB	850'	Closed Open/Closed	NO	N/A	N/A	S
N/A	N/A	1RCVA0155 U1 Reactor Coolant	RCS HOT LEG 1A VENT	N/A	OFD-100A-1.1 (J4)	RB	825'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	1RCVA0157 U1 Reactor Coolant	RCS HOT LEG 1B VENT	N/A	OFD-100A-1.1 (I11)	RB	825'	Closed Closed	NO	N/A	N/A	R
9	N/A	1RCVA0159 U1 Reactor Coolant	RV VENT ISOLATION	N/A	OFD-100A-1.1 (I9)	RB	844'	Closed Open/Closed	YES	O-704-E	1SKL-08	S,R
46	N/A	1RCVA0160 U1 Reactor Coolant	RV VENT ISOLATION	N/A	OFD-100A-1.1 (I9)	RB	844'	Closed Open/Closed	YES	O-704-E	1SKL-08	S,R
10	N/A	1RCVA0162 U1 Reactor Coolant	POST ACC SAMPLE PATH ISOL	N/A	OFD-110A-1.4 (G1)	RB	777'	Closed Open	YES	O-705	1KVIB-14	S,R
10	N/A	1RCVA0163	POST ACC SAMPLE PATH ISOL	N/A	OFD-110A-1.4 (G2)	RB	777'	Closed Open	YES	O-705	1KVIC-14	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 Reactor Coolant										
18	N/A	1RCVA0164 U1 Reactor Coolant	POST ACC SAMPLE PATH ISOL	N/A	OFD-110A-1.4 (G3)	AB	758'	Closed Open/Closed	YES	0-705	1KVIB-14	S,R
18	N/A	1RCVA0165 U1 Reactor Coolant	POST ACC SAMPLE PATH ISOL	N/A	OFD-110A-1.4 (G4)	AB	758'	Closed Open	YES	0-705	1KVIA-04	S,R
1	N/A	1RCVA0179 U1 Reactor Coolant	POST ACC SAMPLE THROTTLE	N/A	OFD-110A-1.4 (G4)	AB	758'	Closed Open	YES	0-839	1L2-39	S,R
58	32	1RPS U1 Generic	UNIT 1 RPS CABINETS	N/A	O-710	AB	822'	In Service In Service	YES	0-705	1KVIA-01/1K	S,R
1	N/A	1RSC-1CCW-287/ENCL U1 SSF AUX Service Water	REMOTE STARTER ENCLOSURE FOR 1CCW-287	N/A	OEE-151-49	SSF	758'	Not Used Not Used	NO	N/A	N/A	S,R
1	22	1RSC-1FDW-368/ENCL U1 Emergency Feedwater	REMOTE STARTER ENCLOSURE FOR 1FDW-368	N/A	OEE-147-12	AB	809'	Not Used Not Used	NO	N/A	N/A	S,R
1	22	1RSC-1FDW-369/ENCL U1 Emergency Feedwater	REMOTE STARTER ENCLOSURE FOR 1FDW-369	N/A	OEE-147-11	AB	809'	Not Used Not Used	NO	N/A	N/A	S,R
1	22	1RSC-1FDW-372/ENCL U1 Emergency Feedwater	REMOTE STARTER ENCLOSURE FOR 1FDW-372	N/A	OEE-147-07	AB	809'	Not Used Not Used	NO	N/A	N/A	S,R
1	22	1RSC-1FDW-374/ENCL	REMOTE STARTER	N/A	OEE-147-08	AB	809'	Not Used	NO	N/A	N/A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 Emergency Feedwater	ENCLOSURE FOR 1FDW-374					Not Used				
1	22	1RSC-1FDW-382/ENCL U1 Emergency Feedwater	REMOTE STARTER ENCLOSURE FOR 1FDW-382	N/A	OEE-147-09	AB	809'	Not Used Not Used	NO	N/A	N/A	S,R
1	22	1RSC-1FDW-384/ENCL U1 Emergency Feedwater	REMOTE STARTER ENCLOSURE FOR 1FDW-384	N/A	OEE-147-10	AB	809'	Not Used Not Used	NO	N/A	N/A	S,R
1	N/A	1RSC-1HP-409/ENCL U1 High Pressure Injection	REMOTE STARTER ENCLOSURE FOR 1HP-409	N/A	OEE-151-32	AB	796'	In Service In Service	YES	O-703-G	1XS3-02D	S,R
1	N/A	1RSC-1HP-410/ENCL U1 High Pressure Injection	REMOTE STARTER ENCLOSURE FOR 1HP-410	N/A	OEE-151-33	AB	796'	In Service In Service	YES	N/A	1XS3-02D	S,R
1	N/A	1RSC-1LPSW-565/ENCL U1 Low Pressure Service Water	REMOTE STARTER ENCLOSURE FOR 1LPSW-565	N/A	OEE-138-36	AB	796'	In Service In Service	YES	O-703-G	1XS3-03CT	S,R
1	N/A	1RSC-1LPSW-566/ENCL U1 Low Pressure Service Water	REMOTE STARTER ENCLOSURE FOR 1LPSW-566	N/A	OEE-138-37	AB	796'	In Service In Service	YES	O-703-G	1XS3-03CB	S,R
1	22	1RSC-1PR-59/ENCL U1 Penetration Rm Ventilation	REMOTE STARTER ENCLOSURE FOR 1PR-59	N/A	OEE-158-18	AB	809'	In Service In Service	YES	O-703-D	1XL-0AB	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
1	22	1RSC-1PR-60/ENCL U1 Penetration Rm Ventilation	REMOTE STARTER ENCLOSURE FOR 1PR-60	N/A	OEE-158-19	AB	809'	In Service In Service	YES	O-703-E	1XI-01BT	S,R
10	N/A	1SCHX000A U1 Stator Coolant	GENERATOR WATER COOLER 1A	N/A	OFD-121A-1.4 (D7)	TB	775'	In Service In Service	NO	N/A	N/A	S
10	N/A	1SCHX000B U1 Stator Coolant	GENERATOR WATER COOLER 1B	N/A	OFD-121A-1.4 (C7)	TB	775'	In Service In Service	NO	N/A	N/A	S
N/A	N/A	1SCWP U1 Main Turbine	UNIT 1 STATOR COOLING WATER PANEL	N/A	OEE-121-05	TB	775'	In Service In Service	N/A	N/A	N/A	R
10	171	1SFTK0002 U1 Emergency Feedwater	INCORE INST HANDLING TANK	N/A	OFD-104A-1.1 (G2)	RB	816'	Not Used Not Used	NO	N/A	N/A	S
1	N/A	1SGFP U1 Condensate	SG FWP PANEL	N/A	OEE-146	TB	775'	In Service In Service	YES	O-705-B	1DP-F06BR	S,R
63	N/A	1SKJ U1 208V PWR (PPB)	120V PPB 1SKJ	N/A	O-704-E	AB	809'	In Service In Service	YES	O-703-G	1XS1-R04B	S,R
63	N/A	1SKK U1 208V PWR (PPB)	120V PPB 1SKK	N/A	O-704-E	AB	809'	In Service In Service	YES	O-703-G	1XS2-R03CT	S,R
63	N/A	1SKL U1 208V PWR (PPB)	120V PPB 1SKL	N/A	O-704-E	AB	809'	In Service In Service	YES	O-703-G	1XS3-R04BT	S,R
RB	N/A	1SL-5 U1 Control Cabinets	CRD SYSTEM LOGIC CAB 5	1CRDLC	O-782-B	AB	809'	In Service In Service	N/A	O-705/O-705-A	1KVIA-14/1K	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
RB	N/A	1SL-6 U1 Control Cabinets	CRD SYSTEM LOGIC CAB 6	1CRDLC	O-782-B	AB	809'	In Service In Service	N/A	O-705/O-705-A	1KVIA-14/1K	S,R
N/A	N/A	1SSHVA0001 U1 Main Turbine	STEAM SEAL HEADER ISOLATION	N/A	OFD-121B-1.1 (J7)	TB	796'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	1SSHVA0003 U1 Main Turbine	STEAM SEAL HEADER ISOLATION	N/A	OFD-122B-1.1 (J6)	TB	796'	Closed Closed	NO	N/A	N/A	R
1	173	1TB-111 U1 Condenser Circulating Water	TERM BOX 111	N/A	OOE-136-20	YD	796'	In Service In Service	YES	O-705	1KVID-03	S,R
1	N/A	1TB-112 U1 Condenser Circulating Water	TERM BOX 112	N/A	OOE-136-20	YD	796'	In Service In Service	YES	O-705	1KVID-03	S,R
11	N/A	1TBATWS1 U1 Emergency Feedwater	ATSW TERM BOX 1	N/A	OOE-147-18	AB	809'	In Service In Service	YES	O-704	1KG-28	S,R
11	N/A	1TBATWS2 U1 Emergency Feedwater	ATSW TERM BOX 2	N/A	OOE-147-18	AB	809'	In Service In Service	YES	O-704	1KG-29	S,R
27	26	1TC U1 4160V PWR	4KV SWGR 1TC	N/A	O-751-A	TB	796'	In Service In Service	YES	O-702	MFB	S,R
10	N/A	1TCPA U1 Control Cabinets	TURB CONT PANEL 1TCPA	N/A	O-931	TB	796'	In Service In Service	YES	O-705	1DIA-31	S,R
27	26	1TD	4KV SWGR 1TD	N/A	O-751-C	TB	796'	In Service	YES	O-702	MFB	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 4160V PWR						In Service				
16	N/A	1TDC3 U1 Reactor Coolant	TRANSDUCER CAB 1TDC3	N/A	OEE-150-23	AB	809'	In Service In Service	YES	O-705-A	1KI-18	S,R
27	26	1TE U1 4160V PWR	4KV SWGR 1TE	N/A	O-751-E	TB	796'	In Service In Service	YES	O-702	MFB	S,R
N/A	N/A	1TOFL0009 U1 Emergency Feedwater	EFW PUMP TURBINE OIL FILTER	N/A	OFD-135B-1.2 (I10)	TB	775'	Not Used In Service	NO	N/A	N/A	S*
RB	N/A	1TOHX0001 U1 Emergency Feedwater	EFWPT OIL COOLER	1TOTK0002	OFD-133A-1.2 (I14)	TB	775'	Not Used In Service	NO	N/A	N/A	S
1	N/A	1TOPS0176B U1 Condensate DC Interlocks	FWPT 1A BEARING OIL PRESS LOW	N/A	OEE-145-00-A	TB	75'+	In Service In Service	YES	O-705	1DIA-20	S,R
1	N/A	1TOPS0192B U1 Condensate DC Interlocks	FWPT 1B BEARING OIL PRESS LOW	N/A	OEE-145-00-A	TB	75'+	In Service In Service	YES	O-705	1DIA-20	S,R
10	N/A	1TOPU0022 U1 Emergency Feedwater	EFWPT AUX OIL PUMP	N/A	OFD-135B-1.2 (H4)	TB	775'	Off On	YES	O-705-B	1DP-R03A	S,R
RB	N/A	1TOPU0029 U1 Emergency Feedwater	EFWPT SHAFT DRIVEN OIL PUMP	1TOPU0022	OFD-135B-1.2 (F4)	TB	775'	Off On	NO	N/A	N/A	S

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
9	174	1TOTK0002 U1 Emergency Feedwater	EFW PUMP TURBINE OIL TANK	N/A	OFD-135B-1.2 (J2)	TB	775'	Not Used In Service	NO	N/A	N/A	S
20	N/A	1TOVA0059 U1 Emergency Feedwater	EFW PUMP TURBINE OIL PR VALVE	N/A	OFD-135B-1.2 (H11)	TB	775'	Closed Throttled	NO	N/A	N/A	S
10	28	1TTC6 U1 Cabinets	TURB TERM CAB 1TTC6	N/A	O-772-G	TB	796'	In Service In Service	NO	N/A	N/A	S,R
RB	N/A	1UB1 U1 Control Boards	CONTROL BOARD 1UB1	1UB1,2; 1AB1	O-710	AB	822'	In Service In Service	N/A	N/A	N/A	S,R
RB	N/A	1UB1,2;1AB1 U1 Control Boards	CONTROL BOARDS 1UB1,2,AB1	1UB1,2; 1AB1	N/A	AB	822'	In Service In Service	N/A	N/A	N/A	S,R
20	176	1VAE0001 U1 Emergency Steam	EM STEAM AIR EJECTOR (SAE)	N/A	OFD-121C-1.1 (H2)	TB	775'	Off Either	NO	N/A	N/A	S
RB	N/A	1VB1 U1 Control Boards	CONTROL BOARD 1VB1	1VB1,2,3	O-710	AB	822'	In Service In Service	N/A	N/A	N/A	S,R
59	N/A	1VB1,2,3 U1 Control Boards	CONTROL BOARDS 1VB1,2,3	N/A	N/A	AB	822'	In Service In Service	N/A	N/A	N/A	S,R
RB	N/A	1VB2 U1 Control Boards	CONTROL BOARD 1VB2	1VB1,2,3	O-710	AB	822'	In Service In Service	N/A	N/A	N/A	S,R
RB	N/A	1VB3 U1 Control Boards	CONTROL BOARD 1VB3	1VB1,2,3	O-710	AB	822'	In Service In Service	N/A	N/A	N/A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

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Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

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The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
1	177	1VSAH-B1T-EV-A HVAC	B1T & B2T ENCLOSURE VENT FAN A	N/A	OEE-131-08	BH	796'	On On	YES	O-704-A	1KSG-03	S,R
1	177	1VSAH-B1T-EV-B HVAC	B1T & B2T ENCLOSURE VENT FAN B	N/A	OEE-131-08	BH	796'	On On	YES	O-704-A	1KSG-04	S,R
1	177	1VSAH-CT4-EV-A HVAC	CT4 ENCLOSURE VENT FAN A	N/A	OEE-131-09	BH	796'	On On	YES	O-704-A	1KSG-01	S,R
1	177	1VSAH-CT4-EV-B HVAC	CT4 ENCLOSURE VENT FAN B	N/A	OEE-131-09	BH	796'	On On	YES	O-704-A	1KSG-02	S,R
51	178	1VSAH0011 HVAC	AHU-11	N/A	OEE-131	AB	838'	On On	YES	O-703-F	1XR-04E	S,R
51	178	1VSAH0012 HVAC	AHU-12	N/A	OEE-131	AB	838'	On On	YES	O-1703-C	2XR-03E	S,R
51	178	1VSAH0026 HVAC	OUTSIDE AIR BOOSTER FAN 'A' (F-22)	N/A	OEE-131-65	AB	838'	Off On	YES	O-703-F	1XR-05C	S,R
51	178	1VSAH0027 HVAC	OUTSIDE AIR BOOSTER FAN 'B' (F-23)	N/A	OEE-131-01	AB	838'	Off On	YES	O-1703-C	2XR-01B	S,R
N/A	N/A	1VSFL0026	CRVS PAC FILTER "A" (UNITS 1 & 2)	N/A	N/A	AB	838'	Off On	NO	N/A	N/A	NONE

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		HVAC										
N/A	N/A	1VSFL0027 HVAC	CRVS PAC FILTER "B" (UNITS 1 & 2)	N/A	N/A	AB	838'	Off On	NO	N/A	N/A	NONE
20	N/A	1VVA0186 U1 Main Turbine	COND VACUUM BREAKER	N/A	OFD-121C-1.1 (I14)	TB	796'	Closed Open	YES	O-703	1XA-R03A	S,R
10	179	1X01 U1 600V PWR (LOAD CENTERS)	600V LC 1X01	N/A	O-703	TB	796'	In Service In Service	YES	O-702	1TC-13	S,R
RB	N/A	1X01/XFMR(1TC-13) U1 600V PWR (LOAD CENTERS)	600V LC 1X01 XFMR (4160V TO 600V)	1X01A	OEE-117-51	TB	796'	In Service In Service	YES	O-702	1TC-13	S
10	179	1X02 U1 600V PWR (LOAD CENTERS)	600V LC 1X02	N/A	O-703-A	TB	796'	In Service In Service	YES	O-702	1TD-13	S,R
RB	N/A	1X02/XFMR(1TD-13) U1 600V PWR (LOAD CENTERS)	600V LC 1X02 XFMR (4160V TO 600V)	1X02	OEE-117-66	TB	796'	In Service In Service	YES	O-702	1TD-13	S
10	179	1X04 U1 600V PWR (LOAD CENTERS)	600V LC 1X04	N/A	O-703-C	TB	796'	In Service In Service	YES	O-702	1TE-03	S,R
RB	N/A	1X04/XFMR(1TE-03)	600V LC 1X04 XFMR (4160V TO 600V)	1X04	OEE-117-70	TB	796'	In Service In Service	YES	O-702	1TE-03	S

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Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 600V PWR (LOAD CENTERS)										
10	179	1X05 U1 600V PWR (LOAD CENTERS)	600V LC 1X05	N/A	O-703-D	TB	796'	In Service In Service	YES	O-702	1TD-02	S,R
RB	N/A	1X05/XFMR(1TD-02) U1 600V PWR (LOAD CENTERS)	600V LC 1X05 XFMR (4160V TO 600V)	1X05	OEE-117-55	TB	796'	In Service In Service	YES	O-702	1TD-02	S
10	179	1X06 U1 600V PWR (LOAD CENTERS)	600V LC 1X06	N/A	O-703-E	TB	796'	In Service In Service	YES	O-702	1TE-02	S,R
RB	N/A	1X06/XFMR(1TE-02) U1 600V PWR (LOAD CENTERS)	600V LC 1X06 XFMR (4160V TO 600V)	1X06	OEE-117-69	TB	796'	In Service In Service	YES	O-702	1TE-02	S
10	179	1X07 U1 600V PWR (LOAD CENTERS)	600V LC 1X07	N/A	O-703-F	TB	796'	In Service In Service	YES	O-702	1TC-02	S,R
RB	N/A	1X07/XFMR(1TC-02) U1 600V PWR (LOAD CENTERS)	600V LC 1X07 XFMR (4160V TO 600V)	1X07	OEE-117-40	TB	796'	In Service In Service	YES	O-702	1TC-02	S
10	180	1X08 U1 600V PWR (LOAD CENTERS)	600V LC 1X08	N/A	OEE-116-01	AB	796'	In Service In Service	YES	O-702	1TC-03	S,R

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11/11/97

Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
RB	N/A	1X08/XFMR(1TC-03) U1 600V PWR (LOAD CENTERS)	600V LC XFMR 1X08 (4160V TO 600V)	1X08	OEE-117-41	TB	796'	In Service In Service	YES	O-702	1TC-03	S
10	181	1X09 U1 600V PWR (LOAD CENTERS)	600V LC 1X09	N/A	OEE-116-01	AB	796'	In Service In Service	YES	O-702	1TD-03	S,R
RB	N/A	1X09/XFMR(1TD-03) U1 600V PWR (LOAD CENTERS)	600V LC XFMR 1X09 (4160V TO 600V)	1X09	OEE-117-56	AB	796'	In Service In Service	YES	O-702	1TD-03	S
10	182	1X10/XFMR U1 600V PWR (LOAD CENTERS)	600V LC 1X10 XFMR	N/A	O-703-G	TB	796'	In Service In Service	YES	O-702	1TC-12	S
1	183	1XA U1 600/208V MOTOR CONTROL CENTERS	MCC 1XA	N/A	O-703	TB	796'	In Service In Service	YES	O-703	1X01-04C	S,R
RB	N/A	1XA(208V) U1 600/208V MOTOR CONTROL CENTERS	208V MCC 1XA	1XA	O-703	TB	796'	In Service In Service	YES	O-703	1XA-F07AT	S,R
RB	N/A	1XA(600V) U1 600/208V MOTOR CONTROL CENTERS	600V MCC 1XA	1XA	O-703	TB	796'	In Service In Service	YES	O-703	1X01-04C	S,R
1	184	1XA-A	208V MCC 1XA-A	N/A	O-703-H	TB	796'	In Service	YES	O-703	1XA-R05BB	S,R

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Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 600/208V MOTOR CONTROL CENTERS						In Service				
1	N/A	1XA/XFMR U1 600/208V MOTOR CONTROL CENTERS	XFMR 1XA	N/A	O-703	TB	796'	In Service In Service	YES	O-703	1XA-F07AT	S
10	86	1XB U1 600/208V MOTOR CONTROL CENTERS	600V MCC 1XB	N/A	O-703-A	TB	775'	In Service In Service	YES	O-703-A	1X02-04C	S,R
1	40	1XC U1 600/208V MOTOR CONTROL CENTERS	MCC 1XC	N/A	O-703-C	TB	775'	In Service In Service	YES	O-703-C	1X04-04C	S,R
RB	N/A	1XC(208V) U1 600/208V MOTOR CONTROL CENTERS	208V MCC 1XC	1XC	O-703-C	TB	775'	In Service In Service	YES	O-703-C	1XC-F01AT	S,R
RB	N/A	1XC(600V) U1 600/208V MOTOR CONTROL CENTERS	600V MCC 1XC	1XC	O-703-C	TB	775'	In Service In Service	YES	O-703-C	1X04-04C	S,R
1	N/A	1XC/XFMR U1 600/208V MOTOR CONTROL CENTERS	XFMR 1XC (600V TO 208V)	N/A	O-703-C	TB	775'	In Service In Service	YES	O-703-C	1XC-F01AT	S
35	41	1XGA U1 600/208V MOTOR CONTROL CENTERS	1XGA	N/A	O-703-C	TB	796'	In Service In Service	YES	O-703-C	1X04-05A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
RB	N/A	1XGA(208V) U1 600/208V MOTOR CONTROL CENTERS	208V MCC 1XGA	1XGA	O-703-C	TB	796'	In Service In Service	YES	O-703-C	1XGA-F05AT	S,R
RB	N/A	1XGA(600V) U1 600/208V MOTOR CONTROL CENTERS	600V MCC 1XGA	1XGA	O-703-C	TB	796'	In Service In Service	YES	O-703-C	1X04-05A	S,R
1	N/A	1XGA/XFMR U1 600/208V MOTOR CONTROL CENTERS	XFMR 1XGA	N/A	O-703-C	TB	796'	In Service In Service	YES	O-703-C	1XGA-F05AT	S
35	42	1XGB U1 600/208V MOTOR CONTROL CENTERS	MCC 1XGB	N/A	O-703-B	TB	796'	In Service In Service	YES	O-703	1X01-05D	S,R
RB	N/A	1XGB(208V) U1 600/208V MOTOR CONTROL CENTERS	208V MCC 1XGB	1XGB	O-703-B	TB	796'	In Service In Service	YES	O-703	1XGB-F-04A	S,R
RB	N/A	1XGB(600V) U1 600/208V MOTOR CONTROL CENTERS	600V MCC 1XGB	1XGB	O-703-B	TB	796'	In Service In Service	YES	O-703	1X01-05D	S,R
1	43	1XGB/XFMR U1 600/208V MOTOR CONTROL CENTERS	XFMR 1XGB	N/A	O-703	TB	796'	In Service In Service	YES	O-703	1XGB-F-04A	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
10	44	1XI U1 600/208V MOTOR CONTROL CENTERS	600V MCC 1XI	N/A	O-703-E	AB	809'	In Service In Service	YES	O-702	1TC-13	S,R
10	44	1XJ U1 600/208V MOTOR CONTROL CENTERS	600V MCC 1XJ	N/A	O-703-F	AB	809'	In Service In Service	YES	O-703-F	1X07-04C	S,R
9	45	1XK U1 600/208V MOTOR CONTROL CENTERS	600V MCC 1XK	N/A	O-703-D	AB	809'	In Service In Service	YES	O-703-E	1X06-06B	S,R
35	N/A	1XL U1 600/208V MOTOR CONTROL CENTERS	MCC 1XL	N/A	O-703-D	AB	771'	In Service In Service	YES	O-703-E	1X06-06D	S,R
RB	N/A	1XL(208V) U1 600/208V MOTOR CONTROL CENTERS	208V MCC 1XL	1XL	O-703-D	AB	771'	In Service In Service	YES	O-703-D	1XL-04AT	S,R
RB	N/A	1XL(600V) U1 600/208V MOTOR CONTROL CENTERS	600V MCC 1XL	1XL	O-703-D	AB	771'	In Service In Service	YES	O-703-E	1X06-06D	S,R
1	N/A	1XL/XFMR U1 600/208V MOTOR CONTROL CENTERS	XFMR 1XL (600V TO 208V)	N/A	O-703-D	AB	771'	In Service In Service	YES	O-703-D	1XL-04AT	S
10	N/A	1XN U1 600/208V MOTOR CONTROL CENTERS	MCC 1XN	N/A	O-703-E	AB	771'	In Service In Service	YES	O-703-E	1X06-05B	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
RB	N/A	1XN(208V) U1 600/208V MOTOR CONTROL CENTERS	208V MCC 1XN	1XN	O-703-E	AB	771'	In Service In Service	YES	O-703-E	1XN-02AT	S,R
RB	N/A	1XN(600V) U1 600/208V MOTOR CONTROL CENTERS	600V MCC 1XN	1XN	O-703-E	AB	771'	In Service In Service	YES	O-703-E	1X06-05B	S,R
1	N/A	1XN/XFMR U1 600/208V MOTOR CONTROL CENTERS	XFMR 1XN (600V TO 208V)	N/A	O-703-E	AB	771'	In Service In Service	YES	O-703-E	1XN-02AT	S
35	47	1XO U1 600/208V MOTOR CONTROL CENTERS	MCC 1XO	N/A	O-703-F	AB	796'	In Service In Service	YES	O-703-F	1X07-05B	S,R
RB	N/A	1XO(208V) U1 600/208V MOTOR CONTROL CENTERS	208V MCC 1XO	1XO	O-703-F	AB	796'	In Service In Service	YES	O-703-F	1XO-F05B	S,R
RB	N/A	1XO(600V) U1 600/208V MOTOR CONTROL CENTERS	600V MCC 1XO	1XO	O-703-F	AB	796'	In Service In Service	YES	O-703-F	1X07-05B	S,R
1	N/A	1XO/XFMR U1 600/208V MOTOR CONTROL CENTERS	XFMR 1XO (600V TO 208V)	N/A	O-703-F	AB	796'	In Service In Service	YES	O-703-F	1XO-F05B	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
35	48	1XP U1 600/208V MOTOR CONTROL CENTERS	MCC 1XO	N/A	O-703-E	AB	796'	In Service In Service	YES	O-703-E	1X06-05B	S,R
RB	N/A	1XP(208V) U1 600/208V MOTOR CONTROL CENTERS	208V MCC 1XP	1XP	O-703-E	AB	796'	In Service In Service	YES	O-703-E	1XP-F05B	S,R
RB	N/A	1XP(600V) U1 600/208V MOTOR CONTROL CENTERS	600V MCC 1XP	1XP	O-703-E	AB	796'	In Service In Service	YES	O-703-E	1X06-05B	S,R
10	N/A	1XP/XFMR U1 600/208V MOTOR CONTROL CENTERS	XFMR 1XP (600V TO 208V)	N/A	O-703-E	AB	796'	In Service In Service	YES	O-703-E	1XP-F05B	S
1	49	1XR U1 600/208V MOTOR CONTROL CENTERS	MCC 1XR	N/A	O-703-F	AB	838'	In Service In Service	YES	O-703-F	1X07-04B	S,R
RB	N/A	1XR(208V) U1 600/208V MOTOR CONTROL CENTERS	208V MCC 1XR	1XR	O-703-F	AB	838'	In Service In Service	YES	O-703-F	1XR-05B	S,R
RB	N/A	1XR(600V) U1 600/208V MOTOR CONTROL CENTERS	600V MCC 1XR	1XR	O-703-F	AB	838'	In Service In Service	YES	O-703-F	1X07-04B	S,R
1	50	1XR/XFMR	XFMR 1XR (600V 208V)	N/A	O-703-F	AB	838'	In Service	YES	O-703-F	1XR-05B	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 600/208V MOTOR CONTROL CENTERS						In Service				
35	51	1XS1 U1 600/208V MOTOR CONTROL CENTERS	MCC 1XS1	N/A	O-703-G	AB	796'	In Service In Service	YES	O-703-G	1X08-05A	S,R
RB	N/A	1XS1(208V) U1 600/208V MOTOR CONTROL CENTERS	208V MCC 1XS1	1XS1	O-703-G	AB	796'	In Service In Service	YES	O-703-G	1XS1-F05AT	S,R
RB	N/A	1XS1(600V) U1 600/208V MOTOR CONTROL CENTERS	600V MCC 1XS1	1XS1	O-703-G	AB	796'	In Service In Service	YES	O-703-G	1X08-05A	S,R
11	N/A	1XS1A/XFMR U1 600/208V MOTOR CONTROL CENTERS	XFMR 1XS1A (600V TO 208V)	N/A	O-703-G	AB	796'	In Service In Service	YES	O-703-G	1XS1-F05AT	S
35	N/A	1XS2 U1 600/208V MOTOR CONTROL CENTERS	MCC 1XS2	N/A	O-703-G	AB	796'	In Service In Service	YES	O-703-G	1X09-05A	S,R
RB	N/A	1XS2(208V) U1 600/208V MOTOR CONTROL CENTERS	208V MCC 1XS2	1XS2	O-703-G	AB	796'	In Service In Service	YES	O-703-G	1XS2-F04AT	S,R
RB	N/A	1XS2(600V)	600V MCC 1XS2	1XS2	O-703-G	AB	796'	In Service In Service	YES	O-703-G	1X09-05A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

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11/11/97

Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 600/208V MOTOR CONTROL CENTERS										
11	N/A	1XS2A/XFMR U1 600/208V MOTOR CONTROL CENTERS	XFMR 1XS2A (600V TO 208V)	N/A	O-703-G	AB	796'	In Service In Service	YES	O-703-G	1XS2-F04AT	S
35	52	1XS3 U1 600/208V MOTOR CONTROL CENTERS	MCC 1XS3	N/A	O-703-G	AB	796'	In Service In Service	YES	O-702	1TC-12	S,R
RB	N/A	1XS3(208V) U1 600/208V MOTOR CONTROL CENTERS	208V MCC 1XS3	1XS3	O-703-G	AB	796'	In Service In Service	YES	O-703-G	1XS3-03BT	S,R
RB	N/A	1XS3(600V) U1 600/208V MOTOR CONTROL CENTERS	600V MCC 1XS3	1XS3	O-703-G	AB	796'	In Service In Service	YES	O-702	1TE-12	S,R
11	53	1XS3A/XFMR U1 600/208V MOTOR CONTROL CENTERS	XFMR 1XS3A (600V TO 208V)	N/A	O-703-G	AB	796'	In Service In Service	YES	O-703-G	1XS3-03BT	S
1	N/A	1XSF(208V) U1 600/208V MOTOR CONTROL CENTERS	MCC 1XSF(208V)	1XSF (208V)	OM 308-361	SSF	817'	In Service In Service	YES	O-703-K	1XSF-F04A	S,R
RB	N/A	1XSF(600V)	MCC 1XSF(600V)	1XSF (600V)	OM 308-361	SSF	817'	In Service In Service	YES	O-703-G/O-702-B	1X08-05B/OX	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
Evaluation type "S" indicates that a seismic evaluation was performed.
Evaluation type "R" indicates that a relay evaluation was performed.
Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
Evaluation type "NSSF" indicates that the equipment is part of the NSSF system and does not require a seismic evaluation.
The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

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Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U1 600/208V MOTOR CONTROL CENTERS										
RB	N/A	1XSF-1(208V) U1 600/208V MOTOR CONTROL CENTERS	MCC 1XSF-1 (208V)	XSF-1(1,2,&3)	OM 308-361	SSF	797'	In Service In Service	YES	O-703-K	1XSF-F02BL	S,R
1	N/A	1XSF/XFMR U1 600/208V MOTOR CONTROL CENTERS	600/208V XFMR 1XSF	N/A	OM 308-361	SSF	817'	In Service In Service	YES	O-703-K	1XSF-F04A	S
9	54	2A/2B/SW U2 240/120V AC PWR	2A/2B REG XFER SW	N/A	O-1759-E-1	AB	796'	In Service In Service	YES	O-1703-D	2XO-04BT	S,R
9	54	2A/MCB U2 240/120V AC PWR	240/120V 2A REGULATOR OUTPUT BKR	N/A	O-1759-E-1	AB	796'	Closed Closed	YES	O-1703-D	2XO-F04BT	S,R
11	59	2A/REG U2 240/120V AC PWR	REGULATED PWR SUPP REG 2A	N/A	O-917	AB	796'	In Service In Service	YES	O-1703-D	2XO-F04BT	S,R
11	56	2A/XFMR U2 240/120V AC PWR	XFMR 2A (600V TO 240V)	N/A	O-917	AB	796'	In Service In Service	YES	O-1703-D	2XO-F04BT	S
RB	N/A	2AB1 U2 Control Boards	CONTROL BOARD 2AB1	2UB1,2; 2AB1	O-710	AB	822'	In Service In Service	N/A	N/A	N/A	S,R
59	N/A	2AB3 U2 Control Boards	CONTROL BOARD 2AB3	N/A	O-710	AB	822'	In Service In Service	N/A	N/A	N/A	S,R
10	N/A	2ADA	ISOL DIODE ASSEMBLY	N/A	O-917	AB	796'	In Service	YES	O-1705	2DCA-03C	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSF" indicates that the equipment is part of the NSSF system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

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Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 125/250V DC PWR	2ADA					In Service				
10	N/A	2ADB U2 125/250V DC PWR	ISOL DIODE ASSEMBLY 2ADB	N/A	O-917	AB	796'	In Service In Service	YES	O-2705	3DCA-03D	S,R
10	N/A	2ADC U2 125/250V DC PWR	ISOL DIODE ASSEMBLY 2ADC	N/A	O-917	AB	796'	In Service In Service	YES	O-2705	3DCB-03C	S,R
10	N/A	2ADD U2 125/250V DC PWR	ISOL DIODE ASSEMBLY 2ADD	N/A	O-917	AB	796'	In Service In Service	YES	O-2705	3DCB-03D	S,R
10	N/A	2ADE U2 240/120V AC PWR	ISOL DIODE ASSEMBLY 2ADE	N/A	O-917	AB	796'	In Service In Service	YES	O-1705	2DCA-04B	S,R
10	N/A	2ADF U2 240/120V AC PWR	ISOL DIODE ASSEMBLY 2ADF	N/A	O-917	AB	796'	In Service In Service	YES	O-1705	2DCA-03E	S,R
10	N/A	2ADG U2 240/120V AC PWR	ISOL DIODE ASSEMBLY 2ADG	N/A	O-1705	AB	796'	In Service In Service	YES	O-1705	2DCA-03F	S,R
1	N/A	2ASP U2 Control Boards	AUX SHUTDOWN PANEL	N/A	O-710	TB	822'	In Service In Service	NO	N/A	N/A	S,R
52	N/A	2ASPT0117P U2 Main Steam	AUX STEAM PRESSURE TRANSMITTER (MS-126 & MS-129)	N/A	OEE-245-84	TB	796'	In Service In Service	YES	O-1705	2KVID-10	S,R
52	57	2AT3 U2 Control Cabinet	AREA TERM CAB 2AT3	N/A	O-305A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
1	58	2AT8 U2 Control Cabinet	AREA TERM CAB 2AT8	N/A	O-305A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
1	N/A	2ATWSCP	U2 ATWS CONTROL	N/A	O-1729-A	AB	838'	In Service	N/A	N/A	N/A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 Control Panel	PANEL					In Service				
15	N/A	2B U2 Pressurizer Heaters	600V PPB 2B (FOR PRESSURIZER HEATERS GROUP 2B BANK 2)	N/A	O-1885-A	RB	800'	In Service In Service	YES	O-703-K	2XSF-F03B	S,R
9	54	2B/MCB U2 240/120V AC PWR	240/120V 2B REGULATOR OUTPUT BKR	N/A	O-917	AB	796'	Closed Closed	YES	0-1703-E	2XP-F01E	S,R
11	59	2B/REG U2 240/120V AC PWR	REGULATED PWR SUPP REG 2B	N/A	O-917	AB	796'	In Service In Service	YES	0-1703-E	2XP-F01E	S,R
11	56	2B/XFMR U2 240/120V AC PWR	XFMR 2B (600V TO 240V)	N/A	O-917	AB	796'	In Service In Service	YES	0-1703-E	2XP-F01E	S
1	N/A	2BSPS0018 U2 Engineered Safeguards	RB PRESS SWITCH (ES CH 2A)	N/A	OFD-103A-1.1	AB	809'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	2BSPS0019 U2 Engineered Safeguards	RB PRESS SWITCH (ES CH 2A)	N/A	OFD-103A-1.1	AB	809'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	2BSPS0020 U2 Engineered Safeguards	RB PRESS SWITCH (ES CH 2B)	N/A	OFD-103A-1.1	AB	809'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	2BSPS0021 U2 Engineered Safeguards	RB PRESS SWITCH (ES CH 2B)	N/A	OFD-103A-1.1	AB	809'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	2BSPS0022	RB PRESS SWITCH (ES CH	N/A	OFD-103A-1.1	AB	809'	In Service	NO	N/A	N/A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 Engineered Safeguards	2C)					In Service				
1	N/A	2BSPS0023 U2 Engineered Safeguards	RB PRESS SWITCH (ES CH 2C)	N/A	OFD-103A-1.1	AB	809'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	2BSPT0004P U2 Engineered Safeguards	RB PRESS XMTR (ES CH 2A)	N/A	OFD-103A-2.1	AB	809'	In Service In Service	YES	O-1705	2KVIA-02	S,R
1	N/A	2BSPT0005P U2 Engineered Safeguards	RB PRESS XMTR (ES CH 2B)	N/A	OFD-103A-2.1	AB	809'	In Service In Service	YES	O-1705	2KVIB-02	S,R
1	N/A	2BSPT0006P U2 Engineered Safeguards	RB PRESS XMTR (ES CH 2C)	N/A	OFD-103A-2.1	AB	809'	In Service In Service	YES	O-1705	2KVIC-02	S,R
10	N/A	2BSPU0001 U2 Reactor Building Spray	RBS PUMP 2A	N/A	OFD-103A-2.1 (J5)	AB	758'	Not Used Not Used	NO	N/A	N/A	NONE
10	N/A	2BSPU0002 U2 Reactor Building Spray	RBS PUMP 2B	N/A	OFD-103A-2.1 (E5)	AB	758'	Not Used Not Used	NO	N/A	N/A	NONE
1	N/A	2BSVA0001 U2 Reactor Building Spray	RB SPRAY HEADER 2A ISOLATION	N/A	OFD-103A-2.1 (J8)	AB	809'	Closed Closed	NO	N/A	N/A	R
1	N/A	2BSVA0002 U2 Reactor Building Spray	RB SPRAY HEADER 2B ISOLATION	N/A	OFD-103A-2.1 (E8)	AB	809'	Closed Closed	NO	N/A	N/A	R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
1	N/A	2BSVA0003 U2 Reactor Building Spray	RBS PUMP SUCTION ISOL	N/A	OFD-102A-2.1 (E12)	AB	758'	Open Open	NO	N/A	N/A	S,R
1	N/A	2BSVA0004 U2 Reactor Building Spray	RBS PUMP SUCTION ISOL	N/A	OFD-102A-2.1 (C12)	AB	758'	Open Open	NO	N/A	N/A	S,R
33	N/A	2C U2 Pressurizer Heaters	600V PPB 2C (FOR PRESSURIZER HEATERS GROUP 2C BANK 2)	N/A	O-188-A	RB	818'	In Service In Service	YES	O-1703-D	2XI-02A	S,R
18	N/A	2CA/BB U2 125/250V DC PWR	CONTROL BATT 2CA	N/A	OEE-230-02	AB	809'	In Service In Service	YES	O-1705	2CA/BC	S
10	N/A	2CA/BC U2 125/250V DC PWR	CONTROL BATT CHGR 2CA	N/A	O-917	AB	796'	In Service In Service	YES	O-1703-G	2XS1-F04A	S,R
10	N/A	2CAP U2 Control Panel	CHEMICAL ADDITION PANEL	N/A	O-908-A	AB	771'	In Service In Service	N/A	N/A	N/A	S,R
18	N/A	2CB/BB U2 125/250V DC PWR	CONTROL BATT 2CB	N/A	OEE-230-03	AB	809'	In Service In Service	YES	O-1705	2CB/BC	S
10	N/A	2CB/BC U2 125/250V DC PWR	CONTROL BATT CHGR 2CB	N/A	O-917	AB	796'	In Service In Service	YES	O-1703-G	2XS2-F04D	S,R
N/A	N/A	2CCWMJ0001 U2 Condenser Circulating Water	CCW PUMP EXP JOINT	N/A	OFD-133A-2.1 (K2)	YD	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	2CCWMJ0002	CCW PUMP EXP JOINT	N/A	OFD-133A-2.1 (K5)	YD	N/A	In Service In Service	NO	N/A	N/A	NONE

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 Condenser Circulating Water										
N/A	N/A	2CCWMJ0003 U2 Condenser Circulating Water	CCW PUMP EXP JOINT	N/A	OFD-133A-2.1 (K7)	YD	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	2CCWMJ0004 U2 Condenser Circulating Water	CCW PUMP EXP JOINT	N/A	OFD-133A-2.1 (K10)	YD	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	2CCWMJ0005 U2 Condenser Circulating Water	COND INLET EXP JOINT	N/A	OFD-133A-2.2 (K2)	TB	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	2CCWMJ0006 U2 Condenser Circulating Water	COND INLET EXP JOINT	N/A	OFD-133A-2.2 (K4)	TB	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	2CCWMJ0007 U2 Condenser Circulating Water	COND INLET EXP JOINT	N/A	OFD-133A-2.2 (K5)	TB	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	2CCWMJ0008 U2 Condenser Circulating Water	COND INLET EXP JOINT	N/A	OFD-133A-2.2 (K8)	TB	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	2CCWMJ0009	COND INLET EXP JOINT	N/A	OFD-133A-2.2 (K9)	TB	N/A	In Service	NO	N/A	N/A	NONE

Notes:

- Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
- Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
- Evaluation type "S" indicates that a seismic evaluation was performed.
- Evaluation type "R" indicates that a relay evaluation was performed.
- Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
- Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
- Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
- The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
- All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 Condenser Circulating Water						In Service				
N/A	N/A	2CCWMJ0010 U2 Condenser Circulating Water	COND INLET EXP JOINT	N/A	OFD-133A-2.2 (K11)	TB	N/A	In Service In Service	NO	N/A	N/A	NONE
20	5	2CCWPU0001 U2 Condenser Circulating Water	CCW PUMP 2A	N/A	OFD-133A-2.1 (K3)	YD	810'	On/off On	YES	O-1702	2TC-04	S,R
20	5	2CCWPU0002 U2 Condenser Circulating Water	CCW PUMP 2B	N/A	OFD-133A-2.1 (K5)	YD	810'	On/off On	YES	O-1702	2TD-04	S,R
20	5	2CCWPU0003 U2 Condenser Circulating Water	CCW PUMP 2C	N/A	OFD-133A-2.1 (K8)	YD	810'	On/off On	YES	O-1702	2TE-04	S,R
20	5	2CCWPU0004 U2 Condenser Circulating Water	CCW PUMP 2D	N/A	OFD-133A-2.1 (K9)	YD	810'	On/off On	YES	O-1702	2TC-05	S,R
10	N/A	2CCWPU0024 U2 Condenser Circulating Water	EFWPT OIL COOLER PUMP	N/A	OFD-133A-2.2 (K13)	TB	775'	Off On	YES	O-1703-G	2XS3-04C	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSF" indicates that the equipment is part of the NSSF system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

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Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
N/A	N/A	2CCWVA0007 U2 Condenser Circulating Water	CCW EM DISCH ISOL	N/A	OFD-133A-2.2 (C2)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
20	N/A	2CCWVA0010 U2 Condenser Circulating Water	DISCH ISOL VALVE	N/A	OFD-133A-2.1 (K2)	YD	796'	Open/Closed Open	YES	O-1703-G	2XS1-F02C	S,R
20	N/A	2CCWVA0011 U2 Condenser Circulating Water	DISCH ISOL VALVE	N/A	OFD-133A-2.1 (K5)	YD	796'	Open/Closed Open	YES	O-1703-G	2XS1-F02D	S,R
20	N/A	2CCWVA0012 U2 Condenser Circulating Water	DISCH ISOL VALVE	N/A	OFD-133A-2.1 (K7)	YD	796'	Open/Closed Open	YES	O-1703-G	2XS3-02E	S,R
20	N/A	2CCWVA0013 U2 Condenser Circulating Water	DISCH ISOL VALVE	N/A	OFD-133A-2.1 (K10)	YD	796'	Open/Closed Open	YES	O-1703-G	2XS1-F03C	S,R
N/A	N/A	2CCWVA0026 U2 Condenser Circulating Water	CCW VENT VALVE	N/A	OFD-133A-2.1 (I3)	YD	771'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	2CCWVA0027 U2 Condenser Circulating Water	CCW VENT VALVE	N/A	OFD-133A-2.1 (H5)	YD	771'	Closed Closed	NO	N/A	N/A	R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSF" indicates that the equipment is part of the NSSF system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
N/A	N/A	2CCWVA0028 U2 Condenser Circulating Water	CCW VENT VALVE	N/A	OFD-133A-2.1 (H7)	YD	771'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	2CCWVA0029 U2 Condenser Circulating Water	CCW VENT VALVE	N/A	OFD-133A-2.1 (I10)	YD	771'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	2CCWVA0268 U2 Condenser Circulating Water	SSF ASW PUMP DISCH ISOL	N/A	OFD-133A-2.5 (H13)	SSF	N/A	Closed Either	NO	N/A	N/A	NONE
N/A	N/A	2CCWVA0269 U2 Condenser Circulating Water	CROSSOVER ISOLATION TO A	N/A	OFD-121D-2.1 (G13)	AB	771'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	2CCWVA0287 U2 Condenser Circulating Water	SSF ISOL VALVE	N/A	OFD-133A-2.5 (G14)	SSF	754'	Closed Closed	NO	N/A	N/A	R
18	6	2CDM000A U2 Polishing Demineralizer	POLISHING DEMINERALIZER 2A	N/A	OFD-121A-2.5 (I2)	TB	775'	In Service Either	NO	N/A	N/A	S
18	6	2CDM000B U2 Polishing Demineralizer	POLISHING DEMINERALIZER 2B	N/A	OFD-121A-2.5 (I5)	TB	775'	In Service Either	NO	N/A	N/A	S
18	6	2CDM000C	POLISHING	N/A	OFD-121A-2.5 (I7)	TB	775'	In Service	NO	N/A	N/A	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

11/11/97

Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 Polishing Demineralizer	DEMINERALIZER 2C					Either				
18	6	2CDM000D U2 Polishing Demineralizer	POLISHING DEMINERALIZER 2D	N/A	OFD-121A-2.5 (I10)	TB	775'	In Service Either	NO	N/A	N/A	S
18	6	2CDM000E U2 Polishing Demineralizer	POLISHING DEMINERALIZER 2E	N/A	OFD-121A-2.5 (I13)	TB	775'	In Service Either	NO	N/A	N/A	S
N/A	N/A	2CFL0002 U2 Condensate	RESIN TRAP	N/A	OFD-121A-2.5 (D2)	TB	775'	In Service Not Used	NO	N/A	N/A	S
N/A	N/A	2CFL000A U2 Condensate	HOTWELL PUMP STRAINER	N/A	OFD-121A-2.4 (L3)	TB	775'	In Service Not Used	NO	N/A	N/A	S
N/A	N/A	2CFL000B U2 Condensate	HOTWELL PUMP STRAINER	N/A	OFD-121A-2.4 (J3)	TB	775'	In Service Not Used	NO	N/A	N/A	S
N/A	N/A	2CFL000C U2 Condensate	HOTWELL PUMP STRAINER	N/A	OFD-121A-2.4 (I3)	TB	775'	In Service Not Used	NO	N/A	N/A	S
16	N/A	2CFTK000A U2 Core Flood	CORE FLOOD TANK 2A	N/A	O-6	RB	797'	In Service In Service	NO	N/A	N/A	S,R
16	N/A	2CFTK000B U2 Core Flood	CORE FLOOD TANK 2B	N/A	O-10	RB	818'	In Service In Service	NO	N/A	N/A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
Evaluation type "S" indicates that a seismic evaluation was performed.
Evaluation type "R" indicates that a relay evaluation was performed.
Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
Evaluation type "NSSF" indicates that the equipment is part of the NSSF system and does not require a seismic evaluation.
The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

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Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
10	7	2CHX002A U2 Condensate	CONDENSATE COOLER 2A	N/A	OFD-121A-2.4 (D3)	TB	775'	In Service Either	NO	N/A	N/A	S
10	7	2CHX002B U2 Condensate	CONDENSATE COOLER 2B	N/A	OFD-121A-2.4 (C3)	TB	775'	In Service Either	NO	N/A	N/A	S
52	8	2CLT0015A U2 ICCM	UST 2B LEVEL	N/A	OFD-121A-2.7 (I2)	TB	838'	In Service In Service	YES	O-1705	2KVIA-08	S,R
52	8	2CLT0036 U2 ICCM	UST 2A LEVEL	N/A	OFD-121A-2.7 (I10)	TB	838'	In Service In Service	YES	O-1705	2KVIB-13	S,R
N/A	N/A	2CMJ0007 U2 Emergency Feedwater	UST DOME TO 2A UST EXP JOINT	N/A	OFD-121A-2.7 (J5)	TB	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	2CMJ0008 U2 Emergency Feedwater	UST DOME TO 2B UST EXP JOINT	N/A	OFD-121A-2.7 (J7)	TB	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	2CMJ0010 U2 Plant Heating	CST PUMP 2A EXP JOINT	N/A	OFD-121A-2.7 (D8)	AB	N/A	In Service Not Used	NO	N/A	N/A	NONE
N/A	N/A	2CMJ0011 U2 Plant Heating	CST PUMP 2B EXP JOINT	N/A	OFD-121A-2.7 (B8)	AB	N/A	In Service Not Used	NO	N/A	N/A	NONE
52	8	2CPS0015	UST MAKEUP LEVEL CONTROL (PS-15)	N/A	OEE-245-72	TB	838'	In Service Not Used	N/A	N/A	N/A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

11/11/97

Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 Condensate										
52	8	2CPS0036 U2 Condensate	UST MAKEUP LEVEL CONTROL (PS-36)	N/A	OEE-245-72	TB	838'	In Service Not Used	N/A	N/A	N/A	S,R
1	N/A	2CPS0227 U2 Condensate DC Interlocks	CONDENSATE BOOSTER PUMP SUCTION HEADER PRESS LOW	N/A	OEE-245-00-A	TB	775'	In Service Not Used	N/A	N/A	N/A	S,R
20	N/A	2CPU0010 U2 Condensate	HOTWELL PUMP 2A	N/A	OFD-121A-2.4 (L5)	TB	775'	On Off	NO	N/A	N/A	S,R
20	N/A	2CPU0011 U2 Condensate	HOTWELL PUMP 2B	N/A	OFD-121A-2.4 (J5)	TB	775'	On Off	NO	N/A	N/A	S,R
20	N/A	2CPU0012 U2 Condensate	HOTWELL PUMP 2C	N/A	OFD-121A-2.4 (I5)	TB	775'	On Off	NO	N/A	N/A	S,R
10	N/A	2CPU0019 U2 Condensate	HOLDING PUMP 2A	N/A	OFD-121A-2.5 (H2)	TB	775'	In Service Not Used	NO	N/A	N/A	S
10	N/A	2CPU0020 U2 Condensate	HOLDING PUMP 2B	N/A	OFD-121A-2.5 (H4)	TB	775'	In Service Not Used	NO	N/A	N/A	S
10	N/A	2CPU0021 U2 Condensate	HOLDING PUMP 2C	N/A	OFD-121A-2.5 (H7)	TB	775'	In Service Not Used	NO	N/A	N/A	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSF" indicates that the equipment is part of the NSSF system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
10	N/A	2CPU0022 U2 Condensate	HOLDING PUMP 2D	N/A	OFD-121A-2.5 (H9)	TB	775'	In Service Not Used	NO	N/A	N/A	S
10	N/A	2CPU0023 U2 Condensate	HOLDING PUMP 2E	N/A	OFD-121A-2.5 (H12)	TB	775'	In Service Not Used	NO	N/A	N/A	S
10	N/A	2CRDACBKRCAB U2 Reactor Trip	CRD SYSTEM AC BKR CAB	N/A	O-710-A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
11	N/A	2CRDDCBKRCAB U2 Reactor Trip	CRD SYSTEM DC BKR CAB	N/A	O-710-A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
10	N/A	2CRDLC U2 Reactor Trip	CONTROL ROD DRIVE LOGIC CABINETS	N/A	O-710-A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
1	11	2CREL U2 Emergency Lighting	UNIT 2 CONTROL ROOM EMERGENCY LIGHTS	N/A	O-846-A	AB	822'	N/A N/A	N/A	O-1705-B	2DL2-06	S
10	168	2CTK0003 U2 Condensate	SLURRY TANK	N/A	OFD-121A-2.5 (D5)	TB	775'	In Service In Service	NO	N/A	N/A	S
18	169	2CTK000A U2 Condensate	UPPER SURGE TANK 2A	N/A	OFD-121A-2.7 (J8)	TB	838'	In Service In Service	NO	N/A	N/A	S
18	169	2CTK000B U2 Condensate	UPPER SURGE TANK 2B	N/A	OFD-121A-2.7 (J3)	TB	838'	In Service In Service	NO	N/A	N/A	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

11/11/97

Composite Safe Shutdown Equipment List (SSEL) Ocone Units 1,2 & 3

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
16	170	2CTK000C U2 Condensate	UPPER SURGE TANK DOME	N/A	OFD-121A-2.7 (K6)	TB	838+	In Service In Service	NO	N/A	N/A	S
N/A	N/A	2CVA0001 U2 Condensate	HOTWELL PUMP INLET ISOL VALVE	N/A	OFD-121A-2.4 (I2)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0003 U2 Condensate	HOTWELL PUMP OUTLET ISOL VLV	N/A	OFD-121A-2.4 (I7)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0004 U2 Condensate	HOTWELL PUMP INLET ISOL VALVE	N/A	OFD-121A-2.4 (J2)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0006 U2 Condensate	HOTWELL PUMP OUTLET ISOL VLV	N/A	OFD-121A-2.4 (J7)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0007 U2 Condensate	HOTWELL PUMP INLET ISOL VALVE	N/A	OFD-121A-2.4 (L2)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0009 U2 Condensate	HOTWELL PUMP OUTLET ISOL VLV	N/A	OFD-121A-2.4 (L7)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0010 U2 Condensate	HOTWELL PUMP ISOLATION VALVE	N/A	OFD-121A-2.4 (H7)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0014	HWP THROTTLE VALVE	N/A	OFD-121A-2.4 (G5)	TB	N/A	Open Either	NO	N/A	N/A	NONE

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 Condensate										
N/A	N/A	2CVA0015 U2 Condensate	HWP BYPASS VALVE	N/A	OFD-121A-2.4 (H5)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0017 U2 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-2.5 (K2)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0018 U2 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-2.5 (G2)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0019 U2 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-2.5 (K5)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0020 U2 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-2.5 (G5)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0021 U2 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-2.5 (K8)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0022 U2 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-2.5 (G8)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0023 U2 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-2.5 (K10)	TB	N/A	Open Either	NO	N/A	N/A	NONE

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
N/A	N/A	2CVA0024 U2 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-2.5 (G10)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0025 U2 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-2.5 (K13)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0026 U2 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-2.5 (G13)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0148 U2 Condensate	CST PUMPS CONTROL	N/A	OFD-121A-2.7 (B12)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0152 U2 Condensate	UST RISER ISOLATION	N/A	OFD-121A-2.7 (I6)	TB	777'	Open Open	NO	N/A	N/A	R
N/A	N/A	2CVA0153 U2 Condensate	UST RISER ISOLATION	N/A	OFD-121A-2.7 (I7)	TB	777'	Open Open	NO	N/A	N/A	R
N/A	N/A	2CVA0156 U2 Condensate	UST RISER ISOLATION	N/A	OFD-121A-2.7 (H7)	TB	777'	Open Open	NO	N/A	N/A	R
N/A	N/A	2CVA0158 U2 Condensate	UST RISER ISOLATION	N/A	OFD-121A-2.7 (H5)	TB	777'	Open Open	NO	N/A	N/A	R
N/A	N/A	2CVA0160	UST SUPPLY ISO TO TDEFWP	N/A	OFD-121A-2.8 (E8)	TB	777'	Closed Closed	NO	N/A	N/A	R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 Condensate										
52	N/A	2CVA0176 U2 Condensate	UST TO COND ISOL VALVE	N/A	OFD-121A-2.8 (H7)	TB	775'	Open/closed Closed	YES	O-1704-A	2SKK-24	S,R
52	N/A	2CVA0187 U2 Condensate	UST TO COND ISOL VALVE	N/A	OFD-121A-2.8 (G7)	TB	775'	Open/closed Closed	YES	O-1704	2KA-28	S,R
52	N/A	2CVA0192 U2 Condensate	UST TO COND ISOL VALVE	N/A	OFD-121A-2.8 (J7)	TB	775'	Open/closed Closed	YES	O-1704	2KA-28	S,R
N/A	N/A	2CVA0225 U2 Condensate	POL DEMIN ISOL VALVE (BACKWASH INLET W/A VALVE)	N/A	OFD-121A-2.5 (H3)	TB	777'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	2CVA0229 U2 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-2.5 (I2)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0230 U2 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-2.5 (I2)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0232 U2 Condensate	POL DEMIN ISOL VALVE (DRAIN U/A VALVE)	N/A	OFD-121A-2.5 (K2)	TB	777'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	2CVA0233 U2 Condensate	POL DEMIN ISOL VALVE (BACKWASH INLET W/B VALVE)	N/A	OFD-121A-2.5 (H5)	TB	777'	Closed Closed	NO	N/A	N/A	R

Notes:

- Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
- Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
- Evaluation type "S" indicates that a seismic evaluation was performed.
- Evaluation type "R" indicates that a relay evaluation was performed.
- Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
- Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
- Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
- The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
- All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
N/A	N/A	2CVA0237 U2 Condensate	POL DEMIN ISOL VALVE (DRAIN U/B VALVE)	N/A	OFD-121A-2.5 (K5)	TB	777'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	2CVA0238 U2 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-2.5 (I4)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0239 U2 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-2.5 (I4)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0240 U2 Condensate	POL DEMIN ISOL VALVE (BACKWASH INLET W/C VALVE)	N/A	OFD-121A-2.5 (H8)	TB	777'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	2CVA0244 U2 Condensate	POL DEMIN ISOL VALVE (DRAIN U/C VALVE)	N/A	OFD-121A-2.5 (K7)	TB	777'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	2CVA0245 U2 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-2.5 (I7)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0246 U2 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-2.5 (I7)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0247 U2 Condensate	POL DEMIN ISOL VALVE (BACKWASH INLET W/D VALVE)	N/A	OFD-121A-2.5 (H11)	TB	777'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	2CVA0251	POL DEMIN ISOL VALVE (DRAIN U/D VALVE)	N/A	OFD-121A-2.5 (K10)	TB	777'	Closed Closed	NO	N/A	N/A	R

Notes:

- Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
- Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
- Evaluation type "S" indicates that a seismic evaluation was performed.
- Evaluation type "R" indicates that a relay evaluation was performed.
- Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
- Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
- Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
- The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
- All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 Condensate										
N/A	N/A	2CVA0252 U2 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-2.5 (I10)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0253 U2 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-2.5 (I10)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0254 U2 Condensate	POL DEMIN ISOL VALVE (BACKWASH INLET W/E VALVE)	N/A	OFD-121A-2.5 (H13)	TB	777'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	2CVA0258 U2 Condensate	POL DEMIN ISOL VALVE (DRAIN U/E VALVE)	N/A	OFD-121A-2.5 (K12)	TB	777'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	2CVA0259 U2 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-2.5 (I12)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0260 U2 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-2.5 (I12)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0262 U2 Condensate	SLURRY TANK ISOLATION VALVE (Z VALVE)	N/A	OFD-121A-2.5 (E6)	TB	777'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	2CVA0263 U2 Condensate	POL DEMIN ISOL VALVE (X VALVE)	N/A	OFD-121A-2.5 (F5)	TB	777'	Closed Closed	NO	N/A	N/A	R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
N/A	N/A	2CVA0264 U2 Condensate	SLURRY TANK ISOLATION VALVE (L VALVE)	N/A	OFD-121A-2.5 (D5)	TB	777'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	2CVA0265 U2 Condensate	SLURRY TANK ISOLATION VALVE (D VALVE)	N/A	OFD-121A-2.5 (D5)	TB	777'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	2CVA0266 U2 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-2.5 (F6)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0267 U2 Condensate	POL DEMIN ISOL VALVE (VR VALVE)	N/A	OFD-121A-2.5 (F7)	TB	777'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	2CVA0268 U2 Condensate	POL DEMIN ISOL VALVE (QR VALVE)	N/A	OFD-121A-2.5 (F7)	TB	777'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	2CVA0271 U2 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-2.5 (K1)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0272 U2 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-2.5 (K4)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0273 U2 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-2.5 (K7)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0274	POL DEMIN ISOL VALVE	N/A	OFD-121A-2.5 (K9)	TB	N/A	Closed Either	NO	N/A	N/A	NONE

Notes:

- Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
- Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
- Evaluation type "S" indicates that a seismic evaluation was performed.
- Evaluation type "R" indicates that a relay evaluation was performed.
- Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
- Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
- Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
- The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 Condensate										
N/A	N/A	2CVA0275 U2 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-2.5 (K12)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
9	N/A	2CVA0391 U2 Condensate	HOTWELL SUPPLY ISOL TO TDFW	N/A	OFD-121A-2.8 (J11)	TB	775'	Closed Open	NO	N/A	N/A	S,R
N/A	N/A	2CVA0826 U2 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-2.5 (K3)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0829 U2 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-2.5 (K5)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0832 U2 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-2.5 (K8)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0835 U2 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-2.5 (K11)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
N/A	N/A	2CVA0838 U2 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-2.5 (K13)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
33	N/A	2D U2 Pressurizer Heaters	600V PPB 2D (FOR PRESSURIZER HEATERS GROUP 2D BANK 2)	N/A	O-1885-A	RB	818'	In Service In Service	YES	O-1703-E	2XJ-02A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
35	189	2DCA U2 125/250V DC PWR	125V DC 2DCA	N/A	O-1705	AB	796'	In Service In Service	YES	O-1703-G	2XS1-F04A	S,R
35	188	2DCB U2 125/250V DC PWR	125V DC 2DCB	N/A	O-1705	AB	796'	In Service In Service	YES	O-1703-G	2XS2-F04D	S,R
10	N/A	2DIA/INV U2 240/120V AC PWR	120V STATIC INV 2DIA	N/A	OEE-218-23-A	AB	796'	In Service In Service	YES	O-1705	2DIA-33	S,R
1	N/A	2DIA/PPB U2 125/250V DC PWR	125V DC PPB 2DIA	N/A	O-1705	AB	809'	In Service In Service	YES	O-1705	2ADA	S,R
10	N/A	2DIB/INV U2 240/120V AC PWR	120V STATIC INV 2DIB	N/A	OEE-218-23-A	AB	796'	In Service In Service	YES	O-1705	2DIB-33	S,R
1	N/A	2DIB/PPB U2 125/250V DC PWR	125V DC PPB 2DIB	N/A	O-1705	AB	809'	In Service In Service	YES	O-1705	2ADB	S,R
10	N/A	2DIC/INV U2 240/120V AC PWR	120V STATIC INV 2DIC	N/A	OEE-218-23-A	AB	796'	In Service In Service	YES	O-1705	2DID-33	S,R
1	N/A	2DIC/PPB U2 125/250V DC PWR	125V DC PPB 2DIC	N/A	O-1705	AB	809'	In Service In Service	YES	O-1705	2ADC	S,R
10	N/A	2DID/INV U2 240/120V AC PWR	120V STATIC INV 2DID	N/A	OEE-218-23-A	AB	796'	In Service In Service	YES	O-1705	2DID-33	S,R
1	N/A	2DID/PPB	125V DC PPB 2DID	N/A	O-1705	AB	809'	In Service	YES	O-1705	2ADD	S,R

Notes:

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- Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
- Evaluation type "S" indicates that a seismic evaluation was performed.
- Evaluation type "R" indicates that a relay evaluation was performed.
- Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
- Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
- Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
- The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
- All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 125/250V DC PWR						In Service				
1	N/A	2DL2/PPB U2 125/250V DC PWR	250V DC PPB 2DL2	N/A	O-931	AB	796'	In Service In Service	YES	O-1705-B	2DP-F03CL	S,R
35	25	2DP U2 125/250V DC PWR	125/250V DC 2DP	N/A	O-14	TB	796'	In Service In Service	YES	O-1703-D	2XO-F01A	S,R
59	63	2EB1-8,EF1-8 U2 Control Boards	ELECTRICAL BOARDS 2EB1-8,EF1-8	N/A	O-710	AB	822'	In Service In Service	N/A	N/A	N/A	S,R
RB	N/A	2EHC1 U2 Control Cabinet	EHC CAB 2EHC1	2EHC1,2,3	O-710-A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
10	64	2EHC1,2,3 U2 Control Cabinet	EHC CONTROL CABINET 2EHC1,2,3	N/A	N/A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
RB	N/A	2EHC2 U2 Control Cabinet	EHC CAB 2EHC2	2EHC1,2,3	O-710-A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
RB	N/A	2EHC3 U2 Control Cabinet	EHC CAB 2EHC3	2EHC1,2,3	O-710-A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
10	65	2EHTC1 U2 Control Cabinet	EHC TERM CAB 2EHTC1	N/A	O-710-A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
10	65	2EHTC2 U2 Control Cabinet	EHC TERM CAB 2EHTC2	N/A	O-710-A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
1	N/A	2EPSLP1	EPSL PANEL 2EPSLP1	N/A	N/A	AB	809'	In Service	N/A	N/A	N/A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

11/11/97

Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 Emergency Power Switching Logic						In Service				
1	66	2EPSLP2 U2 Emergency Power Switching Logic	EPSL PANEL 2EPSLP2	N/A	N/A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
58	67	2ESFAS U2 Control Cabinets	UNIT 2 ESFAS CABINETS	N/A	N/A	AB	822'	In Service In Service	N/A	N/A	N/A	S,R
RB	N/A	2ESTC1 U2 Control Cabinet	ESFAS ODD CH TERM CAB 2ESTC1	2ESTC1,2,3	O-710-A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
16	68	2ESTC1,2,3 U2 Control Cabinet	ESFAS CABINETS ESTC1,2,3	N/A	N/A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
RB	N/A	2ESTC2 U2 Control Cabinet	ESFAS EVEN CH TERM CAB 2ESTC2	2ESTC1,2,3	O-710-A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
10	N/A	2ESTC2A U2 Control Cabinet	ESFAS AUX RLY CAB 2ESTC2A	N/A	O-710-A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
RB	N/A	2ESTC3 U2 Control Cabinet	ESFAS EVEN/ODD TERM CAB 2ESTC3	2ESTC1,2,3	O-710-A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
N/A	N/A	2FDWFE0153 U2 Emergency Feedwater	2A EFW HEADER FLOW	N/A	OFD-121D-2.1 (K9)	AB	783'	Not Used In Service	NO	N/A	N/A	S*,R
N/A	N/A	2FDWFE0154 U2 Emergency Feedwater	2B EFW HEADER FLOW	N/A	OFD-121D-2.1 (D9)	AB	783'	Not Used In Service	NO	N/A	N/A	S*,R

Notes:

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- Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
- Evaluation type "S" indicates that a seismic evaluation was performed.
- Evaluation type "R" indicates that a relay evaluation was performed.
- Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
- Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
- Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
- The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
- All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
52	N/A	2FDWFT0129 U2 Emergency Feedwater	2A EFW HEADER FLOW	N/A	OFD-121D-2.1 (K9)	AB	775'	Not Used In Service	YES	O-1705	2KVIC-08	S,R
52	N/A	2FDWFT0130 U2 Emergency Feedwater	2B EFW HEADER FLOW	N/A	OFD-121D-2.1 (D9)	AB	775'	Not Used In Service	YES	O-705	1KVIC-09	S,R
52	N/A	2FDWFT0153 U2 Emergency Feedwater	2A EFW HEADER FLOW TRANSMITTER	N/A	OFD-121D-2.1 (K9)	AB	783'	Not Used In Service	YES	O-1705	2KVIB-08	S,R
52	N/A	2FDWFT0154 U2 Emergency Feedwater	2B EFW HEADER FLOW TRANSMITTER	N/A	OFD-121D-2.1 (D9)	AB	783'	Not Used In Service	YES	O-1705	2KVIB-08	S,R
RB	N/A	2FDWHX0004 U2 Feedwater	EFW PUMP 2A MOTOR COOLER	2FDWPU0004	OFD-124A-2.3(K3)	TB	775'	Not Used In Service	NO	N/A	N/A	S
RB	N/A	2FDWHX0005 U2 Feedwater	EFW PUMP 2B MOTOR COOLER	2FDWPU0005	OFD-124A-2.3(I3)	TB	775'	Not Used In Service	NO	N/A	N/A	S
10	N/A	2FDWLT0080 U2 Emergency Feedwater	SG 2A LEVEL TRANSMITTER	N/A	OFD-121B-2.3 (K12)	RB	777'	In Service In Service	YES	O-1705	2KVIA-08	S,R
10	N/A	2FDWLT0081 U2 Emergency Feedwater	SG 2B LEVEL TRANSMITTER	N/A	OFD-121B-2.3 (F12)	RB	777'	In Service In Service	YES	O-1705	2KVIB-13	S,R
10	N/A	2FDWLT0082	SG 2A LEVEL TRANSMITTER	N/A	OFD-121B-2.3 (K14)	RB	777'	In Service In Service	YES	O-1705	2KVIA-08	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

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Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 Emergency Feedwater										
10	N/A	2FDWLT0083 U2 Emergency Feedwater	SG 2B LEVEL TRANSMITTER	N/A	OFD-121B-2.3 (F14)	RB	777'	In Service In Service	YES	O-1705	2KVIB-13	S,R
1	N/A	2FDWPS0300 U2 Emergency Feedwater	2EFPT LOW HYDRAULIC OIL PRESS SWITCH	N/A	OEE-247-05	TB	775'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	2FDWPS0382 U2 Emergency Feedwater	FWP 2B CONTROL OIL PRESS SWITCH	N/A	OEE-217-54	TB	775'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	2FDWPS0383 U2 Emergency Feedwater	FWPT 2A CONTROL OIL PRESS SWITCH	N/A	OEE-217-55	TB	775'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	2FDWPS0384 U2 Emergency Feedwater	FWP 2A CONTROL OIL PRESS SWITCH	N/A	OEE-217-54	TB	775'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	2FDWPS0385 U2 Emergency Feedwater	FWP 2B CONTROL OIL PRESS SWITCH	N/A	OEE-217-55	TB	775'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	2FDWPS0386 U2 Emergency Feedwater	MDEFWP 2A DISCH PRESS SWITCH	N/A	OFD-121B-2.1	TB	775'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	2FDWPS0387 U2 Emergency Feedwater	MDEFWP 2A DISCH PRESS SWITCH	N/A	OFD-121B-2.1	TB	775'	In Service In Service	NO	N/A	N/A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
 Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
 Evaluation type "S" indicates that a seismic evaluation was performed.
 Evaluation type "R" indicates that a relay evaluation was performed.
 Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
 Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
 Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
 The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
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Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
1	N/A	2FDWPS0388 U2 Emergency Feedwater	FWPT 2B DISCH PRESS LOW	N/A	OFD-121B-2.1	TB	775'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	2FDWPS0389 U2 Emergency Feedwater	FWPT 2B DISCH PRESS LOW	N/A	OFD-121B-2.1	TB	775'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	2FDWPS1009 U2 Emergency Feedwater	MAIN FWP DISCH PRESS SWITCH (2MS-93)	N/A	OFD-121B-2.1	TB	775'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	2FDWPS1010 U2 Emergency Feedwater	MAIN FWP DISCH PRESS SWITCH (2MS-93)	N/A	OFD-121B-2.1	TB	775'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	2FDWPS1011 U2 Emergency Feedwater	FWP 2A DISCH HDR PRESS SWITCH	N/A	OEE-247-02	TB	775'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	2FDWPS1012 U2 Emergency Feedwater	MAIN FWP 2B DISCH HDR PRESS SWITCH	N/A	OEE-247-02	TB	775'	In Service In Service	NO	N/A	N/A	S,R
10	N/A	2FDWPU0003 U2 Emergency Feedwater	TDEFW PUMP	N/A	OFD-121D-2.1 (F3)	TB	775'	Off On	N/A	N/A	STEAM	S,R
10	N/A	2FDWPU0004 U2 Emergency Feedwater	MDEFW PUMP 2A	N/A	OFD-121D-2.1 (K3)	TB	775'	Off On	YES	0-1702	2TD-15	S,R
10	N/A	2FDWPU0005	MDEFW PUMP 2B	N/A	OFD-121D-2.1 (D3)	TB	775'	Off On	YES	0-1702	2TE-15	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 Emergency Feedwater										
RB	N/A	2FDWTR0003 U2 Emergency Feedwater	EFWP TURBINE	2FDWPU0003	OFD-122A-2.4 (G10)	TB	775'	Off Throttled	NO	N/A	N/A	S
1	N/A	2FDWVA0086 U2 Emergency Feedwater	PRESS REG TD PUMP SEALS	N/A	OFD-121D-2.1 (G3)	TB	775'	Closed Throttled	NO	N/A	N/A	S
1	N/A	2FDWVA0087 U2 Emergency Feedwater	PRESS REG TD PUMP SEALS	N/A	OFD-121D-2.1 (G3)	TB	775'	Closed Throttled	NO	N/A	N/A	S
1	N/A	2FDWVA0105 U2 Emergency Feedwater	SG 2A SAMPLE ISOLATION	N/A	OFD-110A-2.1 (F3)	RB	797'	Open/closed Closed	YES	O-1703-G	2XS1-R06D	S,R
1	N/A	2FDWVA0106 U2 Emergency Feedwater	SG 2A SAMPLE ISOLATION	N/A	OFD-110A-2.1 (F6)	AB	809'	Open/closed Closed	YES	O-1705	2DIB-25	S,R
15	N/A	2FDWVA0107 U2 Emergency Feedwater	SG 2B SAMPLE ISOLATION	N/A	OFD-110A-2.1 (D3)	RB	797'	Open/closed Closed	YES	O-1703-G	2XS1-R06E	S,R
1	N/A	2FDWVA0108 U2 Emergency Feedwater	SG 2B SAMPLE ISOLATION	N/A	OFD-110A-2.1 (D6)	AB	809'	Open/closed Closed	YES	O-1705	2DIB-25	S,R
1	N/A	2FDWVA0129 U2 Emergency Feedwater	PRESS REG TD PUMP SEALS	N/A	OFD-121D-2.1(G3)	TB	775'	Closed Throttled	NO	N/A	N/A	S

Notes:

- Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
- Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
- Evaluation type "S" indicates that a seismic evaluation was performed.
- Evaluation type "R" indicates that a relay evaluation was performed.
- Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
- Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
- Evaluation type "NSSF" indicates that the equipment is part of the NSSF system and does not require a seismic evaluation.
- The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
- All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
1	N/A	2FDWVA0218 U2 Emergency Feedwater	PRESS REG TD PUMP SEALS	N/A	OFD-121D-2.1 (G3)	TB	775'	Closed Throttled	NO	N/A	N/A	S
1	N/A	2FDWVA0315 U2 Emergency Feedwater	MDEFW PUMP 2A ISOLATION	N/A	OFD-121D-2.1 (K10)	AB	809'	Closed Throttled	YES	O-1705	2DIB-10	S,R
1	69	2FDWVA0316 U2 Emergency Feedwater	MDEFW PUMP 2B ISOLATION	N/A	OFD-121D-2.1 (D13)	AB	809'	Closed Throttled	YES	O-1705	2DIC-10	S,R
N/A	N/A	2FDWVA0347 U2 Emergency Feedwater	MDEFW PUMP 2B ISOLATION	N/A	OFD-121D-2.1 (D12)	AB	825'	Open Open	NO	N/A	N/A	R
N/A	N/A	2FDWVA0368 U2 Emergency Feedwater	TDEFW TO HEADER A	N/A	OFD-121D-2.1 (D6)	TB	775'	Open Open	NO	N/A	N/A	R
N/A	N/A	2FDWVA0369 U2 Emergency Feedwater	TDEFW TO HEADER B	N/A	OFD-121D-2.1 (D7)	TB	775'	Open Open	NO	N/A	N/A	R
N/A	N/A	2FDWVA0372 U2 Emergency Feedwater	MDEFW PUMP 2A ISOLATION	N/A	OFD-121D-2.1 (K7)	TB	775'	Open Open	NO	N/A	N/A	R
N/A	N/A	2FDWVA0374 U2 Emergency Feedwater	STARTUP HEADER ISOL	N/A	OFD-121D-2.1 (J7)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	2FDWVA0382	MDEFW PUMP 2B ISOLATION	N/A	OFD-121D-2.1 (D6)	TB	775'	Open Open	NO	N/A	N/A	R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 Emergency Feedwater										
N/A	N/A	2FDWVA0384 U2 Emergency Feedwater	STARTUP HEADER ISOL	N/A	OFD-121D-2.1 (D7)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	2FDWVA0549 U2 Emergency Feedwater	2A MDEFDWP RECIRC REGULATOR	N/A	OFD-121D-2.1 (J2)	TB	775'	Open Open	NO	N/A	N/A	S
N/A	N/A	2FDWVA0550 U2 Emergency Feedwater	2B MDEFDWP RECIRC REGULATOR	N/A	OFD-121D-2.1 (E1)	TB	775'	Open Open	NO	N/A	N/A	S
1	N/A	2HBP U2 Control Panel	UNIT 2 HEATER BLANKETING PANEL	N/A	O-710	TB	822'	In Service In Service	N/A	N/A	N/A	S,R
1	N/A	2HDPS0377 U2 Main Steam	1ST STAGE RH PRESS SWITCH	N/A	OEE-254-05	TB	822'	In service In service	YES	O-1703	2XA-AF02A	S,R
1	N/A	2HPIEP0002 U2 High Pressure Injection	RCP SEAL INJECTION FLOW	N/A	OFD-101A-2.4	AB	775'	In service In service	YES	O-1705-A	2KU-21	S,R
N/A	N/A	2HPIFE0007 U2 High Pressure Injection	HPI A TRAIN INJ FLOW ELEMENT	N/A	OFD-101A-2.3 (K12)	AB	N/A	Not Used In Service	NO	N/A	N/A	NONE
N/A	N/A	2HPIFE0008 U2 High Pressure Injection	HPI B TRAIN INJ FLOW ELEMENT	N/A	OFD-101A-2.3 (C12)	AB	N/A	Not Used In Service	NO	N/A	N/A	NONE
N/A	N/A	2HPIFE0075	RCP SEAL INJ FLOW	N/A	OFD-101A-2.4 (H6)	AB	N/A	In Service	NO	N/A	N/A	NONE

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 High Pressure Injection	ELEMENT					In Service				
N/A	N/A	2HPIFE0162 U2 High Pressure Injection	B LOOP INJ FLOW ELEMENT	N/A	OFD-101A-2.4 (E7)	AB	N/A	Not Used In Service	NO	N/A	N/A	NONE
21	34	2HPIFL000A U2 High Pressure Injection	RCP SEAL SUPPLY FILTER	N/A	OFD-101A-2.4 (F4)	AB	783'	In Service In Service	NO	N/A	N/A	S
21	34	2HPIFL000B U2 High Pressure Injection	RCP SEAL SUPPLY FILTER	N/A	OFD-101A-2.4 (H4)	AB	783'	In Service In Service	NO	N/A	N/A	S
1	N/A	2HPIFT0007A U2 High Pressure Injection	HPI A TRAIN INJ FLOW TRANSMITTER	N/A	OFD-101A-2.3 (K12)	AB	758'	Not Used In Service	YES	O-1705	2KVIA-08	S,R
1	N/A	2HPIFT0008A U2 High Pressure Injection	HPI B TRAIN INJ FLOW TRANSMITTER	N/A	OFD-101A-2.3 (C12)	AB	758'	Not Used In Service	YES	O-1705	2KVIB-13	S,R
21	N/A	2HPIFT0075 U2 High Pressure Injection	RCP SEAL INJ FLOW TRANSMITTER	N/A	OFD-101A-2.4 (H6)	AB	783'	In Service In Service	YES	O-1705-A	ICS POWER	S,R
1	N/A	2HPIFT0101 U2 High Pressure Injection	RC PUMP SEAL INLET FLOW XMTR (Powered by ICS)	N/A	OM-1201.H-097	AB	783'	In Service In Service	YES	O-1704	2KM-28	S,R
1	N/A	2HPIFT0102 U2 High Pressure Injection	RC PUMP SEAL INLET FLOW XMTR (Powered by ICS)	N/A	OM-1201.H-097	AB	783'	In Service In Service	YES	O-1704	2KM-28	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

11/11/97

Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
1	N/A	2HPIFT0103 U2 High Pressure Injection	RC PUMP SEAL INLET FLOW XMTR (Powered by ICS)	N/A	OM-1201.H-097	AB	783'	In Service In Service	YES	O-1704	2KM-28	S,R
1	N/A	2HPIFT0104 U2 High Pressure Injection	RC PUMP SEAL INLET FLOW XMTR (Powered by ICS)	N/A	OM-1201.H-097	AB	783'	In Service In Service	YES	O-1704	2KM-28	S,R
1	N/A	2HPIFT0160 U2 High Pressure Injection	B LOOP INJ FLOW TRANSMITTER	N/A	OFD-101A-2.4 (E8)	AB	809'	Not Used In Service	YES	O-1705	2KVIC-13	S,R
RB	N/A	2HPIHX0001 U2 High Pressure Injection	HPI PUMP 2A MOTOR COOLER	2HPIPU0001	OFD-124B-2.1(K11)	AB	758'	In Service In Service	NO	N/A	N/A	S
RB	N/A	2HPIHX0002 U2 High Pressure Injection	HPI PUMP 2B MOTOR COOLER	2HPIPU0002	OFD-124B-2.1(I11)	AB	758'	In Service In Service	NO	N/A	N/A	S
RB	N/A	2HPIHX0003 U2 High Pressure Injection	HPI PUMP 2C MOTOR COOLER	2HPIPU0003	OFD-124B-2.1(H11)	AB	758'	Not Used In Service	NO	N/A	N/A	S
10	N/A	2HPIHX000A U2 High Pressure Injection	LETDOWN COOLER 2A	N/A	OFD-101A-2.1 (L4)	RB	777'	In Service Not Used	NO	N/A	N/A	S
10	N/A	2HPIHX000B U2 High Pressure Injection	LETDOWN COOLER 2B	N/A	OFD-101A-2.1 (J4)	RB	777'	Not Used Not Used	NO	N/A	N/A	S
52	N/A	2HPILT0033P1	LDST Level #1	N/A	OFD-101A-2.2 (C5)	AB	771'	In Service In Service	YES	O-1705-A	2KI-01	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

11/11/97

Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 High Pressure Injection										
52	N/A	2HPILT0033P2 U2 High Pressure Injection	LDST Level #2	N/A	OFD-101A-2.2 (C5)	AB	771'	In Service In Service	YES	O-1705-A	2KI-01	S
52	N/A	2HPIPS0357 U2 High Pressure Injection	LETDOWN FLOW TEMP HIGH INTERLOCK	N/A	OEE-251-03	AB	783'	In Service In Service	YES	O-1705	2DIB-25	S,R
10	N/A	2HPIPU0001 U2 High Pressure Injection	HPI PUMP 2A	N/A	OFD-101A-2.3 (J8)	AB	758'	On/Off On	YES	O-1702	2TC-08	S,R
10	N/A	2HPIPU0002 U2 High Pressure Injection	HPI PUMP 2B	N/A	OFD-101A-2.3 (G8)	AB	758'	On/Off On	YES	O-1702	2TE-09	S,R
10	N/A	2HPIPU0003 U2 High Pressure Injection	HPI PUMP 2C	N/A	OFD-101A-2.3 (D8)	AB	758'	Off On	YES	O-1702	2TD-02	S,R
10	35	2HPITK0001 U2 High Pressure Injection	LET DOWN STORAGE TANK	N/A	OFD-101A-2.2 (D6)	AB	771'	In Service In Service	NO	N/A	N/A	S
N/A	N/A	2HPSVA0184 U2 High Pressure Service Water	TDEFWP OIL COOLER ISOL VALVE	N/A	OFD-124C-2.2(H4)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
9	70	2HPVA0001 U2 High Pressure Injection	LETDOWN INLET ISOLATION	N/A	OFD-101A-2.1 (L2)	RB	777'	Open/Closed Either	NO	N/A	N/A	NONE

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

11/11/97

Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
9	70	2HPVA0002 U2 High Pressure Injection	LETDOWN INLET ISOLATION	N/A	OFD-101A-2.1 (J2)	RB	777'	Open/Closed Either	NO	N/A	N/A	NONE
9	N/A	2HPVA0003 U2 High Pressure Injection	LETDOWN ISOLATION	N/A	OFD-101A-2.1 (K5)	RB	777'	Open/Closed Closed	YES	O-703-K	2XSF-F01C	S,R
9	N/A	2HPVA0004 U2 High Pressure Injection	LETDOWN ISOLATION	N/A	OFD-101A-2.1 (J5)	RB	777'	Open/Closed Closed	YES	O-703-K	2XSF-F01D	S,R
52	N/A	2HPVA0005 U2 High Pressure Injection	LETDOWN ISOLATION	N/A	OFD-101A-2.1 (K8)	AB	809'	Open Closed	YES	O-1705	2DIB-25	S,R
10	N/A	2HPVA0020 U2 High Pressure Injection	RCP SEAL RETURN ISOLATION	N/A	OFD-101A-2.1 (E5)	RB	797'	Open Closed	YES	O-703-K	2XSF-F02C	S,R
1	N/A	2HPVA0021 U2 High Pressure Injection	RCP SEAL RETURN ISOLATION	N/A	OFD-101A-2.1 (D8)	RB	809'	Open Closed	YES	O-1705	2DIB-25	S,R
N/A	N/A	2HPVA0022 U2 High Pressure Injection	LDST DRAIN	N/A	OFD-101A-2.2 (C11)	AB	783'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	2HPVA0023 U2 High Pressure Injection	HPI LDST SUCTION ISOLATION	N/A	OFD-101A-2.2 (D13)	AB	783'	Open Open	NO	N/A	N/A	R
1	N/A	2HPVA0024	BWST SUCTION ISOLATION	N/A	OFD-101A-2.3 (I2)	AB	771'	Closed Open	YES	O-1703-G	2XS1-R01D	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 High Pressure Injection										
1	N/A	2HPVA0025 U2 High Pressure Injection	BWST SUCTION ISOLATION	N/A	OFD-101A-2.3 (F2)	AB	771'	Closed Open	YES	O-1703-G	2XS2-R01A	S,R
1	N/A	2HPVA0026 U2 High Pressure Injection	HPI TRAIN 2A INJECTION	N/A	OFD-101A-2.4 (J7)	AB	809'	Closed Open	YES	O-1703-G	2XS1-R02A	S,R
1	N/A	2HPVA0027 U2 High Pressure Injection	HPI TRAIN 2B (EMERGENCY) INJECTION	N/A	OFD-101A-2.4 (D7)	AB	809'	Open Open	YES	O-1703-G	2XS2-R01B	S,R
1	N/A	2HPVA0031 U2 High Pressure Injection	RCP SEAL INJ FLOW CONTROL	N/A	OFD-101A-2.4 (F6)	AB	796'	Open/Closed Open/Closed	YES	O-1704	2KM-28	S,R
N/A	N/A	2HPVA0098 U2 High Pressure Injection	HPI SUCTION CROSSOVER	N/A	OFD-101A-2.3 (I3)	AB	758'	Open Open	NO	N/A	N/A	R
N/A	N/A	2HPVA0115 U2 High Pressure Injection	HPI DISCH HEADER SEPARATION	N/A	OFD-101A-2.3 (H11)	AB	758'	Open Open	NO	N/A	N/A	R
N/A	N/A	2HPVA0226 U2 High Pressure Injection	RCP SEAL RETURN ISOL VALVE	N/A	OFD-101A-2.1 (D2)	RB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2HPVA0228 U2 High Pressure Injection	RCP SEAL RETURN ISOL VALVE	N/A	OFD-101A-2.1 (E2)	RB	N/A	Open Either	NO	N/A	N/A	NONE

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
Evaluation type "S" indicates that a seismic evaluation was performed.
Evaluation type "R" indicates that a relay evaluation was performed.
Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
N/A	N/A	2HPVA0230 U2 High Pressure Injection	RCP SEAL RETURN ISOL VALVE	N/A	OFD-101A-2.1 (H2)	RB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2HPVA0232 U2 High Pressure Injection	RCP SEAL RETURN ISOL VALVE	N/A	OFD-101A-2.1 (G2)	RB	N/A	Open Either	NO	N/A	N/A	NONE
1	N/A	2HPVA0355 U2 High Pressure Injection	HPI AUX SPRAY THROTTLE	N/A	OFD-101A-2.4 (L6)	AB	809'	Open/Closed Open/Closed	YES	O-1705	2KVIC-07	S,R
N/A	N/A	2HPVA0405 U2 High Pressure Injection	ALT LETDOWN BOUNDARY	N/A	OFD-101A-2.5 (H10)	RB	777'	Closed Closed	NO	N/A	N/A	R
1	N/A	2HPVA0409 U2 High Pressure Injection	HPI CROSSOVER ISOLATION	N/A	OFD-101A-2.4 (E7)	AB	809'	Closed Open/Closed	YES	O-1703-G	2XS3-02D	S,R
1	N/A	2HPVA0410 U2 High Pressure Injection	HPI CROSSOVER ISOLATION	N/A	OFD-101A-2.4 (F7)	AB	809'	Closed Open/Closed	YES	O-1703-G	2XS3-02D	S,R
N/A	N/A	2HPVA0417 U2 High Pressure Injection	ALT LETDOWN BOUNDARY	N/A	OFD-101A-2.5 (I8)	RB	777'	Closed Closed	NO	N/A	N/A	R
10	N/A	2HPVA0426 U2 High Pressure Injection	ALT LETDOWN PATH ISOLATION	N/A	OFD-101A-2.5 (K9)	RB	777'	Closed Open/Closed	YES	O-703-K	2XSF-F04B	S,R
10	36	2HPVA0428	ALT LETDOWN PATH ISOLATION	N/A	OFD-101A-2.5 (J13)	RB	777'	Closed Open	YES	O-703-K	2XSF-1-F02B	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSF" indicates that the equipment is part of the NSSF system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 High Pressure Injection										
1	N/A	2ICCM U2 Core Exit TC	UNIT 2 ICCM TRAIN A CABINET	N/A	O-1710	AB	822'	In Service In Service	YES	N/A	N/A	S,R
1	N/A	2ICCM B U2 Reactor Coolant	UNIT 2 ICCM TRAIN B CABINET	N/A	O-1710	AB	822'	In Service In Service	YES	N/A	N/A	S,R
RB	N/A	2ICSCABS U2 Control Cabinets	INTEGRATED CONTROL SYSTEM CABINETS	2ICS CABS	O-710	AB	822'	In Service In Service	YES	N/A	N/A	S,R
52	N/A	2KA U2 Condensate	120V PPB 2KA	N/A	ELEMENTARY NOT	TB	775'	In Service Not Used	YES	O-1703	2XF-06AB	S,R
1	N/A	2KB U2 208V PWR (PPB)	120V PPB 2KB	N/A	O-1704	TB	796'	In Service In Service	YES	O-1703-B	2XGB-F01C	S,R
1	N/A	2KB/XFMR U2 208V PWR (PPB)	XFMR 2KB (600:208:120V)	N/A	O-1704	TB	796'	In Service In Service	YES	O-1703-B	2XGB-F01C	S
52	71	2KC U2 208V PWR (PPB)	120V PPB 2KC	N/A	O-1704	TB	796'	In Service In Service	YES	O-1703-E	2XP-R04AT	S,R
9	71	2KD U2 208V PWR (PPB)	120V PPB 2KD	N/A	O-1704	AB	809'	In Service In Service	YES	O-1703-E	2XP-R04AT	S,R
1	72	2KESP U2 Control Panel	KEOWEE EM START PANEL	N/A	O-710-A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
1	N/A	2KI	120V PPB 2KI	N/A	O-1705-A	AB	809'	In Service	YES	O-1705-A	INV 2KI	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 240/120V AC PWR						In Service				
10	N/A	2KI/INV U2 240/120V AC PWR	STATIC INVERTER 2KI (INCLUDES STATIC XFER SWITCH)	N/A	O-154-A-001	AB	796'	In Service In Service	YES	O-1705-A	2ADF	S,R
1	N/A	2KI/SW/BP U2 240/120V AC PWR	STATIC SWITCH AND INVERTER BYPASS SWITCH 2KI	N/A	O-1705-A	AB	796'	In Service In Service	YES	O-1705-A	INV 2KI	S,R
1	N/A	2KI/SW/T U2 240/120V AC PWR	TRANSFER SWITCH 2KI	N/A	O-1705-A	AB	796'	In Service In Service	YES	O-1705-A	INV 2KI	S,R
1	N/A	2KI/XFMR U2 240/120V AC PWR	ISOLATION XFMR SHIELDED 2KI	N/A	O-1705-A	AB	796'	In Service In Service	YES	O-1705-A	INV 2KI	S
1	N/A	2KM U2 208V PWR (PPB)	120V PPB 2KM	N/A	O-305-A	AB	809'	In Service In Service	YES	O-1705-E	2XP-R04E	S,R
35	N/A	2KRA U2 240/120V AC PWR	120V PPB 2KRA	N/A	O-1705-A	AB	809'	In Service In Service	YES	O-1705-A	2A	S,R
1	N/A	2KRB U2 240/120V AC PWR	120V PPB 2KRB	N/A	O-1705-A	AB	809'	In Service In Service	YES	O-1705-A	2A	S,R
1	N/A	2KU U2 240/120V AC PWR	120V PPB 2KU	N/A	O-1705-A	AB	809'	In Service In Service	YES	O-1705-A	INV 2KU	S,R
10	N/A	2KU/INV U2 240/120V AC PWR	STATIC INVERTER 2KU (INCLUDES STATIC XFER SWITCH)	N/A	O-1705-A	AB	796'	In Service In Service	YES	O-1705-A	2ADE	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

11/11/97

Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
1	N/A	2KU/SW/BP U2 240/120V AC PWR	STATIC SWITCH AND INVERTER BYPASS SWITCH 2KU	N/A	O-1705-A	AB	796'	In Service In Service	YES	O-1705-A	INV 2KU	S,R
1	N/A	2KU/SW/T U2 240/120V AC PWR	TRANSFER SWITCH 2KU	N/A	O-1705-A	AB	796'	In Service In Service	YES	O-1705-A	INV 2KU	S,R
1	N/A	2KU/XFMR U2 240/120V AC PWR	ISOLATION XFMR SHIELDED 2KU	N/A	O-1705-A	AB	796'	In Service In Service	YES	O-1705-A	INV 2KU	S
1	N/A	2KVIA U2 240/120V AC PWR	120V PPB 2KVIA	N/A	O-1705	AB	809'	In Service In Service	YES	O-1705	INV 2DIA	S,R
1	N/A	2KVIB U2 240/120V AC PWR	120V PPB 2KVIB	N/A	O-1705	AB	809'	In Service In Service	YES	O-1705	INV 2DIB	S,R
1	N/A	2KVIC U2 240/120V AC PWR	120V PPB 2KVIC	N/A	O-1705	AB	809'	In Service In Service	YES	O-1705	INV 2DIC	S,R
1	N/A	2KVID U2 240/120V AC PWR	120V PPB 2KVID	N/A	O-1705	AB	809'	In Service In Service	YES	O-1705	INV 2DID	S,R
1	N/A	2KX U2 240/120V AC PWR	120V PPB 2KX	N/A	O-1705-A	AB	809'	In Service In Service	YES	O-1705-A	INV 2KX	S,R
10	N/A	2KX/INV U2 240/120V AC PWR	STATIC INVERTER 2KX (INCLUDES STATIC XFER SWITCH)	N/A	O-1705	AB	796'	In Service In Service	YES	O-1705-A	2ADG	S,R
1	N/A	2KX/SW/BP U2 240/120V AC PWR	STATIC SWITCH AND INVERTER BYPASS SWITCH 2KX	N/A	O-1705-A	AB	796'	In Service In Service	YES	O-1705-A	INV 2KX	S,R

Notes:

- Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
- Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
- Evaluation type "S" indicates that a seismic evaluation was performed.
- Evaluation type "R" indicates that a relay evaluation was performed.
- Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
- Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
- Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
- The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
- All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
1	N/A	2KX/SW/T U2 240/120V AC PWR	TRANSFER SWITCH 2KX	N/A	O-917	AB	796'	In Service In Service	YES	O-1705-A	INV 2KX	S,R
1	39	2L21/PPB U2 Emergency Lighting	125V DC PPB 2L21	N/A	O-931	AB	822'	In Service In Service	YES	O-1705-B	2DL2-06	S,R
N/A	N/A	2LPIFE0004 U2 Low Pressure Injection	LPI TRAIN 2B INJ FLOW ELEMENT	N/A	OFD-102A-2.2 (F12)	AB	N/A	Not Used In Service	NO	N/A	N/A	NONE
N/A	N/A	2LPIFE0005 U2 Low Pressure Injection	LPI TRAIN 2A INJ FLOW ELEMENT	N/A	OFD-102A-2.2 (K12)	AB	N/A	Not Used In Service	NO	N/A	N/A	NONE
1	N/A	2LPIFT0004P U2 Low Pressure Injection	LPI TRAIN 2B INJ FLOW TRANS (Powered by ICCM)	N/A	OFD-102A-2.2 (G12)	AB	809'	Not Used In Service	YES	O-1705	2KVIB-13	S,R
1	N/A	2LPIFT0005P U2 Low Pressure Injection	LPI TRAIN 2A INJ FLOW TRANS (Powered by ICCM)	N/A	OFD-102A-2.2 (J12)	AB	809'	Not Used In Service	YES	O-1705	2KVIB-08	S,R
10	N/A	2LPIHX000A U2 Low Pressure Injection	LPI COOLER 2A	N/A	OFD-102A-2.2 (K10)	AB	771'	Not Used In Service	NO	N/A	N/A	S
10	N/A	2LPIHX000B U2 Low Pressure Injection	LPI COOLER 2B	N/A	OFD-102A-2.2 (E10)	AB	771'	Not Used In Service	NO	N/A	N/A	S
10	N/A	2LPIPU0001 U2 Low Pressure Injection	2LPI PUMP A	N/A	OFD-102A-2.2 (K4)	AB	758'	Off On	YES	O-1702	2TC-09	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSF" indicates that the equipment is part of the NSSF system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
10	N/A	2LPIPU0002 U2 Low Pressure Injection	LPI PUMP 2B	N/A	OFD-102A-2.2 (H4)	AB	758'	Off On	YES	O-1702	2TC-10	S,R
10	N/A	2LPIPU0003 U2 Low Pressure Injection	2LPI PUMP C	N/A	OFD-102A-2.2 (E4)	AB	758'	Off On	YES	O-1702	2TE-10	S,R
1	N/A	2LPITE0209 U2 Low Pressure Injection	LPI COOLER 2B OUTLET TEMP (ICS Input)	N/A	OFD-102A-2.2 (F11)	AB	809'	Not Used In Service	YES	O-1705-A	2KI-25	S,R
1	N/A	2LPITE0210 U2 Low Pressure Injection	LPI COOLER 2A OUTLET TEMP (ICS Input)	N/A	OFD-102A-2.2 (L10)	AB	809'	Not Used In Service	YES	O-1705-A	2KI-25	S,R
18	N/A	2LPITK0001 U2 Low Pressure Injection	BWST	N/A	OFD-102A-2.1 (I10)	YD	796'	In Service In Service	NO	N/A	N/A	S
1	N/A	2LPSEP0022 U2 Low Pressure Service Water	DECAY HEAT COOLER E/P CONVERTER (2LPSW-251)	N/A	OFD-124B-2.1	TB	775'	In Service In Service	YES	O-1705	2KVIB-14	S,R
1	N/A	2LPSEP0023 U2 Low Pressure Service Water	DECAY HEAT COOLER E/P CONVERTER (2LPSW-252)	N/A	OFD-124B-2.1	TB	775'	In Service In Service	YES	O-1705	2KVIC-14	S,R
N/A	N/A	2LPSFL0001 U2 Low Pressure Service Water	NORMAL SUPPLY FILTER TO HPI PUMP	N/A	OFD-124B-2.1 (L4)	AB	783'	In Service In Service	NO	N/A	N/A	S*

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

11/11/97

Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
N/A	N/A	2LPSFL0002 U2 Low Pressure Service Water	EM SUPPLY FILTER TO HPI PUMP	N/A	OFD-124B-2.1 (F8)	AB	783'	In Service In Service	NO	N/A	N/A	S*
1	N/A	2LPSFT0124 U2 Low Pressure Service Water	LPI COOLER 2A FLOW XMTR (2LPSW-251)	N/A	OFD-124B-2.1	AB	771'	In Service In Service	YES	O-1705	2KVIB-14	S,R
1	N/A	2LPSFT0125 U2 Low Pressure Service Water	LPI COOLER 2B FLOW XMTR (2LPSW-252)	N/A	OFD-124B-2.1	AB	771'	In Service In Service	YES	O-1705	2KVIC-14	S,R
1	N/A	2LPSVA0004 U2 Low Pressure Service Water	LPI COOLER 2A ISOLATION VALVE	N/A	OFD-124B-2.1 (K6)	AB	783'	Closed Open	YES	O-1703-G	2XS1-R03D	S,R
10	N/A	2LPSVA0005 U2 Low Pressure Service Water	LPI COOLER 2B ISOLATION VALVE	N/A	OFD-124B-2.1 (H6)	AB	783'	Closed Open	YES	O-1703-G	2XS2-R02C	S,R
N/A	N/A	2LPSVA0006 U2 Low Pressure Service Water	SUPPLY ISOL TO RC PUMP COOLERS	N/A	OFD-124B-2.4 (L2)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2LPSVA0007 U2 Low Pressure Service Water	RCP COOLER ISOLATION VALVE	N/A	OFD-124B-2.4 (K7)	RB	N/A	Open Either	NO	N/A	N/A	NONE

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

11/11/97

Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
N/A	N/A	2LPSVA0008 U2 Low Pressure Service Water	RCP COOLER ISOLATION VALVE	N/A	OFD-124B-2.4 (G8)	RB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2LPSVA0009 U2 Low Pressure Service Water	RCP COOLER ISOLATION VALVE	N/A	OFD-124B-2.4 (F7)	RB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2LPSVA0010 U2 Low Pressure Service Water	RCP COOLER ISOLATION VALVE	N/A	OFD-124B-2.4 (B8)	RB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2LPSVA0011 U2 Low Pressure Service Water	RCP COOLER ISOLATION VALVE	N/A	OFD-124B-2.4 (G9)	RB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2LPSVA0012 U2 Low Pressure Service Water	RCP COOLER ISOLATION VALVE	N/A	OFD-124B-2.4 (C9)	RB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2LPSVA0013 U2 Low Pressure Service Water	RCP COOLER ISOLATION VALVE	N/A	OFD-124B-2.4 (L8)	RB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2LPSVA0014 U2 Low Pressure Service Water	RCP COOLER ISOLATION VALVE	N/A	OFD-124B-2.4 (G11)	RB	N/A	Open Either	NO	N/A	N/A	NONE

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
 Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
 Evaluation type "S" indicates that a seismic evaluation was performed.
 Evaluation type "R" indicates that a relay evaluation was performed.
 Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
 Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
 Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
 The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
 All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

11/11/97

Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
N/A	N/A	2LPSVA0015 U2 Low Pressure Service Water	RETURN ISOL FROM RC PUMP COOLERS	N/A	OFD-124B-2.4 (G14)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2LPSVA0016 U2 Low Pressure Service Water	RBCU 2A SUPPLY VALVE	N/A	OFD-124B-2.2(K3)	AB	835'	Open Open	NO	N/A	N/A	R
1	N/A	2LPSVA0018 U2 Low Pressure Service Water	RBCU 2A RETURN VALVE	N/A	OFD-124B-2.2(D3)	AB	809'	Thrtld Open	YES	O-1703-G	2XS1-R03E	S,R
N/A	N/A	2LPSVA0019 U2 Low Pressure Service Water	RBCU 2B SUPPLY VALVE	N/A	OFD-124B-2.2(K8)	AB	809'	Open Open	NO	N/A	N/A	R
1	N/A	2LPSVA0021 U2 Low Pressure Service Water	RBCU 2B RETURN VALVE	N/A	OFD-124B-22(D8)	AB	809'	Thrtld Open	YES	O-1703-G	2XS3-05B	S,R
N/A	N/A	2LPSVA0022 U2 Low Pressure Service Water	RBCU 2C SUPPLY VALVE	N/A	OFD-124B-2.2(K12)	AB	809'	Open Open	NO	N/A	N/A	R
1	N/A	2LPSVA0024 U2 Low Pressure Service Water	RBCU 2C RETURN VALVE	N/A	OFD-124B-2.2(D12)	AB	809'	Thrtld Open	YES	O-1703-G	2XS2-R02D	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
 Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
 Evaluation type "S" indicates that a seismic evaluation was performed.
 Evaluation type "R" indicates that a relay evaluation was performed.
 Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
9	N/A	2LPSVA0137 U2 Low Pressure Service Water	TDEFW ISOLATION VALVE	N/A	OFD-124A-2.3(K11)	TB	775'	Closed Open	YES	O-1703	2XA-A-R05C	S,R
N/A	N/A	2LPSVA0138 U2 Low Pressure Service Water	TDEFW ISOLATION VALVE	N/A	OFD-124A-2.3(L11)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
9	N/A	2LPSVA0251 U2 Low Pressure Service Water	LPI COOLER 2A CONTROL VALVE	N/A	OFD-124B-2.1(K8)	TB	775'	Closed Open	YES	O-1705	2KVIA-14	S,R
9	N/A	2LPSVA0252 U2 Low Pressure Service Water	LPI COOLER 2B CONTROL VALVE	N/A	OFD-124B-2.1(H7)	TB	775'	Closed Open	YES	O-1705	2KVIC-14	S,R
9	N/A	2LPSVA0516 U2 Emergency Feedwater	EFW PUMP 2A LPSW ISOLATION VALVE	N/A	OFD-124A-2.3(K5)	TB	775'	Closed Open	YES	O-1705	2DIB-32	S,R
9	N/A	2LPSVA0525 U2 Emergency Feedwater	EFW PUMP 2B LPSW ISOLATION VALVE	N/A	OFD-124A-2.3(I5)	TB	775'	Closed Open	YES	O-1705	2DIC-28	S,R
15	N/A	2LPSVA0565 U2 Low Pressure Service Water	RB AUX COOLERS SUPPLY VALVE	N/A	OFD-124B-2.2(J8)	RB	825'	Open Closed	YES	O-1703-G	2XS3-03CT	S,R
9	N/A	2LPSVA0566	RBCU 3B INLET VALVE	N/A	OFD-124B-2.2(J8)	RB	797'	Closed	YES	O-1703-G	2XS3-03CB	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

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Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

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Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 Low Pressure Service Water						Open				
N/A	N/A	2LPSPA0772 U2 Low Pressure Service Water	RBCU TO RIA ISOL VALVE	N/A	OFD-124A-2.2 (D4)	AB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2LPSPA0773 U2 Low Pressure Service Water	RBCU TO RIA ISOL VALVE	N/A	OFD-124A-2.2 (D8)	AB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	2LPSPA0774 U2 Low Pressure Service Water	RBCU TO RIA ISOL VALVE	N/A	OFD-124A-2.2 (D13)	AB	N/A	Open Either	NO	N/A	N/A	NONE
10	N/A	2LPVA0001 U2 Low Pressure Injection	LPI DROPLINE ISOL FROM RCS	N/A	OFD-102A-2.1 (H2)	RB	797'	Closed Open	YES	O-1703-G	2XS1-F04D	S,R
10	N/A	2LPVA0002 U2 Low Pressure Injection	LPI DROPLINE ISOL FROM RCS	N/A	OFD-102A-2.1 (H2)	RB	797'	Closed Open	YES	O-1703-G	2XS1-F05C	S,R
1	N/A	2LPVA0003 U2 Low Pressure Injection	LPI HOT LEG SUCTION	N/A	OFD-102A-2.1 (H6)	AB	758'	Closed Open	YES	O-1703-G	2XS1-R01B	S,R
N/A	N/A	2LPVA0005 U2 Low Pressure Injection	LPI PUMP 2A SUCTION	N/A	OFD-102A-2.1 (F10)	AB	758'	Open Open	NO	N/A	N/A	R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

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The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

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Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
1	N/A	2LPVA0006 U2 Low Pressure Injection	LPI SUCTION CROSSOVER	N/A	OFD-102A-2.1 (E8)	AB	758'	Closed Open	YES	O-1703-D	2XL-03C	S,R
1	N/A	2LPVA0007 U2 Low Pressure Injection	LPI SUCTION CROSSOVER	N/A	OFD-102A-2.1 (D8)	AB	758'	Closed Open	YES	O-1703-D	2XL-05E	S,R
N/A	N/A	2LPVA0008 U2 Low Pressure Injection	LPI PUMP 2B SUCTION	N/A	OFD-102A-2.1 (C8)	AB	758'	Open Open	NO	N/A	N/A	R
N/A	N/A	2LPVA0009 U2 Low Pressure Injection	LPI CROSSOVER	N/A	OFD-102A-2.2 (I8)	AB	758'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	2LPVA0010 U2 Low Pressure Injection	LPI CROSSOVER	N/A	OFD-102A-2.2 (H8)	AB	758'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	2LPVA0011 U2 Low Pressure Injection	LPI COOLER 2A ISOLATION	N/A	OFD-102A-2.2 (K8)	AB	771'	Open Open	NO	N/A	N/A	R
10	N/A	2LPVA0012 U2 Low Pressure Injection	LPI COOLER 2A ISOLATION	N/A	OFD-102A-2.2 (K11)	AB	771'	Open Throttled	YES	O-1703-G	2XS1-R01A	S,R
N/A	N/A	2LPVA0013 U2 Low Pressure Injection	LPI COOLER 2B ISOLATION	N/A	OFD-102A-2.2 (E8)	AB	771'	Open Open	NO	N/A	N/A	R
10	N/A	2LPVA0014	LPI COOLER 2B ISOLATION	N/A	OFD-102A-2.2 (E11)	AB	771'	Open Throttled	YES	O-1703-G	2XS2-R02A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
 Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
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 Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
 Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
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 The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 Low Pressure Injection										
10	N/A	2LPVA0015 U2 Low Pressure Injection	LPI TO HPI/RBS PIGGYBACK 2A	N/A	OFD-102A-2.2 (K11)	AB	771'	Closed Open/Closed	YES	O-1703-D	2XL-04C	S,R
10	N/A	2LPVA0016 U2 Low Pressure Injection	LPI TO HPI/RBS PIGGYBACK 2B	N/A	OFD-102A-2.2 (E11)	AB	771'	Closed Open/Closed	YES	O-1703-E	2XN-04A	S,R
1	N/A	2LPVA0017 U2 Low Pressure Injection	LPI TRAIN 2A INJECTION ISOL	N/A	OFD-102A-2.2 (K12)	AB	822'	Closed Open	YES	O-1703-G	2XS1-F04E	S,R
1	N/A	2LPVA0018 U2 Low Pressure Injection	LPI TRAIN 2B INJECTION ISOL	N/A	OFD-102A-2.2 (E13)	AB	809'	Closed Open	YES	O-1703-G	2XS2-F04E	S,R
1	N/A	2LPVA0019 U2 Low Pressure Injection	RB EM SUMP SUCTION	N/A	OFD-102A-2.1 (D5)	AB	758'	Closed Open	YES	O-1703-G	2XS1-R02C	S,R
1	N/A	2LPVA0020 U2 Low Pressure Injection	RB EM SUMP SUCTION	N/A	OFD-102A-2.1 (D5)	AB	758'	Closed Open	YES	O-1703-G	2XS2-R04C	S,R
52	N/A	2LPVA0021 U2 Low Pressure Injection	BWST SUCTION ISOLATION	N/A	OFD-102A-2.1 (E7)	AB	771'	Open Closed	YES	O-1703-G	2XS1-R03C	S,R
52	N/A	2LPVA0022 U2 Low Pressure Injection	BWST SUCTION ISOLATION	N/A	OFD-102A-2.1 (C7)	AB	771'	Open Closed	YES	O-1703-G	2XS2-R01C	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
52	N/A	2LPVA0061 U2 Low Pressure Injection	BWST VACUUM BREAKER	N/A	OFD-102A-2.1 (J10)	YD	796'	Closed Open	NO	N/A	N/A	S
1	N/A	2LPVA0069 U2 Low Pressure Injection	LPI SWITCHOVER FLOW CTRL	N/A	OFD-102A-2.2 (H8)	AB	758'	Closed Open/Closed	YES	O-1703-E	2XN-03D	S,R
N/A	N/A	2LPVA0103 U2 Low Pressure Injection	BORON DILUTION ISOLATION	N/A	OFD-102A-2.1 (G2)	RB	797'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	2LPVA0104 U2 Low Pressure Injection	BORON DILUTION ISOLATION	N/A	OFD-102A-2.1 (G2)	RB	797'	Closed Closed	NO	N/A	N/A	R
1	N/A	2LPVA0126 U2 Low Pressure Injection	LPI POST ACC SAMPLE ISOL	N/A	OFD-110A-2.4 (I5)	AB	758'	Closed Open/Closed	YES	O-839	1L2-37	S,R
1	73	2MC-1 U2 Condensate DC Interlocks	INSTRUMENT RACK 2MC-1	N/A	O-1422A-1	TB	775'	In Service In Service	NO	N/A	N/A	S,R
1	74	2MC-12 U2 Main Steam	INSTRUMENT RACK 2MC-12	N/A	O-1422A-3	TB	796'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	2MC-16 U2 Main Steam	INSTRUMENT RACK 2MC-16	N/A	O-1422A-3	TB	796'	In Service In Service	NO	N/A	N/A	S,R
9	N/A	2MC-2 U2 Condensate DC Interlocks	INSTRUMENT RACK 2MC-2	N/A	O-1422A-1	TB	775'	In Service In Service	NO	N/A	N/A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

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Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
1	N/A	2MC-F40 U2 Main Steam	INSTRUMENT RACK 2MC-F40	N/A	O-1422A-3	TB	796'	In Service In Service	NO	N/A	N/A	S,R
1	75	2MFBMRP U2 Main Feeder Bus Monitor	MAIN FDR BUS MONITOR RLY PANEL	N/A	O-710-A	AB	809'	In Service In Service	YES	O-1705	2DIA-05/2DI	S,R
1	N/A	2MSPS0086 U2 Main Steam	MAIN STEAM PRESS SWITCH (MS-19)	N/A	OEE-245-56	TB	796'	In Service In Service	YES	O-1705-A	2KI-01	S,R
1	N/A	2MSPS0087 U2 Main Steam	MAIN STEAM PRESS SWITCH (MS-22)	N/A	OEE-245-56	TB	796'	In Service In Service	YES	O-1705-A	2KI-01	S,R
1	N/A	2MSPS0088 U2 Main Steam	MAIN STEAM PRESS SWITCH (MS-28)	N/A	OEE-245-56	TB	796'	In Service In Service	YES	O-1705-A	2KI-01	S,R
1	N/A	2MSPS0089 U2 Main Steam	MAIN STEAM PRESS SWITCH (MS-31)	N/A	OEE-245-56	TB	796'	In Service In Service	YES	O-1705-A	2KI-01	S,R
10	N/A	2MSPT0024P U2 Main Steam	SG 2A PRESSURE	N/A	OFD-122A-2.1 (J2)	RB	825'	In Service In Service	YES	O-1705-A	2KI-05	S,R
10	N/A	2MSPT0025P U2 Main Steam	SG 2A PRESSURE	N/A	OFD-122A-2.1 (J2)	RB	825'	In Service In Service	YES	O-1705-A	2KI-05	S,R
10	N/A	2MSPT0026P	SG 2B PRESSURE	N/A	OFD-122A-2.1 (D2)	RB	825'	In Service In Service	YES	O-1705-A	2KI-05	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 Main Steam										
10	N/A	2MSPT0027P U2 Main Steam	SG 2B PRESSURE	N/A	OFD-122A-2.1 (D2)	RB	825'	In Service In Service	YES	O-1705-A	2KI-05	S,R
9	12	2MSPY0042 U2 Emergency Feedwater	UNIT 2 UPS (2MSSS0042 - 2MS-87)	N/A	OEE-247-02-A	AB	796'	In Service In Service	YES	O-1704	2KB-32	S,R
27	N/A	2MSVA0001 U2 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-2.1 (J9)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	2MSVA0002 U2 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-2.1 (J4)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	2MSVA0003 U2 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-2.1 (J8)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	2MSVA0004 U2 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-2.1 (J6)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	2MSVA0005 U2 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-2.1 (J8)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	2MSVA0006 U2 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-2.1 (J5)	YD	813'	Closed Open	NO	N/A	N/A	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

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Evaluation type "S" indicates that a seismic evaluation was performed.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
27	N/A	2MSVA0007 U2 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-2.1 (J7)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	2MSVA0008 U2 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-2.1 (J6)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	2MSVA0009 U2 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-2.1 (D9)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	2MSVA0010 U2 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-2.1 (D4)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	2MSVA0011 U2 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-2.1 (D8)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	2MSVA0012 U2 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-2.1 (D5)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	2MSVA0013 U2 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-2.1 (D8)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	2MSVA0014 U2 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-2.1 (D6)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	2MSVA0015	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-2.1 (D7)	YD	813'	Closed Open	NO	N/A	N/A	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 Main Steam										
27	N/A	2MSVA0016 U2 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-2.1 (D6)	YD	813'	Closed Open	NO	N/A	N/A	S
1	N/A	2MSVA0017 U2 Main Steam	TURBINE BYPASS ISOLATION	N/A	OFD-122A-2.2 (I4)	TB	796'	Open Closed	YES	O-1703-B	2XGB-R02C	S,R
1	N/A	2MSVA0019 U2 Main Steam	TURBINE BYPASS VALVE	N/A	OFD-122A-2.2 (I8)	TB	796'	Open/Closed Closed	YES	O-1705-A	2KI-01	S,R
1	N/A	2MSVA0022 U2 Main Steam	TURBINE BYPASS VALVE	N/A	OFD-122A-2.2 (K8)	TB	796'	Open/Closed Closed	YES	O-1705-A	2KI-01	S,R
1	N/A	2MSVA0024 U2 Main Steam	AS ISOLATION	N/A	OFD-122A-2.2 (H3)	TB	796'	Open Closed	YES	O-1703-B	2XGB-R03A	S,R
9	N/A	2MSVA0026 U2 Main Steam	TURBINE BYPASS ISOLATION	N/A	OFD-122A-2.2 (D4)	TB	796'	Open Closed	YES	O-1703-B	2XGB-R02D	S,R
1	N/A	2MSVA0028 U2 Main Steam	TURBINE BYPASS VALVE	N/A	OFD-122A-2.2 (F8)	TB	796'	Open/Closed Closed	YES	O-1705-A	2KI-01	S,R
1	N/A	2MSVA0031 U2 Main Steam	TURBINE BYPASS VALVE	N/A	OFD-122A-2.2 (D8)	TB	796'	Open/Closed Closed	YES	O-1705-A	2KI-01	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
1	N/A	2MSVA0033 U2 Main Steam	AS ISOLATION	N/A	OFD-122A-2.2 (E3)	TB	796'	Open Closed	YES	O-1703-B	R03B	S,R
9	N/A	2MSVA0035 U2 Main Steam	FWPT ISOLATION	N/A	OFD-122A-2.3 (L1)	TB	796'	Open Closed	YES	O-1703	2XA-R04C	S,R
9	N/A	2MSVA0036 U2 Main Steam	FWPT ISOLATION	N/A	OFD-122A-2.3 (F1)	TB	796'	Open Closed	YES	O-1703	2XA-R04D	S,R
9	N/A	2MSVA0040 U2 Condensate	FWPT STOP VALVE	N/A	OFD-122A-2.3 (L8)	TB	775'	Open Closed	YES	O-1705-B	2DP-F06BR	S,R
9	N/A	2MSVA0043 U2 Condensate	FWPT STOP VALVE	N/A	OFD-122A-2.3 (F8)	TB	775'	Open Closed	YES	O-1705-B	2DP-F06DC	S,R
N/A	N/A	2MSVA0046 U2 Main Steam	EMERGENCY SAE ISOL VALVE	N/A	OFD-121C-2.1 (H3)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
9	N/A	2MSVA0047 U2 Main Steam	MS TO CSAE	N/A	OFD-122A-2.3 (E4)	TB	796'	Open Closed	YES	O-1703	2XA-A-R05A	S,R
9	N/A	2MSVA0076 U2 Main Steam	MS RH ISOLATION	N/A	OFD-122A-2.1 (I10)	TB	796'	Open Closed	YES	O-1703	2XA-R05C	S,R
9	N/A	2MSVA0077	MS TO 2ND STAGE RHTR ISOL	N/A	OFD-122C-2.2 (K4)	TB	796'	Open Closed	YES	O-1703	2XA-A-F02A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

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Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 Main Steam										
9	N/A	2MSVA0078 U2 Main Steam	MS TO 2ND STAGE RHTR ISOL	N/A	OFD-122C-2.2 (K8)	TB	796'	Open Closed	YES	O-1703	2XA-A-F02B	S,R
1	N/A	2MSVA0079 U2 Main Steam	MS RH ISOLATION	N/A	OFD-122A-2.1 (C10)	TB	796'	Open Closed	YES	O-1703	2XA-R05D	S,R
1	N/A	2MSVA0080 U2 Main Steam	MS TO 2ND STAGE RHTR ISOL	N/A	OFD-122C-2.2 (F4)	TB	796'	Open Closed	YES	O-1703	2XA-A-F02D	S,R
9	N/A	2MSVA0081 U2 Main Steam	MS TO 2ND STAGE RHTR ISOL	N/A	OFD-122C-2.2 (F8)	TB	796'	Open Closed	YES	O-1703	2XA-A-F02C	S,R
N/A	N/A	2MSVA0082 U2 Emergency Feedwater	TDEFW STEAM SUPPLY	N/A	OFD-122A-2.4 (I2)	TB	796'	Open Open	NO	N/A	N/A	R
N/A	N/A	2MSVA0084 U2 Emergency Feedwater	TDEFW STEAM SUPPLY	N/A	OFD-122A-2.4 (F2)	TB	796'	Open Open	NO	N/A	N/A	R
9	N/A	2MSVA0087 U2 Emergency Feedwater	TDEFW MS ISOLATION VALVE	N/A	OFD-122A-2.4 (G3)	TB	796'	Throttled Throttled	YES	O-1704	2KB-32	S,R
9	N/A	2MSVA0093 U2 Emergency Feedwater	TDEFW MS ISOLATION VALVE	N/A	OFD-122A-2.4 (G7)	TB	775'	Closed Open	YES	O-1705	2KVID-08	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

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Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
N/A	N/A	2MSVA0094 U2 Emergency Feedwater	EFW TURBINE STOP VALVE	N/A	OFD-122A-2.4 (G8)	TB	775'	Open Open	NO	N/A	N/A	R
9	N/A	2MSVA0095 U2 Emergency Feedwater	TDEFW CONTROL VALVE	N/A	OFD-122A-2.4 (G9)	TB	775'	Throttled Throttled	N/A	OM-200A-0010-001	STEAM	S,R
20	125	2MSVA0102 U2 Main Steam	TURBINE STOP VALVE	N/A	OFD-122B-2.1 (I3)	TB	796'	Open Closed	YES	O-1705	2DIA-07	S,R
20	125	2MSVA0103 U2 Main Steam	TURBINE STOP VALVE	N/A	OFD-122B-2.1 (I4)	TB	796'	Open Closed	YES	O-1705	2DIA-07	S,R
20	125	2MSVA0104 U2 Main Steam	TURBINE STOP VALVE	N/A	OFD-122B-2.1 (I5)	TB	796'	Open Closed	YES	O-1705	2DIA-07	S,R
20	125	2MSVA0105 U2 Main Steam	TURBINE STOP VALVE	N/A	OFD-122B-2.1 (I5)	TB	796'	Open Closed	YES	O-1705	2DIA-07	S,R
20	126	2MSVA0106 U2 Main Steam	MAIN STEAM CONTROL VALVE	N/A	OFD-122B-2.1 (E3)	TB	796'	Open Closed	YES	O-1705	2DIA-07	S,R
20	126	2MSVA0107 U2 Main Steam	MAIN STEAM CONTROL VALVE	N/A	OFD-122B-2.1 (G5)	TB	796'	Open Closed	YES	O-1705	2DIA-07	S,R
20	126	2MSVA0108	MAIN STEAM CONTROL VALVE	N/A	OFD-122B-2.1 (F4)	TB	796'	Open Closed	YES	O-1705	2DIA-07	S,R

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 Main Steam										
20	126	2MSVA0109 U2 Main Steam	MAIN STEAM CONTROL VALVE	N/A	OFD-122B-2.1 (G5)	TB	796'	Open Closed	YES	O-1705	2DIA-07	S,R
9	N/A	2MSVA0112 U2 Main Steam	MS TO 2ND STAGE RHTR ISOL	N/A	OFD-122C-2.2 (K5)	TB	796'	Open Closed	NO	N/A	N/A	S,R
52	N/A	2MSVA0126 U2 Main Steam	MS TO AS CONTROL VALVE	N/A	OFD-128A-2.1 (I6)	TB	796'	Open/Closed Closed	YES	O-1705	2KVID-10	S,R
52	N/A	2MSVA0129 U2 Main Steam	MS TO AS CONTROL VALVE	N/A	OFD-128A-2.1 (I7)	TB	796'	Open/Closed Closed	YES	O-1705	2KVID-10	S,R
9	N/A	2MSVA0173 U2 Main Steam	MS TO 2ND STAGE RHTR ISOL	N/A	OFD-122C-2.2 (F5)	TB	796'	Open Closed	YES	O-1422N-28	Pnumatic	S,R
RB	N/A	2MTC1 U2 Control Cabinets	MISC TERM CAB 2MTC1	2MTC1,2,3,4	N/A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
16	N/A	2MTC1,2,3,4 U2 Control Cabinets	MISCELLANEOUS TERMINAL CABINETS (2MTC'S)	N/A	N/A	AB	809'	N/A N/A	N/A	N/A	N/A	S,R
RB	N/A	2MTC2 U2 Control Cabinets	MISC TERM CAB 2MTC2	2MTC1,2,3,4	N/A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
RB	N/A	2MTC3 U2 Control Cabinets	MISC TERM CAB 2MTC3	2MTC1,2,3,4	N/A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R

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Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

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The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
RB	N/A	2MTC4 U2 Control Cabinets	MISC TERM CAB 2MTC4	2MTC1,2,3,4	N/A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
18	N/A	2PA/BB U2 125/250V DC PWR	PWR BATT 2PA	N/A	OEE-230-01	TB	796'	In Service In Service	YES	O-1705-B	2PA/BC	S
10	16	2PA/BC U2 125/250V DC PWR	PWR BATT CHGR 2PA	N/A	O-1893	TB	796'	In Service In Service	YES	O-1703-D	2XO-F01A	S,R
60	190	2PAMLT0090 U2 Post Accident Monitoring	RB Containment Water Level Train A	N/A	OEE-258-23	RB	777'	Not Used In Service	YES	O-1705-A	2KI-20	S,R
60	190	2PAMLT0091 U2 Post Accident Monitoring	RB Containment Water Level Train B	N/A	OEE-258-23	RB	777'	Not Used In Service	YES	O-1705-A	2KU-11	S,R
10	N/A	2PASCP U2 Post Accident Sample	POST ACCIDENT SAMPLE CONT PANEL (2RC-179)	N/A	OEE-262-02	AB	771'	In Service In Service	YES	O-839	1L2-37	S,R
18	N/A	2PB/BB U2 125/250V DC PWR	PWR BATT 2PB	N/A	OEE-230-01	TB	796'	In Service In Service	YES	O-1705-B	2PB/BC	S
10	16	2PB/BC U2 125/250V DC PWR	PWR BATT CHGR 2PB	N/A	O-1893	TB	796'	In Service In Service	YES	O-1705-E	2XP-F01A	S,R
16	N/A	2PIR U2 Control Panels	UNIT 2 PNEUMATIC INSTR RACK	N/A	N/A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
RB	N/A	2PRZ U2 Pressurizer Heaters	U2 PRESSURIZER	2PZR	N/A	RB	818'			N/A		NSSS

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Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

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Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
1	77	2PS157AB/PS101 U2 Main Turbine	LOW HYDRAULIC PRESSURE SWITCH	N/A	OEE-221-05	TB	775'	In Service In Service	YES	O-1705	2DIA-05	S,R
10	N/A	2RBCAH0020A U2 Reactor Building Cooling	RBCU FAN 2A	N/A	OFD-116E-2.1 (H-6)	RB	825'	On-high On-low	YES	O-1703-G	2X08-06C	S,R
10	N/A	2RBCAH0020B U2 Reactor Building Cooling	RBCU FAN 2B	N/A	OFD-116E-2.1 (H-8)	RB	825'	Off On-low	YES	O-1703-G	2XS3-01A	S,R
10	N/A	2RBCAH0020C U2 Reactor Building Cooling	RBCU FAN 2C	N/A	OFD-116E-2.1 (H-10)	RB	825'	On-high On-low	YES	O-1703-G	2X09-06C	S,R
10	N/A	2RBCHX000A U2 Reactor Building Cooling	RB COOLING UNIT 2A	N/A	OFD-124B-2.2(G3)	RB	825'	In Service In Service	NO	N/A	N/A	S
10	N/A	2RBCHX000B U2 Reactor Building Cooling	RB COOLING UNIT 2B	N/A	OFD-124B-2.2(G8)	RB	797'	In Service In Service	NO	N/A	N/A	S
10	N/A	2RBCHX000C U2 Reactor Building Cooling	RB COOLING UNIT 2C	N/A	OFD-124B-2.2(G12)	RB	797'	In Service In Service	NO	N/A	N/A	S

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Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

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Appendix B

11/11/97

Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
RB	N/A	2RBCHX00A1 U2 Reactor Building Cooling	RB VENTILATION COOLING COIL 2A1	2ARBCU_A	OFD-124B-2.3 (K6)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	2RBCHX00A2 U2 Reactor Building Cooling	RB VENTILATION COOLING COIL 2A2	2ARBCU_A	OFD-124B-2.3 (J6)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	2RBCHX00A3 U2 Reactor Building Cooling	RB VENTILATION COOLING COIL 2A3	2ARBCU_A	OFD-124B-2.3 (I6)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	2RBCHX00A4 U2 Reactor Building Cooling	RB VENTILATION COOLING COIL 2A4	2ARBCU_A	OFD-124B-2.3 (H6)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	2RBCHX00B1 U2 Reactor Building Cooling	RB VENTILATION COOLING COIL 2B1	2ARBCU_B	OFD-124B-2.3 (K11)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	2RBCHX00B2 U2 Reactor Building Cooling	RB VENTILATION COOLING COIL 2B2	2ARBCU_B	OFD-124B-2.3 (J11)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	2RBCHX00B3 U2 Reactor Building Cooling	RB VENTILATION COOLING COIL 2B3	2ARBCU_B	OFD-124B-2.3 (I11)	RB	844'	In Service Either	NO	N/A	N/A	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
RB	N/A	2RBCHX00B4 U2 Reactor Building Cooling	RB VENTILATION COOLING COIL 2B4	2ARBCU_B	OFD-124B-2.3 (H11)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	2RBCHX00C1 U2 Reactor Building Cooling	RB VENTILATION COOLING COIL 2C1	2ARBCU_C	OFD-124B-2.3 (F6)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	2RBCHX00C2 U2 Reactor Building Cooling	RB VENTILATION COOLING COIL 2C2	2ARBCU_C	OFD-124B-2.3 (E6)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	2RBCHX00C3 U2 Reactor Building Cooling	RB VENTILATION COOLING COIL 2C3	2ARBCU_C	OFD-124B-2.3 (D6)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	2RBCHX00C4 U2 Reactor Building Cooling	RB VENTILATION COOLING COIL 2C4	2ARBCU_C	OFD-124B-2.3 (C6)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	2RBCHX00D1 U2 Reactor Building Cooling	RB VENTILATION COOLING COIL 2D1	2ARBCU_D	OFD-124B-2.3 (F11)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	2RBCHX00D2 U2 Reactor Building Cooling	RB VENTILATION COOLING COIL 2D2	2ARBCU_D	OFD-124B-2.3 (E11)	RB	844'	In Service Either	NO	N/A	N/A	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
Evaluation type "S" indicates that a seismic evaluation was performed.
Evaluation type "R" indicates that a relay evaluation was performed.
Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
RB	N/A	2RBCHX00D3 U2 Reactor Building Cooling	RB VENTILATION COOLING COIL 2D3	2ARBCU_D	OFD-124B-2.3 (D11)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	2RBCHX00D4 U2 Reactor Building Cooling	RB VENTILATION COOLING COIL 2D4	2ARBCU_D	OFD-124B-2.3 (C11)	RB	844'	In Service Either	NO	N/A	N/A	S
10	N/A	2RCLT0004P1 U2 Reactor Coolant	PRZ LEVEL TRANSMITTER	N/A	OFD-100A-2.2 (G8)	RB	797'	In Service In Service	YES	O-1705	2KVIA-08	S,R
10	N/A	2RCLT0004P3 U2 Reactor Coolant	PRZ LEVEL TRANSMITTER	N/A	OFD-100A-2.2 (G8)	RB	797'	In Service In Service	YES	O-1705	2KVIB-13	S,R
52	N/A	2RCLT0123 U2 ICCM	2A RCS HOT LEG LVL (ICCM A)	N/A	OFD-100A-2.1 (I4)	RB	809'	Not Used In Service	YES	O-1705	2KVIA-08	S,R
52	N/A	2RCLT0124 U2 ICCM	2B RCS HOT LEG LVL (ICCM B)	N/A	OFD-100A-2.1 (I12)	RB	809'	Not Used In Service	YES	O-1705	2KVIB-13	S,R
52	N/A	2RCLT0125 U2 ICCM	RV HEAD LEVEL (ICCM A)	N/A	OFD-100A-2.1 (I7)	RB	809'	Not Used In Service	YES	O-1705	2KVIA-08	S,R
52	N/A	2RCLT0126 U2 ICCM	RV HEAD LEVEL (ICCM B)	N/A	OFD-100A-2.1 (I8)	RB	809'	Not Used In Service	YES	O-1705	2KVIB-13	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
15	N/A	2RCPS0364 U2 Low Pressure Injection	RC PRESS SWITCH	N/A	OEE-252-14	RB	825'	In Service In Service	YES	O-1703-G	2XS1-FO5C	S,R
15	N/A	2RCPT0017P U2 Reactor Coolant	RCS LOOP A PRESS TRANS	N/A	OFD-100A-2.1 (H5)	RB	825'	In Service In Service	YES	O-1705	2KVIA-01	S,R
15	N/A	2RCPT0021P U2 Engineered Safeguards	RC PRESS XMTR (ES CH A)	N/A	OFD-100A-2.1	RB	825'	In Service In Service	YES	O-1705	2KVIA-02	S,R
15	N/A	2RCPT0022P U2 Engineered Safeguards	RC PRESS XMTR (ES CH B)	N/A	OFD-100A-2.1	RB	825'	In Service In Service	YES	O-1705	2KVIC-02	S,R
15	N/A	2RCPT0023P U2 Engineered Safeguards	RC PRESS XMTR (ES CH C)	N/A	OFD-100A-2.1	RB	825'	In Service In Service	YES	O-1705	2KVIB-02	S,R
15	N/A	2RCPT0166P U2 Reactor Coolant	RCS LOOP B PRESS TRANS	N/A	OFD-100A-2.1 (H9)	RB	825'	In Service In Service	YES	O-1705-A	2KI-10	S,R
52	N/A	2RCPT0244 U2 ICCM	WR RCS PRESS TRAIN A (ICCM)	N/A	OFD-100A-2.1 (I4)	AB	809'	In Service In Service	YES	O-1705	2KVIA-08	S,R
52	N/A	2RCPT0245 U2 ICCM	WR RCS PRESS TRAIN B (ICCM)	N/A	OFD-100A-2.1 (I8)	AB	809'	In Service In Service	YES	O-1705	2KVIB-13	S,R
1	N/A	2RCRD0005B	A2 COLD LEG RTD	N/A	OFD-100A-2.1 (E5)	RB	797'	In Service In Service	YES	O-1705-A	2KI-18	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
Evaluation type "S" indicates that a seismic evaluation was performed.
Evaluation type "R" indicates that a relay evaluation was performed.
Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 Reactor Coolant										
1	N/A	2RCRD0006A U2 Reactor Coolant	A1 COLD LEG RTD	N/A	OFD-100A-2.1 (C5)	RB	797'	In Service In Service	YES	O-1705-A	2KI-18	S,R
1	N/A	2RCRD0007B U2 Reactor Coolant	B2 COLD LEG RTD	N/A	OFD-100A-2.1 (D10)	RB	797'	In Service In Service	YES	O-1705-A	2KI-18	S,R
1	N/A	2RCRD0008A U2 Reactor Coolant	B1 COLD LEG RTD	N/A	OFD-100A-2.1 (C11)	RB	797'	In Service In Service	YES	O-1705-A	2KI-18	S,R
1	N/A	2RCRD0043A U2 Reactor Coolant	PRZ RTD	N/A	OFD-100A-2.2 (G6)	RB	797'	In Service In Service	YES	O-1705	2KVIA-08	S,R
1	N/A	2RCRD0043B U2 Reactor Coolant	PRZ RTD	N/A	OFD-100A-2.2 (G6)	RB	797'	In Service In Service	YES	O-1705	2KVIB-13	S,R
15	N/A	2RCRD0084B U2 Reactor Coolant	A HOT LEG RTD	N/A	OFD-100A-2.1 (H5)	RB	844'	In Service In Service	YES	O-1705-A	2KI-18	S,R
15	N/A	2RCRD0085B U2 Reactor Coolant	B HOT LEG RTD	N/A	OFD-100A-2.1 (H11)	RB	844'	In Service In Service	YES	O-1705-A	2KI-18	S,R
N/A	N/A	2RCVA0001 U2 Reactor Coolant	PRESSURIZER SPRAY VALVE	N/A	OFD-100A-2.2 (G10)	RB	N/A	Closed Either	NO	N/A	N/A	NONE

Notes:

- Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
- Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
- Evaluation type "S" indicates that a seismic evaluation was performed.
- Evaluation type "R" indicates that a relay evaluation was performed.
- Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
- Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
- Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
- The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
- All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
1	19	2RCVA0003 U2 Reactor Coolant	PRZ SPRAY ISOLATION	N/A	OFD-100A-2.2 (H10)	RB	850'	Open Open/Closed	YES	0-1703-D	2XO-R01D	S,R
1	19	2RCVA0004 U2 Reactor Coolant	PRZ PORV BLOCK VALVE	N/A	OFD-100A-2.2 (J9)	RB	850'	Open Open/Closed	YES	0-703-K	2XSF-F06C	S,R
60	191	2RCVA0005 U2 Reactor Coolant	PRZ STEAM SAMPLE ISOLATION	N/A	OFD-110A-2.1 (I3)	RB	810'	Open/Closed Closed	NO	N/A	N/A	S,R
60	191	2RCVA0006 U2 Reactor Coolant	PRZ WATER SAMPLE ISOLATION	N/A	OFD-110A-2.1 (H3)	RB	810'	Open/Closed Closed	NO	N/A	N/A	S,R
52	N/A	2RCVA0007 U2 Reactor Coolant	PRZ WATER SAMPLE ISOLATION	N/A	OFD-110A-2.1 (H3)	AB	809'	Open/Closed Closed	NO	N/A	N/A	S,R
1	20	2RCVA0066 U2 Reactor Coolant	PRZ PORV	N/A	OFD-100A-2.2 (K9)	RB	850'	Closed Open/Closed	YES	0-1705	2DIB-24	S,R
1	20	2RCVA0067 U2 Reactor Coolant	PRZ CODE SAFETY	N/A	OFD-100A-2.2 (K8)	RB	850'	Closed Open/Closed	NO	N/A	N/A	S
1	21	2RCVA0068 U2 Reactor Coolant	PRZ CODE SAFETY	N/A	OFD-100A-2.2 (K7)	RB	850'	Closed Open/Closed	NO	N/A	N/A	S
N/A	N/A	2RCVA0155	RCS HOT LEG 2A VENT	N/A	OFD-100A-2.1 (I3)	RB	825'	Closed Closed	NO	N/A	N/A	R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 Reactor Coolant										
N/A	N/A	2RCVA0157 U2 Reactor Coolant	RCS HOT LEG 2B VENT	N/A	OFD-100A-2.1 (I12)	RB	825'	Closed Closed	NO	N/A	N/A	R
1	N/A	2RCVA0159 U2 Reactor Coolant	RV VENT ISOLATION	N/A	OFD-100A-2.1 (I10)	RB	844'	Closed Open/Closed	YES	O-1704-A	2SKL-08	S,R
1	N/A	2RCVA0160 U2 Reactor Coolant	RV VENT ISOLATION	N/A	OFD-100A-2.1 (I10)	RB	844'	Closed Open/Closed	YES	O-1704-A	2SKL-08	S,R
10	N/A	2RCVA0162 U2 Reactor Coolant	POST ACC SAMPLE PATH ISOL	N/A	OFD-110A-2.4 (G1)	RB	777'	Closed Open	YES	O-1705	2KVIB-09	S,R
10	N/A	2RCVA0163 U2 Reactor Coolant	POST ACC SAMPLE PATH ISOL	N/A	OFD-110A-2.4 (G2)	RB	777'	Closed Open	YES	O-1705	2KVIC-09	S,R
18	N/A	2RCVA0164 U2 Reactor Coolant	POST ACC SAMPLE PATH ISOL	N/A	OFD-110A-2.4 (G4)	AB	758'	Closed Open/Closed	YES	O-1705	2KVIB-09	S,R
18	N/A	2RCVA0165 U2 Reactor Coolant	POST ACC SAMPLE PATH ISOL	N/A	OFD-110A-2.4 (G4)	AB	758'	Closed Open	YES	O-1705	2KVIA-04	S,R
1	N/A	2RCVA0179 U2 Reactor Coolant	POST ACC SAMPLE THROTTLE	N/A	OFD-110A-2.4 (G5)	AB	758'	Closed Open	YES	O-839	1L2-37	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
59	67	2RPS U2 GENERIC	UNIT 2 RPS CABINETS	N/A	O-710	AB	822'	In Service In Service	YES	O-1705	2KVIA-01/2K	N/A
1	N/A	2RSC-2CCW-287/ENCL U2 Condenser Circulating Water	REMOTE STARTER ENCLOSURE FOR 2CCW-287	N/A	OEE-251-48	SSF	758'	Not Used Not Used	NO	N/A	N/A	S,R
1	22	2RSC-2FDW-368/ENCL U2 Emergency Feedwater	REMOTE STARTER ENCLOSURE FOR 2FDW-368	N/A	OEE-247-12	AB	809'	Not Used Not Used	NO	N/A	N/A	S,R
1	22	2RSC-2FDW-369/ENCL U2 Emergency Feedwater	REMOTE STARTER ENCLOSURE FOR 2FDW-369	N/A	OEE-247-11	AB	809'	Not Used Not Used	NO	N/A	N/A	S,R
1	22	2RSC-2FDW-372/ENCL U2 Emergency Feedwater	REMOTE STARTER ENCLOSURE FOR 2FDW-372	N/A	OEE-247-07	AB	809'	Not Used Not Used	NO	N/A	N/A	S,R
1	22	2RSC-2FDW-374/ENCL U2 Emergency Feedwater	REMOTE STARTER ENCLOSURE FOR 2FDW-374	N/A	OEE-247-08	AB	809'	Not Used Not Used	NO	N/A	N/A	S,R
1	22	2RSC-2FDW-382/ENCL U2 Emergency Feedwater	REMOTE STARTER ENCLOSURE FOR 2FDW-382	N/A	OEE-247-09	AB	809'	Not Used Not Used	NO	N/A	N/A	S,R
1	22	2RSC-2FDW-384/ENCL U2 Emergency Feedwater	REMOTE STARTER ENCLOSURE FOR 2FDW-384	N/A	OEE-247-10	AB	809'	Not Used Not Used	NO	N/A	N/A	S,R
1	N/A	2RSC-2HP-409/ENCL	REMOTE STARTER ENCLOSURE FOR 2HP-409	N/A	OEE-251-30	AB	796'	In Service In Service	YES	O-1703-G	2XS3-02D	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 High Pressure Injection										
1	N/A	2RSC-2HP-410/ENCL U2 High Pressure Injection	REMOTE STARTER ENCLOSURE FOR 2HP-410	N/A	OEE-251-31	AB	796'	In Service In Service	YES	O-1703-G	2XS3-02D	S,R
1	N/A	2RSC-2LPSW-565/ENCL U2 Low Pressure Service Water	REMOTE STARTER ENCLOSURE FOR 2LPSW-565	N/A	OEE-238-36	AB	796'	In Service In Service	YES	O-1703-G	2XS3-03CT	S,R
1	N/A	2RSC-2LPSW-566/ENCL U2 Low Pressure Service Water	REMOTE STARTER ENCLOSURE FOR 2LPSW-566	N/A	OEE-238-37	AB	796'	In Service In Service	YES	O-1703-G	2XS3-03CB	S,R
1	22	2RSC-2PR-59/ENCL U2 Penetration Rm Ventilation	REMOTE STARTER ENCLOSURE FOR 2PR-59	N/A	OEE-258-21	AB	809'	In Service In Service	YES	O-1703-E	2X1-01BB	S,R
1	22	2RSC-2PR-60/ENCL U2 Penetration Rm Ventilation	REMOTE STARTER ENCLOSURE FOR 2PR-60	N/A	OEE-258-22	AB	809'	In Service In Service	YES	O-1703-E	2XJ-01BB	S,R
10	N/A	2SCHX000A U2 Stater Coolant	GEN WATER COOLER 2A	N/A	OFD-121A-2.4 (D7)	TB	775'	In Service In Service	NO	N/A	N/A	S
10	N/A	2SCHX000B U2 Stater Coolant	GEN WATER COOLER 2B	N/A	OFD-121A-2.4 (C7)	TB	775'	In Service In Service	NO	N/A	N/A	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
N/A	N/A	2SCWP U2 Main Turbine	UNIT 2 STATOR COOLING WATER PANEL	N/A	OEE-221-05	TB	775'	In Service In Service	N/A	N/A	N/A	R
10	171	2SFTK0002 U2 Emergency Feedwater	INCORE INST HANDLING TANK	N/A	OFD-104A-1.1 (G13)	RB	816'	Not Used Not Used	NO	N/A	N/A	S
1	N/A	2SGFP U2 Condensate	SG FWP PANEL	N/A	OEE-246	TB	775'	In Service In Service	YES	O-1705-B	2DP-F06BR	S,R
1	N/A	2SGLC U2 Steam Generator	STEAM GEN LOGIC CABINET	N/A	O-1778	AB	809'	In Service In Service	YES	O-1705	2KVIA-17	S,R
1	N/A	2SKJ U2 208V PWR (PPB)	120V PPB 2SKJ	N/A	O-710-A	AB	809'	In Service In Service	YES	O-1703-G	2XS1-R04B	S,R
1	N/A	2SKK U2 208V PWR (PPB)	120V PPB 2SKK	N/A	O-305-A	AB	809'	In Service In Service	YES	O-1703-G	2XS2-R03CT	S,R
1	N/A	2SKL U2 208V PWR (PPB)	120V PPB 2SKL	N/A	O-1704-A	AB	809'	In Service In Service	YES	O-1703-G	2XS3-04BB	S,R
RB	N/A	2SL-5 U2 Control Cabinets	CRD SYSTEM LOGIC CAB 5	2CRDLC	O-782	AB	809'	In Service In Service	N/A	O-1705/O-1705-A	2KVIA-14/2K	S,R
RB	N/A	2SL-6 U2 Control Cabinets	CRD SYSTEM LOGIC CAB 6	2CRDLC	O-782	AB	809'	In Service In Service	N/A	O-1705/O-1705-A	2KVIA-14/2K	S,R
N/A	N/A	2SSHVA0001 U2 Main Turbine	STEAM SEAL HEADER ISOL	N/A	OFD-121B-2.1 (J7)	TB	796'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	2SSHVA0003	STEAM SEAL HEADER ISOL	N/A	OFD-122B-2.1 (J6)	TB	796'	Closed Closed	NO	N/A	N/A	R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

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Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 Main Turbine										
1	N/A	2TB-1001 U2 Emergency Feedwater	TERMINAL BOX TB-1001	N/A	O-950	BH	796'	In Service In Service	YES	YES	YES	S,R
1	N/A	2TB-1111 U2 Condenser Circulating Water	TERM BOX TB-1111	N/A	OEE-236-14	YD	796'	In Service In Service	YES	O-1705	2KVID-03	S,R
1	N/A	2TB-1112 U2 Condenser Circulating Water	TERM BOX TB-1112	N/A	OEE-236-14	YD	796'	In Service In Service	YES	O-1705	2KVID-03	S,R
11	N/A	2TBATWS1 U2 Emergency Feedwater	ATSW TERM BOX 1	N/A	O-1729-G	AB	809'	In Service In Service	YES	O-704	1KG-26	S,R
11	N/A	2TBATWS2 U2 Emergency Feedwater	ATSW TERM BOX 2	N/A	O-1729-G	AB	809'	In Service In Service	YES	O-704	1KG-27	S,R
27	78	2TC U2 4160 V PWR	4KV SWGR 2TC	N/A	O-1893	TB	796'	In Service In Service	YES	O-1702	MFB	S,R
10	N/A	2TCPA U2 Control Cabinets	TURB CONT PANEL 2TCPA	N/A	O-1930	TB	796'	In Service In Service	YES	O-1705	2DIA-31	S,R
27	78	2TD U2 4160 V PWR	4KV SWGR 2TD	N/A	O-1893	TB	796'	In Service In Service	YES	O-1702	MFB	S,R
16	N/A	2TDC3 U2 Reactor Coolant	TRANSDUCER CAB 2TDC3	N/A	OEE-250-23	AB	809'	In Service In Service	YES	O-1705-A	2KI-18	S,R
27	78	2TE	4KV SWGR 2TE	N/A	O-1893	TB	796'	In Service	YES	O-1702	MFB	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

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Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

11/11/97

Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 4160 V PWR						In Service				
N/A	N/A	2TOFL0009 U2 Emergency Feedwater	EFW PUMP TURB OIL FILTER	N/A	OFD-135B-2.2 (H10)	TB	775'	Not Used In Service	NO	N/A	N/A	S*
RB	N/A	2TOHX0001 U2 Emergency Feedwater	EFWPT OIL COOLER	2TOTK0002	OFD-133A-2.2 (H14)	TB	775'	Not Used In Service	NO	N/A	N/A	S
9	79	2TOPS0176B U2 Condensate DC Interlocks	FWPT 2A BEARING OIL PRESS LOW	2FDWPS0176B	OEE-245-00-A	TB	775'	In Service In Service	YES	O-1705	2DIA-20	S,R
9	N/A	2TOPS0192B U2 Condensate DC Interlocks	FWPT 2B BEARING OIL PRESS LOW	2FDWPS0192B	OEE-245-00-A	TB	775'	In Service In Service	YES	O-1705	2DIA-20	S,R
10	N/A	2TOPU0022 U2 Emergency Feedwater	EFWPT AUX OIL PUMP	N/A	OFD-135B-2.2 (H4)	TB	775'	Off On	YES	O-1705-B	2DP-R03A	S,R
RB	N/A	2TOPU0029 U2 Emergency Feedwater	EFWPT SHAFT DRIVEN OIL PUMP	2TOPU0022	OFD-135B-2.2 (F4)	TB	775'	Off On	NO	N/A	N/A	S
9	174	2TOTK0002 U2 Emergency Feedwater	EFW PUMP TURBINE OIL TANK	N/A	OFD-135B-2.2 (J2)	TB	775'	Not Used In Service	NO	N/A	N/A	S
20	N/A	2TOVA0059	EFW PUMP TURB OIL PR VALVE	N/A	OFD-135B-2.2 (H11)	TB	775'	Closed Throttled	NO	N/A	N/A	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
Evaluation type "S" indicates that a seismic evaluation was performed.
Evaluation type "R" indicates that a relay evaluation was performed.
Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
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Appendix B

11/11/97

Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 Emergency Feedwater										
10	80	2TTC4 U2 Cabinet	TURB TERM CAB 2TTC4	N/A	OEE-221-16	TB	796'	In Service In Service	NO	N/A	N/A	S,R
RB	N/A	2UB1 U2 Control Boards	CONTROL BOARD 2UB1	2UB1,2; 2AB1	O-710	AB	822'	In Service In Service	N/A	N/A	N/A	S,R
RB	N/A	2UB1,2;2AB1 U2 Control Boards	CONTROL BOARDS 2UB1,2,AB1	2UB1,2; 2AB1	N/A	AB	822'	In Service In Service	N/A	N/A	N/A	S,R
RB	N/A	2UB2 U2 Control Boards	CONTROL BOARD 2UB2	2UB1,2; 2AB1	O-710	AB	822'	In Service In Service	N/A	N/A	N/A	S,R
20	176	2VAE0001 U2 Emergency Steam	EM STEAM AIR EJECTOR (SAE)	N/A	OFD-121C-2.1 (H2)	TB	775'	Off Either	NO	N/A	N/A	S
RB	N/A	2VB1 U2 Control Boards	CONTROL BOARD 2VB1	2VB1,2,3	O-710	AB	822'	In Service In Service	N/A	N/A	N/A	S,R
59	N/A	2VB1,2,3 U2 Control Boards	CONTROL BOARDS 2VB1,2,3	N/A	N/A	AB	822'	In Service In Service	N/A	N/A	N/A	S,R
RB	N/A	2VB2 U2 Control Boards	CONTROL BOARD 2VB2	2VB1,2,3	O-710	AB	822'	In Service In Service	N/A	N/A	N/A	S,R
RB	N/A	2VB3 U2 Control Boards	CONTROL BOARD 2VB3	2VB1,2,3	O-710	AB	822'	In Service In Service	N/A	N/A	N/A	S,R
20	N/A	2VVA0186 U2 Main Turbine	COND VACUUM BREAKER	N/A	OFD-121C-2.1 (I14)	TB	796'	Closed Open	YES	O-1703	2XA-R02A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
 Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
 Evaluation type "S" indicates that a seismic evaluation was performed.
 Evaluation type "R" indicates that a relay evaluation was performed.
 Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
 Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
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 The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
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Appendix B

11/11/97

Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
10	82	2X01 U2 600V PWR (LOAD CENTERS)	600V LC 2X01	N/A	O-1703	TB	796'	In Service In Service	YES	O-1702	2TC-02	S,R
RB	N/A	2X01/XFMR U2 600V PWR (LOAD CENTERS)	600V LC 2X01 XFMR (4160V TO 600V)	2X01	OEE-217-13	TB	796'	In Service In Service	YES	O-1702	2TC-02	S
10	82	2X02 U2 600V PWR (LOAD CENTERS)	600V LC 2X02	N/A	O-1703-A	TB	796'	In Service In Service	YES	O-1702	2TD-02	S,R
RB	N/A	2X02/XFMR U2 600V PWR (LOAD CENTERS)	600V LC 2X02 XFMR (4160V TO 600V)	2X02	O-1703-A	TB	796'	In Service In Service	YES	O-1702	2TD-02	S
10	179	2X03 U2 600V PWR (LOAD CENTERS)	600V LC 2X03	N/A	O-1703-B	TB	796'	In Service In Service	YES	O-1702	2TE-02	S,R
RB	N/A	2X03/XFMR U2 600V PWR (LOAD CENTERS)	600V LC 2X03 XFMR (4160V TO 600V)	2X03	O-1703-B	TB	796'	In Service In Service	YES	O-1702	2TE-02	S
1	179	2X04 U2 600V PWR (LOAD CENTERS)	600V LC 2X04	N/A	O-1703-C	TB	796'	In Service In Service	YES	O-1702	2TC-03	S,R
RB	N/A	2X04/XFMR U2 600V PWR (LOAD CENTERS)	600V LC 2X04 XFMR (4160V TO 600V)	2X04	O-1703-C	TB	796'	In Service In Service	YES	O-702	2TC-03	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
 Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
 Evaluation type "S" indicates that a seismic evaluation was performed.
 Evaluation type "R" indicates that a relay evaluation was performed.
 Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Ocone Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		CENTERS)										
10	179	2X05 U2 600V PWR (LOAD CENTERS)	600V LC 2X05	N/A	O-1703-D	TB	796'	In Service In Service	YES	O-1702	2TD-03	S,R
RB	N/A	2X05/XFMR U2 600V PWR (LOAD CENTERS)	600V LC 2X05 XFMR (4160V TO 600V)	2X05	O-1703-D	TB	796'	In Service In Service	YES	O-1702	2TD-03	S
10	179	2X06 U2 600V PWR (LOAD CENTERS)	600V LC 2X06	N/A	O-1703-E	TB	796'	In Service In Service	YES	O-1702	2TE-03	S,R
RB	N/A	2X06/XFMR U2 600V PWR (LOAD CENTERS)	600V LC 2X06 XFMR (4160V TO 600V)	2X06	O-1703-E	TB	796'	In Service In Service	YES	O-1702	2TE-03	S
10	N/A	2X08 U2 600V PWR (LOAD CENTERS)	600V LC 2X08	N/A	O-1703-G	AB	796'	In Service In Service	YES	O-1702	2TC-13	S,R
RB	N/A	2X08/XFMR U2 600V PWR (LOAD CENTERS)	600V LC XFMR 2X08 (4160V TO 600V)	2X08	O-1703-G	AB	796'	In Service In Service	YES	O-1702	2TC-13	S
10	N/A	2X09 U2 600V PWR (LOAD CENTERS)	600V LC 2X09	N/A	O-1703-G	AB	796'	In Service In Service	YES	O-1702	2TD-13	S,R
RB	N/A	2X09/XFMR	600V LC XFMR 2X09	2X09	O-1703-G	AB	796'	In Service	YES	O-1702	2TD-13	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

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Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 600V PWR (LOAD CENTERS)	(4160V TO 600V)					In Service				
10	83	2X10/XFMR U2 600V PWR (LOAD CENTERS)	XFMR 2X10 (4160V TO 600V)	N/A	O-1703-G	TB	796'	In Service In Service	YES	O-1702	2TE-12	S
1	185	2XA U2 600/208V MOTOR CONTROL CENTERS	MCC 2XA	N/A	O-1703	TB	796'	In Service In Service	YES	O-1703	2X01-04C	S,R
RB	N/A	2XA(208V) U2 600/208V MOTOR CONTROL CENTERS	208V MCC 2XA	2XA	O-1703	TB	796'	In Service In Service	YES	O-1703	2XA-F01AT	N/A
RB	N/A	2XA(600V) U2 600/208V MOTOR CONTROL CENTERS	600V MCC 2XA	2XA	O-1703	TB	796'	In Service In Service	YES	O-1703	2X01-04C	S,R
1	85	2XA-A U2 600/208V MOTOR CONTROL CENTERS	208V MCC 2XA-A	N/A	O-1703	TB	796'	In Service In Service	YES	O-1703	2XA-R01B	S,R
1	N/A	2XA/XFMR U2 600/208V MOTOR CONTROL CENTERS	XFMR 2XA (600V TO 208V)	N/A	O-1703	TB	796'	In Service In Service	YES	O-1703	2XA-F01AT	S
10	86	2XB U2 600/208V MOTOR	600V MCC 2XB	N/A	O-1703-A	TB	775'	In Service In Service	YES	O-1703-A	2X02-04C	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

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Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		CONTROL CENTERS										
1	87	2XC U2 600/208V MOTOR CONTROL CENTERS	MCC 2XC	N/A	O-1703-B	TB	775'	In Service In Service	YES	O-1703-B	2X03-04C	S,R
RB	N/A	2XC(208V) U2 600/208V MOTOR CONTROL CENTERS	208V MCC 2XC	2XC	O-1703-B	TB	775'	In Service In Service	YES	O-1703-B	2XC-F01AT	S,R
RB	N/A	2XC(600V) U2 600/208V MOTOR CONTROL CENTERS	600V MCC 2XC	2XC	O-1703-B	TB	775'	In Service In Service	YES	O-1703-B	2X03-04C	S,R
1	N/A	2XC/XFMR U2 600/208V MOTOR CONTROL CENTERS	XFMR 2XC (600V TO 208V)	N/A	O-1703-B	TB	775'	In Service In Service	YES	O-1703-B	2XC-F01AT	S
35	88	2XGA U2 600/208V MOTOR CONTROL CENTERS	2XGA	N/A	O-1703-A	TB	796'	In Service In Service	YES	O-1703-A	2X0205B	S,R
RB	N/A	2XGA(208V) U2 600/208V MOTOR CONTROL CENTERS	208V MCC 2XGA	2XGA	O-1703-A	TB	796'	In Service In Service	YES	O-1703-A	2XGA-F04B	S,R
1	89	2XGA/XFMR U2 600/208V MOTOR CONTROL CENTERS	XFMR 2XGA(600V TO 208V)	N/A	O-1703-A	TB	796'	In Service In Service	YES	O-1703-A	2XGA-F04B	S

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Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
35	90	2XGB U2 600/208V MOTOR CONTROL CENTERS	MCC 2XGB	N/A	O-1703-B	TB	796'	In Service In Service	YES	O-1703-B	2X03-05A	S,R
RB	N/A	2XGB(208V) U2 600/208V MOTOR CONTROL CENTERS	208V MCC 2XGB	2XGB	O-1703-B	TB	796'	In Service In Service	YES	O-1703-B	2XGB-F01AT	S,R
RB	N/A	2XGB(600V) U2 600/208V MOTOR CONTROL CENTERS	600V MCC 2XGB	2XGB	O-1703-B	TB	796'	In Service In Service	YES	O-1703-B	2X03-05A	S,R
1	89	2XGB/XFMR U2 600/208V MOTOR CONTROL CENTERS	XFMR 2XGB (600V TO 208V)	N/A	O-1703-B	TB	796'	In Service In Service	YES	O-1703-B	2XGB-F01AT	S
10	91	2XI U2 600/208V MOTOR CONTROL CENTERS	600V MCC 2XI	N/A	O-1703-D	AB	809'	In Service In Service	YES	O-1703-D	2X05-04C	S,R
10	91	2XJ U2 600/208V MOTOR CONTROL CENTERS	600V MCC 2XJ	N/A	O-1703-E	AB	809'	In Service In Service	YES	O-1703-E	2X06-04C	S,R
35	N/A	2XL U2 600/208V MOTOR CONTROL CENTERS	MCC 2XL	N/A	O-1703-D	AB	771'	In Service In Service	YES	O-1703-D	2X05-04D	S,R
RB	N/A	2XL(208V) U2 600/208V MOTOR	208V MCC 2XL	2XL	O-1703-D	AB	771'	In Service In Service	YES	O-1703-D	2XL-02BT	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		CONTROL CENTERS										
RB	N/A	2XL(600V) U2 600/208V MOTOR CONTROL CENTERS	600V MCC 2XL	2XL	O-1703-D	AB	771'	In Service In Service	YES	O-1703-D	2X05-04D	S,R
1	N/A	2XL/XFMR U2 600/208V MOTOR CONTROL CENTERS	XFMR 2XL (600V TO 208V)	N/A	O-1703-D	AB	771'	In Service In Service	YES	O-1703-D	2XL-02BT	S
10	N/A	2XN U2 600/208V MOTOR CONTROL CENTERS	MCC 2XN	N/A	O-1703-E	AB	771'	In Service In Service	YES	O-1703-E	2X06-04D	S,R
RB	N/A	2XN(208V) U2 600/208V MOTOR CONTROL CENTERS	208V MCC 2XN	2XN	O-1703-E	AB	771'	In Service In Service	YES	O-1703-E	2X06-04D	S,R
RB	N/A	2XN(600V) U2 600/208V MOTOR CONTROL CENTERS	600V MCC 2XN	2XN	O-1703-E	AB	771'	In Service In Service	YES	O-1703-E	2X06-04D	S,R
1	N/A	2XN/XFMR U2 600/208V MOTOR CONTROL CENTERS	XFMR 2XN (600V TO 208V)	N/A	O-1703-E	AB	771'	In Service In Service	YES	O-1703-E	2XN-02BT	S
35	93	2XO U2 600/208V MOTOR CONTROL CENTERS	MCC 2XO	N/A	O-1703-D	AB	796'	In Service In Service	YES	O-1703-D	2X05-05A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
RB	N/A	2XO(208V) U2 600/208V MOTOR CONTROL CENTERS	208V MCC 2XO	2XO	O-1703-D	AB	796	In Service In Service	YES	O-1703-D	2X05-05A	S,R
RB	N/A	2XO(600V) U2 600/208V MOTOR CONTROL CENTERS	600V MCC 2XO	2XO	O-1703-D	AB	796'	In Service In Service	YES	O-1703-D	2X05-05A	S,R
1	N/A	2XO/XFMR U2 600/208V MOTOR CONTROL CENTERS	XFMR 2XO (600V TO 208V)	N/A	O-1703-D	AB	796'	In Service In Service	YES	O-1703-D	2XO-F05A	S
35	94	2XP U2 600/208V MOTOR CONTROL CENTERS	MCC 2XP	N/A	O-1703-E	AB	796'	In Service In Service	YES	O-1703-E	2X06-05A	S,R
RB	N/A	2XP(208V) U2 600/208V MOTOR CONTROL CENTERS	208V MCC 2XP	2XP	O-1703-E	AB	796	In Service In Service	YES	O-1703-E	2X06-05A	S,R
RB	N/A	2XP(600V) U2 600/208V MOTOR CONTROL CENTERS	600V MCC 2XP	2XP	O-1703-E	AB	796'	In Service In Service	YES	O-1703-E	2X06-05A	S,R
1	N/A	2XP/XFMR U2 600/208V MOTOR CONTROL CENTERS	XFMR 2XP (600V TO 208V)	N/A	O-1703-E	AB	796'	In Service In Service	YES	O-1703-E	2XP-F04A	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
1	95	2XR U2 600/208V MOTOR CONTROL CENTERS	600V MCC 2XR	N/A	O-1703-C	AB	838'	In Service In Service	YES	O-1703-C	2X04-05A	S,R
35	N/A	2XS1 U2 600/208V MOTOR CONTROL CENTERS	MCC 2XS1	N/A	O-1703-G	AB	796'	In Service In Service	YES	O-1703-G	2X08-05A	S,R
RB	N/A	2XS1(208V) U2 600/208V MOTOR CONTROL CENTERS	208V MCC 2XS1	2XS1	O-1703-G	AB	796'	In Service In Service	YES	O-1703-G	2XS1-F05AT	S,R
RB	N/A	2XS1(600V) U2 600/208V MOTOR CONTROL CENTERS	600V MCC 2XS1	2XS1	O-1703-G	AB	796'	In Service In Service	YES	O-1703-G	2X08-05A	S,R
11	N/A	2XS1A/XFMR U2 600/208V MOTOR CONTROL CENTERS	XFMR 2XS1A (600V TO 208V)	N/A	O-1703-G	AB	796'	In Service In Service	YES	O-1703-G	2XS1-F05AT	S
10	N/A	2XS2 U2 600/208V MOTOR CONTROL CENTERS	MCC 2XS2	N/A	O-1703-G	AB	796'	In Service In Service	YES	O-1703-G	2X09-05A	S,R
RB	N/A	2XS2(208V) U3 600/208V MOTOR CONTROL CENTERS	208V MCC 3XS3	2XS2	O-1703-G	AB	796'	In Service In Service	YES	O-1703-G	2XS2-F04AT	S,R
RB	N/A	2XS2(600V)	600V MCC 2XS2	2XS2	O-1703-G	AB	796'	In Service In Service	YES	O-1703-G	2X09-05A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 600/208V MOTOR CONTROL CENTERS										
11	N/A	2XS2A/XFMR U2 600/208V MOTOR CONTROL CENTERS	XFMR 2XS2A (600V TO 208V)	N/A	O-1703-G	AB	796'	In Service In Service	YES	O-1703-G	2XS2-F04AT	S
35	96	2XS3 U2 600/208V MOTOR CONTROL CENTERS	MCC 2XS3	N/A	O-1703-G	AB	796'	In Service In Service	YES	O-1702	2TE-12	S,R
RB	N/A	2XS3(208V) U2 600/208V MOTOR CONTROL CENTERS	208V MCC 2XS3	2XS3	O-1703-G	AB	796'	In Service In Service	YES	O-1702	2TE-12	S,R
RB	N/A	2XS3(600V) U2 600/208V MOTOR CONTROL CENTERS	600V MCC 2XS3	2XS3	O-1703-G	AB	796'	In Service In Service	YES	O-1702	2TE-12	S,R
11	53	2XS3A/XFMR U2 600/208V MOTOR CONTROL CENTERS	XFMR 2XS3A (600V TO 208V)	N/A	O-1703-G	AB	796'	In Service In Service	YES	O-1703-G	2XS3-03BT	S
RB	N/A	2XSF(208V) U2 600/208V MOTOR CONTROL CENTERS	MCC 2XSF(208V)	2XSF (208V)	OM 308-361	SSF	817'	In Service In Service	YES	O-703-K	2XSF-F04A	S,R
RB	N/A	2XSF(600V)	MCC 2XSF(600V)	2XSF (600V)	OM 308-361	SSF	817'	In Service In Service	YES	O-1703-G/O-702-B	2X08-05B/OX	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U2 600/208V MOTOR CONTROL CENTERS										
RB	N/A	2XSF-1(208V) U2 600/208V MOTOR CONTROL CENTERS	MCC 2XSF-1 (208V)	XSF-1(1,2,&3)	OM 308-361	SSF	797'	In Service In Service	YES	O-703-K	2XSF-F02BL	S,R
1	N/A	2XSF/XFMR U2 600/208V MOTOR CONTROL CENTERS	XFMR 2XSF (600V TO 208V)	N/A	OM 308-361	SSF	817'	In Service In Service	YES	O-703-K	2XSF-F04A	S
9	100	3A/3B/SW U3 240/120V AC PWR	3A/3B REG XFER SW	N/A	O-2759-E-1	AB	796'	In Service In Service	YES	O-2703-D	3XO-F01E	S,R
9	100	3A/MCB U3 240/120V AC PWR	240/120V 3A REGULATOR OUTPUT BKR	N/A	O-2759-E-1	AB	796'	Closed Closed	YES	O-2703-D	3XO-F01E	S,R
11	101	3A/REG U3 240/120V AC PWR	REGULATED PWR SUPP REG 3A	N/A	O-2759-E-1	AB	796'	In Service In Service	YES	O-2703-D	3XO-F01E	S,R
11	102	3A/XFMR U3 240/120V AC PWR	XFMR 3A (600V TO 240V)	N/A	O-2759-E-1	AB	796'	In Service In Service	YES	O-2703-D	3XO-F01E	S
RB	N/A	3AB1 U3 Control Boards	CONTROL BOARD 3AB1	3UB1,2,3AB1,2,3,3A, EB1-8	O-2710	AB	822'	In Service In Service	N/A	N/A	N/A	S,R
RB	N/A	3AB3 U3 Control Boards	CONTROL BOARD 3AB3	3UB1,2,3AB1,2,3,3A, EB1-8	O-2710	AB	822'	In Service In Service	N/A	N/A	N/A	S,R
RB	N/A	3AB3A	CONTROL BOARD 3AB3A	3UB1,2,3AB1,2,3,3A,	O-2710	AB	822'	In Service	N/A	N/A	N/A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 Control Boards		EB1-8				In Service				
62	N/A	3ADA U3 125/250V DC PWR	ISOL DIODE ASSEMBLY 3ADA	N/A	O-2917D(14)	AB	796'	In Service In Service	YES	O-2705	3DCA-03C	S,R
62	N/A	3ADB U3 125/250V DC PWR	ISOL DIODE ASSEMBLY 3ADB	N/A	O-2917D(H5)	AB	796'	In Service In Service	YES	O-2705	3DCA-03D	S,R
62	N/A	3ADC U3 125/250V DC PWR	ISOL DIODE ASSEMBLY 3ADC	N/A	O-2917D(G4)	AB	796'	In Service In Service	YES	O-2705	3DCB-03C	S,R
62	N/A	3ADD U3 125/250V DC PWR	ISOL DIODE ASSEMBLY 3ADD	N/A	O-2917D(G5)	AB	796'	In Service In Service	YES	O-2705	3DCB-03D	S,R
10	N/A	3ADE U3 240/120V AC PWR	ISOL DIODE ASSEMBLY 3ADE	N/A	O-2917	AB	796'	In Service In Service	YES	O-2705	3DCA-04B	S,R
10	N/A	3ADF U3 240/120V AC PWR	ISOL DIODE ASSEMBLY 3ADF	N/A	O-2917	AB	796'	In Service In Service	YES	O-2705	3DCA-03E	S,R
10	N/A	3ADG U3 240/120V AC PWR	ISOL DIODE ASSEMBLY 3ADG	N/A	O-2917	AB	796'	In Service In Service	YES	O-2705	3DCA-03F	S,R
1	103	3AHCC(13&14) HVAC	U3 AIR HANDLING CONTROL CENTER (FOR UNITS 13 & 14)	3AHCC (13 & 14)	OEE-331-07	AB	838'	In Service In Service	YES	N/A	3XR-04E	S,R
1	N/A	3ASP U3 Control Boards	AUX SHUTDOWN PANEL	N/A	O-2932	TB	822'	In Service In Service	NO	N/A	N/A	S,R
52	N/A	3ASPT0117P U3 Main Steam	AUX STEAM PRESSURE TRANSMITTER (MS-126 & MS-129)	3ASPT0117	OEE-345-76	TB	796'	In Service In Service	YES	O-2705	3KVID-10	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
Evaluation type "S" indicates that a seismic evaluation was performed.
Evaluation type "R" indicates that a relay evaluation was performed.
Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
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Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
10	N/A	3ASWS U0 Auxiliary Service Water	AUX SERV WATER SWGR (4160V) (1TD-0)	N/A	OEE-117-86	AB	771'	In Service In Service	YES	O-702-A	B1T-10	S,R
RB	N/A	3ASWS/XMFR U0 Auxiliary Service Water	XFMR FOR ASWS 600V LOAD CENTER (4160/600V)	3ASWS	O-702-A1	AB	771'	In Service In Service	YES	O-702-A1	ASW-02	S
1	N/A	3AT3 U3 Control Cabinet	AREA TERM CAB 3AT3	N/A	N/A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
31	N/A	3AT4 U3 Control Cabinet	AREA TERM CAB 3AT4	N/A	O-2710-A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
1	104	3ATWSCP U3 Control Panel	U3 ATWS CONTROL PANEL	N/A	O-2729-A	AB	838'	In Service In Service	N/A	N/A	N/A	S,R
15	N/A	3B U3 Pressurizer Heaters	600V PPB 3B (FOR PRESSURIZER HEATERS GROUP 3B BANK 2)	N/A	O-2726	RB	800'	In Service In Service	YES	O-703-K	3XSF-F03B	S,R
9	100	3B/MCB U3 240/120V AC PWR	240/120V 3B REGULATOR OUTPUT BKR	N/A	O-2705-A	AB	796'	Closed Closed	YES	O-2703-E	3XP-F01AB	S,R
11	105	3B/REG U3 240/120V AC PWR	REGULATED PWR SUPP REG 3B	N/A	O-2759-E-1	AB	796'	In Service In Service	YES	O-2703-E	3XP-F01AB	S,R
11	102	3B/XFMR U3 240/120V AC PWR	XFMR 3B (600V TO 240V)	N/A	O-2759-E-1	AB	796'	In Service In Service	YES	O-2703-E	3XP-F01AB	S
16	N/A	3B1T U3 4160V PWR	4KV SWGR 3B1T	N/A	OM-302-70	BH	796'	In Service In Service	YES	O-702-A2	3T	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
Evaluation type "S" indicates that a seismic evaluation was performed.
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Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
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Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
16	N/A	3B2T U3 4160V PWR	4KV SWGR 3B2T	N/A	O-2751	BH	796'	In Service In Service	YES	O-702-A2	3T	S,R
1	N/A	3BSPS0018 U3 Engineered Safeguards	RB PRESS SWITCH (ES CH 3A)	N/A	O-2422-EE-1-A	AB	809'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	3BSPS0019 U3 Engineered Safeguards	RB PRESS SWITCH (ES CH 3A)	N/A	O-2422-EE-1-A	AB	809'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	3BSPS0020 U3 Engineered Safeguards	RB PRESS SWITCH (ES CH 3B)	N/A	O-2422-EE-1-A	AB	809'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	3BSPS0021 U3 Engineered Safeguards	RB PRESS SWITCH (ES CH 3B)	N/A	O-2422-EE-1-A	AB	809'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	3BSPS0022 U3 Engineered Safeguards	RB PRESS SWITCH (ES CH 3C)	N/A	O-2422-EE-1-B	AB	809'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	3BSPS0023 U3 Engineered Safeguards	RB PRESS SWITCH (ES CH 3C)	N/A	O-2422-EE-1-B	AB	809'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	3BSPT0004P U3 Engineered Safeguards	RB PRESS XMTR (ES CH 3A)	N/A	OM 2201-J-06	AB	809'	In Service In Service	YES	O-2705	3KVIA-02	S,R
1	N/A	3BSPT0005P U3 Engineered Safeguards	RB PRESS XMTR (ES CH 3B)	N/A	OM 2201-J-12	AB	809'	In Service In Service	YES	O-2705	3KVIB-02	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

11/11/97

Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
1	N/A	3BSPT0006P U3 Engineered Safeguards	RB PRESS XMTR (ES CH 3C)	N/A	OM 2201-J-15	AB	809'	In Service In Service	YES	O-2705	3KVIC-02	S,R
17	N/A	3BSPU0001 U3 Reactor Building Spray	RBS PUMP 3A	N/A	OFD-103A-3.1 (J5)	AB	758'	Not Used Not Used	NO	N/A	N/A	NONE
17	N/A	3BSPU0002 U3 Reactor Building Spray	RBS PUMP 3B	N/A	OFD-103A-3.1 (E5)	AB	758'	Not Used Not Used	NO	N/A	N/A	NONE
17	N/A	3BSVA0001 U3 Reactor Building Spray	RB SPRAY HEADER 3A ISOLATION	N/A	OFD-103A-3.1 (J8)	AB	809'	Closed Closed	NO	N/A	N/A	R
17	N/A	3BSVA0002 U3 Reactor Building Spray	RB SPRAY HEADER 3B ISOLATION	N/A	OFD-103A-3.1 (E8)	AB	809'	Closed Closed	NO	N/A	N/A	R
17	N/A	3BSVA0003 U3 Reactor Building Spray	RBS PUMP SUCTION ISOL	N/A	OFD-102A-3.1 (F12)	AB	758'	Open Open	NO	N/A	N/A	S,R
17	N/A	3BSVA0004 U3 Reactor Building Spray	RBS PUMP SUCTION ISOL	N/A	OFD-102A-3.1 (C12)	AB	758'	Open Open	NO	N/A	N/A	S,R
15	106	3C U3 Pressurizer Heaters	600V PPB 3C (FOR PRESSURIZER HEATERS GROUP 3C BANK 2)	N/A	OM 315-19	RB	818'	In Service In Service	YES	O-2703-D	3XI-02A	S,R
18	107	3CA/BB U3 125/250V DC PWR	CONTROL BATT 3CA	N/A	O-2910	AB	809'	In Service In Service	YES	O-2705	3CA/BC	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
10	108	3CA/BC U3 125/250V DC PWR	CONTROL BATT CHGR 3CA	N/A	O-2917D(14)	AB	796'	In Service In Service	YES	O-2703-G	3XS1-F04A	S,R
10	N/A	3CAP U3 Control Panel	CHEMICAL ADDITION PANEL	N/A	O-2907	AB	771'	In Service In Service	N/A	N/A	N/A	S,R
18	107	3CB/BB U3 125/250V DC PWR	CONTROL BATT 3CB	N/A	O-2910	AB	809'	In Service In Service	YES	O-2705	3CB/BC	S
62	N/A	3CB/BC U3 125/250V DC PWR	CONTROL BATT CHGR 3CB	N/A	O-2917D(H5)	AB	796'	In Service In Service	YES	O-2703-G	3XS2-F04D	S,R
N/A	N/A	3CCWMJ0001 U3 Condenser Circulating Water	CCW PUMP EXP JOINT	N/A	OFD-133A-3.1 (K2)	YD	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	3CCWMJ0002 U3 Condenser Circulating Water	CCW PUMP EXP JOINT	N/A	OFD-133A-3.1 (K6)	YD	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	3CCWMJ0003 U3 Condenser Circulating Water	CCW PUMP EXP JOINT	N/A	OFD-133A-3.1 (K7)	YD	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	3CCWMJ0004 U3 Condenser Circulating Water	CCW PUMP EXP JOINT	N/A	OFD-133A-3.1 (K11)	YD	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	3CCWMJ0005	COND INLET EXP JOINT	N/A	OFD-133A-3.2 (K2)	TB	N/A	In Service In Service	NO	N/A	N/A	NONE

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 Condenser Circulating Water										
N/A	N/A	3CCWMJ0006 U3 Condenser Circulating Water	COND INLET EXP JOINT	N/A	OFD-133A-3.2 (K4)	TB	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	3CCWMJ0007 U3 Condenser Circulating Water	COND INLET EXP JOINT	N/A	OFD-133A-3.2 (K5)	TB	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	3CCWMJ0008 U3 Condenser Circulating Water	COND INLET EXP JOINT	N/A	OFD-133A-3.2 (K8)	TB	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	3CCWMJ0009 U3 Condenser Circulating Water	COND INLET EXP JOINT	N/A	OFD-133A-3.2 (K9)	TB	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	3CCWMJ0010 U3 Condenser Circulating Water	COND INLET EXP JOINT	N/A	OFD-133A-3.2 (K11)	TB	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	3CCWMJ0020 U3 Condenser Circulating Water	EM DISCH EXP JOINT	N/A	OFD-133A-3.2 (G3)	TB	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	3CCWMJ0021	EM DISCH EXP JOINT	N/A	OFD-133A-3.2 (G3)	TB	N/A	In Service	NO	N/A	N/A	NONE

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 Condenser Circulating Water						In Service				
N/A	N/A	3CCWMJ0022 U3 Condenser Circulating Water	EM DISCH EXP JOINT	N/A	OFD-133A-3.2 (G10)	TB	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	3CCWMJ0023 U3 Condenser Circulating Water	EM DISCH EXP JOINT	N/A	OFD-133A-3.2 (G10)	TB	N/A	In Service In Service	NO	N/A	N/A	NONE
20	5	3CCWPU0001 U3 Condenser Circulating Water	CCW PUMP 3A	N/A	OFD-133A-3.1 (K3)	YD	810'	On/off On	YES	O-2702	3TC-04	S,R
20	5	3CCWPU0002 U3 Condenser Circulating Water	CCW PUMP 3B	N/A	OFD-133A-3.1 (K5)	YD	810'	On/off On	YES	O-1702	2TD-04	S,R
20	5	3CCWPU0003 U3 Condenser Circulating Water	CCW PUMP 3C	N/A	OFD-133A-3.1 (K8)	YD	810'	On/off On	YES	O-2702	3TE-04	S,R
20	5	3CCWPU0004 U3 Condenser Circulating Water	CCW PUMP 3D	N/A	OFD-133A-3.1 (K9)	YD	810'	On/off On	YES	O-2702	3TC-05	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
10	N/A	3CCWPU0024 U3 Condenser Circulating Water	EFWPT OIL COOLER PUMP	N/A	OFD-133A-3.2 (K13)	TB	775'	Off On	YES	O-2703-G	3XS3-04C	S,R
20	N/A	3CCWVA0010 U3 Condenser Circulating Water	DISCH ISOL VALVE	N/A	OFD-133A-3.1 (K2)	YD	796'	Open/Closed Open	YES	O-2703-G	3XS1-F02C	S,R
20	N/A	3CCWVA0011 U3 Condenser Circulating Water	DISCH ISOL VALVE	N/A	OFD-133A-3.1 (K5)	YD	796'	Open/Closed Open	YES	O-2703-G	3XS1-F02D	S,R
20	N/A	3CCWVA0012 U3 Condenser Circulating Water	DISCH ISOL VALVE	N/A	OFD-133A-3.1 (K7)	YD	796'	Open/Closed Open	YES	O-2703-G	3XS3-02E	S,R
20	N/A	3CCWVA0013 U3 Condenser Circulating Water	DISCH ISOL VALVE	N/A	OFD-133A-3.1 (K10)	YD	796'	Open/Closed Open	YES	O-2703-G	3XS1-F03C	S,R
N/A	N/A	3CCWVA0026 U3 Condenser Circulating Water	CCW VENT VALVE	N/A	OFD-133A-3.1 (I3)	YD	796'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	3CCWVA0027 U3 Condenser Circulating Water	CCW VENT VALVE	N/A	OFD-133A-3.1 (H5)	YD	796'	Closed Closed	NO	N/A	N/A	R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
N/A	N/A	3CCWVA0028 U3 Condenser Circulating Water	CCW VENT VALVE	N/A	OFD-133A-3.1 (H7)	YD	796'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	3CCWVA0029 U3 Condenser Circulating Water	CCW VENT VALVE	N/A	OFD-133A-3.1 (I10)	YD	796'	Closed Closed	NO	N/A	N/A	R
20	N/A	3CCWVA0093 U3 Condenser Circulating Water	EM DISCHARGE VALVE	N/A	OFD-133A-3.2 (D2)	TB	775'	Closed Open	YES	O-705-B	1MVC3-01D	S,R
N/A	N/A	3CCWVA0268 U3 Condenser Circulating Water	SSF ASW PUMP DISCH ISOL	N/A	OFD-133A-2.5 (H12)	SSF	N/A	Closed Either	NO	N/A	N/A	NONE
N/A	N/A	3CCWVA0269 U3 Condenser Circulating Water	CROSSOVER ISOLATION TO A	N/A	OFD-121D-3.1 (G13)	AB	771'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	3CCWVA0287 U3 Condenser Circulating Water	SSF ISOL VALVE	N/A	OFD-133A-2.5 (G-12)	SSF	754'	Closed Closed	NO	N/A	N/A	R
18	6	3CDM000A U3 Polishing Demineralizer	POLISHING DEMINERALIZER 3A	N/A	OFD-121A-3.5 (I2)	TB	775'	In Service Either	NO	N/A	N/A	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
Evaluation type "S" indicates that a seismic evaluation was performed.
Evaluation type "R" indicates that a relay evaluation was performed.
Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
18	6	3CDM000B U3 Polishing Demineralizer	POLISHING DEMINERALIZER 3B	N/A	OFD-121A-3.5 (I5)	TB	775'	In Service Either	NO	N/A	N/A	S
18	6	3CDM000C U3 Polishing Demineralizer	POLISHING DEMINERALIZER 3C	N/A	OFD-121A-3.5 (I7)	TB	775'	In Service Either	NO	N/A	N/A	S
18	6	3CDM000D U3 Polishing Demineralizer	POLISHING DEMINERALIZER 3D	N/A	OFD-121A-3.5 (I10)	TB	775'	In Service Either	NO	N/A	N/A	S
18	6	3CDM000E U3 Polishing Demineralizer	POLISHING DEMINERALIZER 3E	N/A	OFD-121A-3.5 (I13)	TB	775'	In Service Either	NO	N/A	N/A	S
N/A	N/A	3CFL0002 U3 Condensate	RESIN TRAP	N/A	OFD-121A-3.5 (D2)	TB	775'	In Service Not Used	NO	N/A	N/A	S*
N/A	N/A	3CFL000A U3 Condensate	HOTWELL PUMP STRAINER A	N/A	OFD-121A-3.4(I3)	TB	775'	In Service Not Used	NO	N/A	N/A	S*
N/A	N/A	3CFL000B U3 Condensate	HOTWELL PUMP STRAINER B	N/A	OFD-121A-3.4(J3)	TB	775'	In Service Not Used	NO	N/A	N/A	S*
N/A	N/A	3CFL000C U3 Emergency Feedwater	HOTWELL PUMP STRAINER C	N/A	OFD-121A-3.4(I3)	TB	775'	In Service Not Used	NO	N/A	N/A	S*
16	N/A	3CFTK000A	CORE FLOOD TANK 3A	N/A	O-6	RB	797'	In Service In Service	NO	N/A	N/A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 Core Flood										
16	N/A	3CFTK000B U3 Core Flood	CORE FLOOD TANK 3B	N/A	O-10	RB	818'	In Service In Service	NO	N/A	N/A	S,R
10	7	3CHX002A U3 Condensate	CONDENSATE COOLER 3A	N/A	OFD-121A-3.4 (D3)	TB	775'	In Service Either	NO	N/A	N/A	S
10	7	3CHX002B U3 Condensate	CONDENSATE COOLER 3B	N/A	OFD-121A-3.4 (C3)	TB	775'	In Service Either	NO	N/A	N/A	S
52	8	3CLT0015A U3 ICCM	UST 3B LEVEL	N/A	OFD-121A-3.7 (J1)	TB	838'	In Service In Service	YES	O-2705	3KVIA-12	S,R
52	8	3CLT0036 U3 ICCM	UST 3A LEVEL	N/A	OFD-121A-3.7 (J10)	TB	838'	In Service In Service	YES	O-2705	3KVIB-11	S,R
N/A	N/A	3CMJ0007 U3 Emergency Feedwater	UST DOME TO 3A UST EXP JOINT	N/A	OFD-121A-3.7 (J6)	TB	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	3CMJ0008 U3 Emergency Feedwater	UST DOME TO 3B UST EXP JOINT	N/A	OFD-121A-3.7 (J7)	TB	N/A	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	3CMJ0010 U3 Plant Heating	CST PUMP 3A EXP JOINT	N/A	OFD-121A-3.7 (D8)	AB	N/A	In Service Not Used	NO	N/A	N/A	NONE

Notes:

- Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
- Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
- Evaluation type "S" indicates that a seismic evaluation was performed.
- Evaluation type "R" indicates that a relay evaluation was performed.
- Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
- Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
- Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
- The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
- All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
N/A	N/A	3CMJ0011 U3 Plant Heating	CST PUMP 3B EXP JOINT	N/A	OFD-121A-3.7 (B8)	AB	N/A	In Service Not Used	NO	N/A	N/A	NONE
52	8	3CPS0015 U3 Condensate	UST MAKEUP LEVEL CONTROL (PS-15)	N/A	OEE-345-74	TB	838'	In Service Not Used	N/A	N/A	N/A	S,R
52	8	3CPS0036 U3 Condensate	UST MAKEUP LEVEL CONTROL (PS-36)	N/A	OEE-345-74	TB	838'	In Service Not Used	N/A	N/A	N/A	S,R
1	N/A	3CPS0227 U3 Condensate DC Interlocks	CONDENSATE BOOSTER PUMP SUCTION HEADER PRESS LOW	N/A	OEE-345-00-A	TB	775'	In Service Not Used	N/A	N/A	N/A	S,R
20	N/A	3CPU0010 U3 Condensate	HOTWELL PUMP 3A	N/A	OFD-121A-3.4 (L5)	TB	775'	On Off	NO	N/A	N/A	S,R
20	N/A	3CPU0011 U3 Condensate	HOTWELL PUMP 3B	N/A	OFD-121A-3.4 (J5)	TB	775'	On Off	NO	N/A	N/A	S,R
20	N/A	3CPU0012 U3 Condensate	HOTWELL PUMP 3C	N/A	OFD-121A-3.4 (I5)	TB	775'	On Off	NO	N/A	N/A	S,R
10	N/A	3CPU0019 U3 Condensate	HOLDING PUMP	N/A	OFD-121A-3.5 (H2)	TB	775'	In Service Not Used	NO	N/A	N/A	S
10	N/A	3CPU0020	HOLDING PUMP	N/A	OFD-121A-3.5 (H4)	TB	775'	In Service	NO	N/A	N/A	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 Condensate						Not Used				
10	N/A	3CPU0021 U3 Condensate	HOLDING PUMP 3C	N/A	OFD-121A-3.5 (H7)	TB	775'	In Service Not Used	NO	N/A	N/A	S
10	N/A	3CPU0022 U3 Condensate	HOLDING PUMP 3D	N/A	OFD-121A-3.5 (H9)	TB	775'	In Service Not Used	NO	N/A	N/A	S
10	N/A	3CPU0023 U3 Condensate	HOLDING PUMP 3E	N/A	OFD-121A-3.5 (H12)	TB	775'	In Service Not Used	NO	N/A	N/A	S
10	111	3CRDACBKRCAB U3 Reactor Trip	CRD SYSTEM AC BKR CAB	N/A	O-2305A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
11	N/A	3CRDDCBKRCAB U3 Reactor Trip	CRD SYSTEM DC BKR CAB	N/A	O-2710-A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
16	N/A	3CRDLC U3 Reactor Trip	CONTROL ROD DRIVE LOGIC CABINETS	N/A	O-2710A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
1	11	3CREL U3 Emergency Lighting	UNIT 3 CONTROL ROOM EMERGENCY LIGHTS	N/A	O-2846-A	AB	822'	N/A N/A	N/A	O-2705-B	3DL2-07/08	S
10	168	3CTK0003 U3 Condensate	SLURRY TANK	N/A	OFD-121A-3.5 (D5)	TB	775'	In Service In Service	NO	N/A	N/A	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
34	112	3CTK000A U3 Condensate	UPPER SURGE TANK 3A	N/A	OFD-121A-3.7 (J8)	TB	838'	In Service In Service	NO	N/A	N/A	S
34	112	3CTK000B U3 Condensate	UPPER SURGE TANK 3B	N/A	OFD-121A-3.7 (J3)	TB	838'	In Service In Service	NO	N/A	N/A	S
16	170	3CTK000C U3 Condensate	UPPER SURGE TANK DOME	N/A	OFD-121A-3.7 (K6)	TB	838+	In Service In Service	NO	N/A	N/A	S
N/A	N/A	3CVA0001 U3 Condensate	HOTWELL PUMP INLET ISOL VALVE	N/A	OFD-121A-3.4 (I2)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3CVA0003 U3 Condensate	HOTWELL PUMP OUTLET ISOL VLV	N/A	OFD-121A-3.4 (I7)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3CVA0004 U3 Condensate	HOTWELL PUMP INLET ISOL VALVE	N/A	OFD-121A-3.4 (J2)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3CVA0006 U3 Condensate	HOTWELL PUMP OUTLET ISOL VLV	N/A	OFD-121A-3.4 (J7)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3CVA0007 U3 Condensate	HOTWELL PUMP INLET ISOL VALVE	N/A	OFD-121A-3.4 (L2)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3CVA0009	HOTWELL PUMP OUTLET ISOL VLV	N/A	OFD-121A-3.4 (L7)	TB	N/A	Open Either	NO	N/A	N/A	NONE

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
Evaluation type "S" indicates that a seismic evaluation was performed.
Evaluation type "R" indicates that a relay evaluation was performed.
Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 Condensate										
N/A	N/A	3CVA0010 U3 Condensate	HOTWELL PUMP ISOLATION VALVE	N/A	OFD-121A-3.4 (H7)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3CVA0014 U3 Condensate	HWP THROTTLE VALVE	N/A	OFD-121A-3.4 (H5)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3CVA0015 U3 Condensate	HWP BYPASS VALVE	N/A	OFD-121A-3.4 (H5)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3CVA0017 U3 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-3.5 (K2)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3CVA0018 U3 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-3.5 (G2)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3CVA0019 U3 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-3.5 (K5)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3CVA0020 U3 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-3.5 (G5)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3CVA0021 U3 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-3.5 (K8)	TB	N/A	Open Either	NO	N/A	N/A	NONE

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
N/A	N/A	3CVA0022 U3 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-3.5 (G8)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3CVA0023 U3 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-3.5 (K10)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3CVA0024 U3 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-3.5 (G10)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3CVA0025 U3 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-3.5 (K13)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3CVA0026 U3 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-3.5 (G13)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3CVA0148 U3 Condensate	CST PUMPS CONTROL	N/A	OFD-121A-3.7 (B12)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3CVA0152 U3 Condensate	UST RISER ISOLATION	N/A	OFD-121A-3.7 (I6)	TB	775'	Open Open	NO	N/A	N/A	R
N/A	N/A	3CVA0153 U3 Condensate	UST RISER ISOLATION	N/A	OFD-121A-3.7 (I7)	TB	775'	Open Open	NO	N/A	N/A	R
N/A	N/A	3CVA0156	UST RISER ISOLATION	N/A	OFD-121A-3.7 (I7)	TB	775'	Open Open	NO	N/A	N/A	R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
Evaluation type "S" indicates that a seismic evaluation was performed.
Evaluation type "R" indicates that a relay evaluation was performed.
Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 Condensate										
N/A	N/A	3CVA0158 U3 Condensate	UST RISER ISOLATION	N/A	OFD-121A-3.7 (H5)	TB	775'	Open Open	NO	N/A	N/A	R
N/A	N/A	3CVA0160 U3 Condensate	UST SUPPLY ISO TO TDEFW	N/A	OFD-121A-3.8 (E8)	TB	775'	Closed Closed	NO	N/A	N/A	R
52	N/A	3CVA0176 U3 Condensate	UST TO COND ISOL VALVE	N/A	OFD-121A-3.8 (H7)	TB	775'	Open/closed Closed	YES	O-2704-C	3SKK-24	S,R
52	N/A	3CVA0187 U3 Condensate	UST TO COND ISOL VALVE	N/A	OFD-121A-3.8 (G7)	TB	775'	Open/closed Closed	YES	O-2704	3KA-30	S,R
52	N/A	3CVA0192 U3 Condensate	UST TO COND ISOL VALVE	N/A	OFD-121A-3.8 (J7)	TB	775'	Open/closed Closed	YES	O-2704	3KA-30	S,R
N/A	N/A	3CVA0225 U3 Condensate	POL DEMIN ISOL VALVE (BACKWASH INLET W/A VALVE)	N/A	OFD-121A-3.5 (H3)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	3CVA0229 U3 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-3.5 (I2)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3CVA0230 U3 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-3.5 (I2)	TB	N/A	Open Either	NO	N/A	N/A	NONE

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
N/A	N/A	3CVA0232 U3 Condensate	POL DEMIN ISOL VALVE (DRAIN U/A VALVE)	N/A	OFD-121A-3.5 (K1)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	3CVA0233 U3 Condensate	POL DEMIN ISOL VALVE (BACKWASH INLET W/B VALVE)	N/A	OFD-121A-3.5 (H5)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	3CVA0237 U3 Condensate	POL DEMIN ISOL VALVE (DRAIN U/B VALVE)	N/A	OFD-121A-3.5 (K4)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	3CVA0238 U3 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-3.5 (I4)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3CVA0239 U3 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-3.5 (I4)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3CVA0240 U3 Condensate	POL DEMIN ISOL VALVE (BACKWASH INLET W/C VALVE)	N/A	OFD-121A-3.5 (H8)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	3CVA0244 U3 Condensate	POL DEMIN ISOL VALVE (DRAIN U/C VALVE)	N/A	OFD-121A-3.5 (K7)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	3CVA0245 U3 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-3.5 (I7)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3CVA0246	POL DEMIN ISOL VALVE	N/A	OFD-121A-3.5 (I7)	TB	N/A	Open Either	NO	N/A	N/A	NONE

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 Condensate										
N/A	N/A	3CVA0247 U3 Condensate	POL DEMIN ISOL VALVE (BACKWASH INLET W/D VALVE)	N/A	OFD-121A-3.5 (H11)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	3CVA0251 U3 Condensate	POL DEMIN ISOL VALVE (DRAIN U/D VALVE)	N/A	OFD-121A-3.5 (K10)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	3CVA0252 U3 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-3.5 (I10)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3CVA0253 U3 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-3.5 (I10)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3CVA0254 U3 Condensate	POL DEMIN ISOL VALVE (BACKWASH INLET W/E VALVE)	N/A	OFD-121A-3.5 (H14)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	3CVA0258 U3 Condensate	POL DEMIN ISOL VALVE (DRAIN U/E VALVE)	N/A	OFD-121A-3.5 (K12)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	3CVA0259 U3 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-3.5 (I12)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3CVA0260 U3 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-3.5 (I12)	TB	N/A	Open Either	NO	N/A	N/A	NONE

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
Evaluation type "S" indicates that a seismic evaluation was performed.
Evaluation type "R" indicates that a relay evaluation was performed.
Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
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Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
N/A	N/A	3CVA0262 U3 Condensate	SLURRY TANK ISOLATION VALVE (Z VALVE)	N/A	OFD-121A-3.5 (D5)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	3CVA0263 U3 Condensate	POL DEMIN ISOL VALVE (X VALVE)	N/A	OFD-121A-3.5 (F5)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	3CVA0264 U3 Condensate	SLURRY TANK ISOLATION VALVE (L VALVE)	N/A	OFD-121A-3.5 (D4)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	3CVA0265 U3 Condensate	SLURRY TANK ISOLATION VALVE (D VALVE)	N/A	OFD-121A-3.5 (D4)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	3CVA0266 U3 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-3.5 (F8)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3CVA0267 U3 Condensate	POL DEMIN ISOL VALVE (VR VALVE)	N/A	OFD-121A-3.5 (F10)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	3CVA0268 U3 Condensate	POL DEMIN ISOL VALVE (QR VALVE)	N/A	OFD-121A-3.5 (F11)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	3CVA0271 U3 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-3.5 (K1)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
N/A	N/A	3CVA0272	POL DEMIN ISOL VALVE	N/A	OFD-121A-3.5 (K4)	TB	N/A	Closed Either	NO	N/A	N/A	NONE

Notes:

- Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
- Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
- Evaluation type "S" indicates that a seismic evaluation was performed.
- Evaluation type "R" indicates that a relay evaluation was performed.
- Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
- Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
- Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
- The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
- All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 Condensate										
N/A	N/A	3CVA0273 U3 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-3.5 (K7)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
N/A	N/A	3CVA0274 U3 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-3.5 (K9)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
N/A	N/A	3CVA0275 U3 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-3.5 (K12)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
22	N/A	3CVA0391 U3 Condensate	HOTWELL SUPPLY ISO TO TDEFV	N/A	OFD-121A-3.8 (J11)	TB	775'	Closed Open	NO	N/A	N/A	S,R
N/A	N/A	3CVA0826 U3 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-3.5 (K3)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
N/A	N/A	3CVA0829 U3 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-3.5 (K5)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
N/A	N/A	3CVA0832 U3 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-3.5 (K8)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
N/A	N/A	3CVA0835 U3 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-3.5 (K11)	TB	N/A	Closed Either	NO	N/A	N/A	NONE

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
N/A	N/A	3CVA0838 U3 Condensate	POL DEMIN ISOL VALVE	N/A	OFD-121A-3.5 (K13)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
15	106	3D U3 Pressurizer Heaters	600V PPB 3D (FOR PRESSURIZER HEATERS GROUP 3D BANK 2)	N/A	OM 315-19	RB	818'	In Service In Service	YES	O-2703-E	3XJ-02A	S,R
35	113	3DCA U3 125/250V DC PWR	125V DC 3DCA	N/A	O-2917(J4)	AB	796'	In Service In Service	YES	O-2703-G	3XS1-F04A	S,R
35	114	3DCB U3 125/250V DC PWR	125V DC 3DCB	N/A	O-2917(J4)	AB	796'	In Service In Service	YES	O-2703-G	3XS2-F04D	S,R
9	N/A	3DIA/INV U3 240/120V AC PWR	120V STATIC INV 3DIA	N/A	O-2705	AB	796'	In Service In Service	YES	O-2705	3DIA-33	S,R
36	N/A	3DIA/PPB U3 125/250V DC PWR	125V PPB 3DIA	N/A	O-2304-A	AB	809'	In Service In Service	YES	O-2705	3ADA	S,R
9	N/A	3DIB/INV U3 240/120V AC PWR	120V STATIC INV 3DIB	N/A	OM 346-104-1	AB	796'	In Service In Service	YES	O-2705	3DIB-33	S,R
36	N/A	3DIB/PPB U3 125/250V DC PWR	125V PPB 3DIB	N/A	O-2710A	AB	809'	In Service In Service	YES	O-2705	3ADB	S,R
9	N/A	3DIC/INV U3 240/120V AC PWR	120V STATIC INV 3DIC	N/A	O-2710-D	AB	796'	In Service In Service	YES	O-2705	3DIC-33	S,R
36	N/A	3DIC/PPB	125V PPB 3DIC	N/A	O-2710A	AB	809'	In Service	YES	O-2705	3ADC	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
Evaluation type "S" indicates that a seismic evaluation was performed.
Evaluation type "R" indicates that a relay evaluation was performed.
Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 125/250V DC PWR						In Service				
9	N/A	3DID/INV U3 240/120V AC PWR	120V STATIC INV 3DID	N/A	OM 346-104-1	AB	796'	In Service In Service	YES	O-2705	3DID-33	S,R
36	N/A	3DID/PPB U3 125/250V DC PWR	125V PPB 3DID	N/A	OM 315-37	AB	809'	In Service In Service	YES	O-2705	3ADD	S,R
1	N/A	3DL2/PPB U3 125/250V DC PWR	250V DC 3DL2 PPB	N/A	O-931	AB	796'	In Service In Service	YES	O-2705-B	3DP-F03CL	S,R
1	115	3DP U3 125/250V DC PWR	125/250V DC 3DP	N/A	O-2930A	TB	796'	In Service In Service	YES	O-2705-B	3DP-04A	S,R
RB	N/A	3EHC1 U3 Control Cabinet	EHC CAB 3EHC1	3EHC1,2,3	O-2710A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
10	116	3EHC1,2,3 U3 Control Cabinet	EHC CONTROL CABINET 3EHC1,2,3	N/A	N/A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
RB	N/A	3EHC2 U3 Control Cabinet	EHC CAB 3EHC2	3EHC1,2,3	O-2710A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
RB	N/A	3EHC3 U3 Control Cabinet	EHC CAB 3EHC3	3EHC1,2,3	O-2710A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
62	N/A	3EHTC1 U3 Control Cabinet	EHC TERM CAB 3EHTC1	N/A	O-2710A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
16	N/A	3EHTC2 U3 Control Cabinet	EHC TERM CAB 3EHTC2	N/A	O-2710A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
16	N/A	3EPSLP1 U3 Emergency Power Switching Logic	EPSL PANEL 3EPSLP1	N/A	O-2710-A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
16	117	3EPSLP2 U3 Emergency Power Switching Logic	EPSL PANEL 3EPSLP2	N/A	O-2710-A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
58	118	3ESFAS U3 Control Cabinets	UNIT 3 ESFAS CABINETS	N/A	OM-2304-1	AB	822'	In Service In Service	N/A	N/A	N/A	S,R
10	119	3ESTC1 U3 Control Cabinet	ESFAS ODD CH TERM CAB 3ESTC1	N/A	O-2710A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
10	N/A	3ESTC2 U3 Control Cabinet	ESFAS EVEN CH TERM CAB 3ESTC2	N/A	O-2710A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
16	N/A	3ESTC2A U3 Control Cabinet	ESFAS AUX RLY CAB 3ESTC2A	N/A	O-2710A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
10	N/A	3ESTC3 U3 Engineered Safegards	ES ODD & EVEN RLY CAB 3ESTC3	N/A	OEE-338-22	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
N/A	N/A	3FDWFE0153 U3 Emergency Feedwater	SG 3A LEVEL INDICATOR	N/A	OFD-121B-3.3 (J12)	AB	783'	Not Used In Service	NO	N/A	N/A	S*,R
N/A	N/A	3FDWFE0154 U3 Emergency Feedwater	SG 3B LEVEL INDICATOR	N/A	OFD-121B-3.3 (F12)	RB	783'	Not Used In Service	NO	N/A	N/A	S*,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSF" indicates that the equipment is part of the NSSF system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
52	N/A	3FDWFT0140 U3 Emergency Feedwater	3A EFW HEADER FLOW	N/A	OFD-121B-3.3 (J14)	AB	783'	Not Used In Service	YES	O-1705	2KVIC-08	S,R
52	N/A	3FDWFT0141 U3 Emergency Feedwater	3B EFW HEADER FLOW	N/A	OFD-121B-3.3 (F14)	AB	783'	Not Used In Service	YES	O-2705	3KVIC-09	S,R
52	N/A	3FDWFT0153 U3 Emergency Feedwater	3A EFW HEADER FLOW TRANSMITTER	N/A	OFD-121D-3.1(J9)	AB	775'	Not Used In Service	YES	O-2705	3KVIB-09	S,R
52	N/A	3FDWFT0154 U3 Emergency Feedwater	3B EFW HEADER FLOW TRANSMITTER	N/A	OFD-121D-3.1(C9)	AB	775'	Not Used In Service	YES	O-2705	3KVIB-09	S,R
RB	N/A	3FDWHX0004 U3 Feedwater	EFW PUMP 3A MOTOR COOLER	3FDWPU0004	OFD-124A-3.3(K3)	TB	775'	Not Used In Service	NO	N/A	N/A	S
RB	N/A	3FDWHX0005 U3 Feedwater	EFW PUMP 3B MOTOR COOLER	3FDWPU0005	OFD-124A-3.3(I3)	TB	775'	Not Used In Service	NO	N/A	N/A	S
10	N/A	3FDWLT0080 U3 Emergency Feedwater	SG 3A LEVEL TRANSMITTER	N/A	OFD-121B-3.3 (J12)	RB	777'	In Service In Service	YES	O-2705	3KVIA-12	S,R
10	N/A	3FDWLT0081 U3 Emergency Feedwater	SG 3B LEVEL TRANSMITTER	N/A	OFD-121B-3.3 (F12)	RB	777'	In Service In Service	YES	O-2705	3KVIB-11	S,R
10	N/A	3FDWLT0082	SG 3A LEVEL TRANSMITTER	N/A	OFD-121B-3.3 (J14)	RB	777'	In Service In Service	YES	O-2705	3KVIA-12	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 Emergency Feedwater										
10	N/A	3FDWLT0083 U3 Emergency Feedwater	SG 3B LEVEL TRANSMITTER	N/A	OFD-121B-3.3 (F14)	RB	777'	In Service In Service	YES	O-2705	3KVIB-11	S,R
1	N/A	3FDWPS0300 U3 Emergency Feedwater	3EFPT LOW HYDR OIL PRESS SWITCH	N/A	OEE-347-05	TB	775'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	3FDWPS0382 U3 Emergency Feedwater	FWP 3A CONTROL OIL PRESS SWITCH (3TD-00)	N/A	OEE-317-66	TB	775'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	3FDWPS0383 U3 Emergency Feedwater	FWPT 3A CONTROL OIL PRESS SWITCH (3TE-00)	N/A	OEE-317-67	TB	775'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	3FDWPS0384 U3 Emergency Feedwater	FWP 3B CONTROL OIL PRESS SWITCH (3TD-00)	N/A	OEE-317-66	TB	775'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	3FDWPS0385 U3 Emergency Feedwater	MDEFWP 3B CONTROL OIL PRESS SWITCH (3TE-00)	N/A	OEE-317-67	TB	775'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	3FDWPS0386 U3 Emergency Feedwater	MDEFWP 3A DISCH PRESS SWITCH (3TD-00)	N/A	OEE-317-66	TB	775'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	3FDWPS0387 U3 Emergency Feedwater	MDEFWP 3A DISCH PRESS SWITCH (3TE-00)	N/A	OEE-317-67	TB	775'	In Service In Service	NO	N/A	N/A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
Evaluation type "S" indicates that a seismic evaluation was performed.
Evaluation type "R" indicates that a relay evaluation was performed.
Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
1	N/A	3FDWPS0388 U3 Emergency Feedwater	FWPT 3B DISCH PRESS LOW	N/A	OEE-317-66	TB	775'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	3FDWPS0389 U3 Emergency Feedwater	FWPT 3B DISCH PRESS LOW	N/A	OEE-317-67	TB	775'	In Service In Service	NO	N/A	N/A	S,R
9	N/A	3FDWPS1009 U3 Emergency Feedwater	MAIN FWP DISCH PRESS SWITCH (3MS-93)	N/A	OEE-347-02	TB	775'	In Service In Service	NO	N/A	N/A	S,R
9	N/A	3FDWPS1010 U3 Emergency Feedwater	MAIN FWP DISCH PRESS SWITCH (3MS-93)	N/A	OEE-347-02	TB	775'	In Service In Service	NO	N/A	N/A	S,R
9	N/A	3FDWPS1011 U3 Emergency Feedwater	MAIN FWP DISCH HDR PRESS SWITCH (3MS-93)	N/A	OEE-347-02	TB	775'	In Service In Service	NO	N/A	N/A	S,R
9	N/A	3FDWPS1012 U3 Emergency Feedwater	MAIN FWP DISCH HDR PRESS SWITCH (3MS-93)	N/A	OEE-347-02	TB	775'	In Service In Service	NO	N/A	N/A	S,R
10	N/A	3FDWPU0003 U3 Emergency Feedwater	TDEFW PUMP	N/A	OFD-124A-3.3(J13)	TB	775'	Off On	N/A	N/A	STEAM	S,R
10	N/A	3FDWPU0004 U3 Emergency Feedwater	MDEFW PUMP 3A	N/A	OFD-121D-3.1 (K3)	TB	775'	Off On	YES	O-2702	3TD-00	S,R
10	N/A	3FDWPU0005	MDEFW PUMP 3B	N/A	OFD-121D-3.1 (C3)	TB	775'	Off On	YES	O-2702	3TE-00	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 Emergency Feedwater										
RB	N/A	3FDWTR0003 U3 Emergency Feedwater	EFWP TURBINE	3FDWPU0003	OFD-122A-3.4 (G10)	TB	775'	Off Throttled	NO	N/A	N/A	S
40	N/A	3FDWVA0086 U3 Emergency Feedwater	PRESS REG TD PUMP SEALS	N/A	OFD-121D-3.1 (F2)	TB	775'	Closed Throttled	NO	N/A	N/A	S
40	N/A	3FDWVA0087 U3 Emergency Feedwater	PRESS REG TD PUMP SEALS	N/A	OFD-121D-3.1 (G3)	TB	775'	Closed Throttled	NO	N/A	N/A	S
1	N/A	3FDWVA0105 U3 Emergency Feedwater	SG 3A SAMPLE ISOLATION	N/A	OFD-110A-3.1 (D3)	RB	797'	Open/closed Closed	YES	O-2703-G	3XS1-R06C	S,R
17	N/A	3FDWVA0106 U3 Emergency Feedwater	SG 3A SAMPLE ISOLATION	N/A	OFD-110A-3.1 (D5)	AB	809'	Open/closed Closed	YES	O-2705	3DIB-25	S,R
15	N/A	3FDWVA0107 U3 Emergency Feedwater	SG 3B SAMPLE ISOLATION	N/A	OFD-110A-3.1 (F3)	RB	810'	Open/closed Closed	YES	O-2703-G	3XS1-R06D	S,R
17	N/A	3FDWVA0108 U3 Emergency Feedwater	SG 3B SAMPLE ISOLATION	N/A	OFD-110A-3.1 (F5)	AB	809'	Open/closed Closed	YES	O-2705	3DIB-25	S,R
40	N/A	3FDWVA0129 U3 Emergency Feedwater	PRESS REG TD PUMP SEALS	N/A	OFD-121D-3.1(G3)	TB	775'	Closed Throttled	NO	N/A	N/A	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
40	N/A	3FDWVA0218 U3 Emergency Feedwater	PRESS REG TD PUMP SEALS	N/A	OFD-121D-3.1(G3)	TB	775'	Closed Throttled	NO	N/A	N/A	S
17	N/A	3FDWVA0315 U3 Emergency Feedwater	MDEFW PUMP 3A ISOLATION	N/A	OFD-121D-3.1 (K10)	AB	809'	Closed Throttled	YES	O-2705	3DIB-10	S,R
17	N/A	3FDWVA0316 U3 Emergency Feedwater	MDEFW PUMP 3B ISOLATION	N/A	OFD-121D-3.1 (D10)	AB	809'	Closed Throttled	YES	O-2705	3DIC-10	S,R
N/A	N/A	3FDWVA0347 U3 Emergency Feedwater	MDEFW PUMP 3B ISOLATION	N/A	OFD-121D-3.1 (D12)	AB	822'	Open Open	NO	N/A	N/A	R
N/A	N/A	3FDWVA0368 U3 Emergency Feedwater	TDEFW TO HEADER A	N/A	OFD-121D-3.1 (I7)	TB	775'	Open Open	NO	N/A	N/A	R
N/A	N/A	3FDWVA0369 U3 Emergency Feedwater	TDEFW TO HEADER B	N/A	OFD-121D-3.1 (D7)	TB	775'	Open Open	NO	N/A	N/A	R
N/A	N/A	3FDWVA0372 U3 Emergency Feedwater	MDEFW PUMP 3A ISOLATION	N/A	OFD-121D-3.1 (K7)	TB	775'	Open Open	NO	N/A	N/A	R
N/A	N/A	3FDWVA0374 U3 Emergency Feedwater	STARTUP HEADER ISOL	N/A	OFD-121D-3.1 (J7)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	3FDWVA0382	MDEFW PUMP 3B ISOLATION	N/A	OFD-121D-3.1 (D7)	TB	775'	Open Open	NO	N/A	N/A	R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 Emergency Feedwater										
N/A	N/A	3FDWVA0384 U3 Emergency Feedwater	STARTUP HEADER ISOL	N/A	OFD-121D-3.1 (D7)	TB	775'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	3FDWVA0549 U3 Emergency Feedwater	3A MDEFDWP RECIRC REGULATOR	N/A	OFD-121D-3.1 (I1)	TB	775'	Open Open	NO	N/A	N/A	S
N/A	N/A	3FDWVA0550 U3 Emergency Feedwater	3B MDEFDWP RECIRC REGULATOR	N/A	OFD-121D-3.1 (E1)	TB	775'	Open Open	NO	N/A	N/A	S
1	N/A	3HBP U3 Control Panel	UNIT 3 HEATER BLANKETING PANEL	N/A	O-2015	TB	822'	In Service In Service	N/A	N/A	N/A	S,R
1	N/A	3HDPS0377 U3 Main Steam	1ST STAGE RH PRESS SWITCH	N/A	OEE-354-05	TB	822'	In service In service	YES	O-2703	3XA-A-F02A	S,R
1	N/A	3HPIEP0002 U3 High Pressure Injection	RCP SEAL INJECTION FLOW	N/A	OM-2201.H-0100	AB	775'	In service In service	YES	O-2705-A	3KU-21	S,R
N/A	N/A	3HPIFE0007 U3 High Pressure Injection	A LOOP INJ FLOW ELEMENT	N/A	OFD-101A-3.3 (J12)	AB	N/A	Not Used In Service	NO	N/A	N/A	NONE
N/A	N/A	3HPIFE0008 U3 High Pressure Injection	HPI LOOP 3B FLOW ELEMENT	N/A	O-435-C	AB	N/A	Not Used In Service	NO	N/A	N/A	NONE
N/A	N/A	3HPIFE0075	RCP SEAL INJ FLOW	N/A	OFD-101A-3.4 (H7)	AB	N/A	In Service	NO	N/A	N/A	NONE

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
Evaluation type "S" indicates that a seismic evaluation was performed.
Evaluation type "R" indicates that a relay evaluation was performed.
Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 High Pressure Injection	ELEMENT					In Service				
N/A	N/A	3HPIFE0162 U3 High Pressure Injection	B LOOP INJ FLOW ELEMENT	N/A	OFD-101A-3.4 (E8)	AB	N/A	Not Used In Service	NO	N/A	N/A	NONE
21	34	3HPIFL000A U3 High Pressure Injection	RCP SEAL SUPPLY FILTER	N/A	OFD-101A-3.4 (I5)	RB	783'	In Service In Service	NO	N/A	N/A	S
21	34	3HPIFL000B U3 High Pressure Injection	RCP SEAL SUPPLY FILTER	N/A	OFD-101A-3.4 (I5)	RB	783'	In Service In Service	NO	N/A	N/A	S
1	N/A	3HPIFT0007A U3 High Pressure Injection	A LOOP INJ FLOW TRANSMITTER	N/A	OFD-101A-3.3 (J12)	AB	758'	Not Used In Service	YES	O-2705	3KVIA-12	S,R
1	N/A	3HPIFT0008A U3 High Pressure Injection	HPI LOOP 3B FLOW XMTR	N/A	OEE-351-51	AB	758'	Not Used In Service	YES	O-2705	3KVIB-11	S,R
21	N/A	3HPIFT0075 U3 High Pressure Injection	RCP SEAL INJ FLOW TRANSMITTER	N/A	OFD-101A-3.4 (H7)	AB	783'	In Service In Service	YES	O-2705-A	ICS POWER	S,R
1	N/A	3HPIFT0101 U3 High Pressure Injection	RC PUMP SEAL INLET FLOW XMTR (Powered by ICS)	N/A	OM-2201.H-100	AB	783'	In Service In Service	YES	O-2704	3KM-28	S,R
1	N/A	3HPIFT0102 U3 High Pressure Injection	RC PUMP SEAL INLET FLOW XMTR (Powered by ICS)	N/A	OM-2201.H-100	AB	783'	In Service In Service	YES	O-2704	3KM-28	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
1	N/A	3HIPT0103 U3 High Pressure Injection	RC PUMP SEAL INLET FLOW XMTR (Powered by ICS)	N/A	OM-2201.H-100	AB	783'	In Service In Service	YES	O-2704	3KM-28	S,R
1	N/A	3HIPT0104 U3 High Pressure Injection	RC PUMP SEAL INLET FLOW XMTR (Powered by ICS)	N/A	OM-2201.H-100	AB	783'	In Service In Service	YES	O-2704	3KM-28	S,R
RB	N/A	3HPIHX0001 U3 High Pressure Injection	HPI PUMP 3A MOTOR COOLER	3HPIPU0001	OFD-124B-3.1(K11)	TB	758'	In Service In Service	NO	N/A	N/A	S
RB	N/A	3HPIHX0002 U3 High Pressure Injection	HPI PUMP 3B MOTOR COOLER	3HPIPU0002	OFD-124B-3.1(I11)	TB	758'	In Service In Service	NO	N/A	N/A	S
RB	N/A	3HPIHX0003 U3 High Pressure Injection	HPI PUMP 3C MOTOR COOLER	3HPIPU0003	OFD-124B-3.1(H11)	TB	758'	Not Used In Service	NO	N/A	N/A	S
10	N/A	3HPIHX000A U3 High Pressure Injection	LETDOWN COOLER 3A	N/A	OFD-101A-3.1 (L4)	RB	777'	In Service Not Used	NO	N/A	N/A	S
10	N/A	3HPIHX000B U3 High Pressure Injection	LETDOWN COOLER 3B	N/A	OFD-101A-3.1 (J4)	RB	777'	Not Used Not Used	NO	N/A	N/A	S
52	N/A	3HPILT0033P1 U3 High Pressure Injection	LDST Level #1	N/A	OFD-101A-3.2 (C5)	AB	771'	In Service In Service	YES	O-2705-A	3KI-01	S
52	N/A	3HPILT0033P2	LDST Level #2	N/A	OFD-101A-3.2 (C5)	AB	771'	In Service In Service	YES	O-2705-A	3KI-01	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
Evaluation type "S" indicates that a seismic evaluation was performed.
Evaluation type "R" indicates that a relay evaluation was performed.
Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 High Pressure Injection										
52	N/A	3HPIPS0357 U3 High Pressure Injection	LETDOWN FLOW TEMP HIGH INTERLOCK	N/A	OEE-351-03	AB	783'	In Service In Service	YES	O-2705	3DIB-25	S,R
10	N/A	3HPIPU0001 U3 High Pressure Injection	HPI PUMP 3A	N/A	OFD-101A-3.3 (J7)	AB	758'	On/Off On	YES	O-2702	3TC-08	S,R
10	N/A	3HPIPU0002 U3 High Pressure Injection	HPI PUMP 3B	N/A	OFD-101A-3.3 (G7)	AB	758'	On/Off On	YES	O-2702	3TE-09	S,R
10	N/A	3HPIPU0003 U3 High Pressure Injection	HPI PUMP 3C	N/A	OFD-101A-3.3 (C8)	AB	758'	Off On	YES	O-2702	3TD-09	S,R
10	35	3HPITK0001 U3 High Pressure Injection	LETDOWN STORAGE TANK	N/A	OFD-101A-3.2 (D6)	AB	771'	In Service In Service	NO	N/A	N/A	S
N/A	N/A	3HPSVA0184 U3 High Pressure Service Water	EFWP OIL COOLER ISOL VALVE	N/A	OFD-124C-3.2 (H4)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
1	N/A	3HPVA0001 U3 High Pressure Injection	LETDOWN INLET ISOLATION	N/A	OFD-101A-3.1 (K2)	RB	777'	Open/Closed Either	NO	N/A	N/A	NONE
1	N/A	3HPVA0002 U3 High Pressure Injection	LETDOWN INLET ISOLATION	N/A	OFD-101A-3.1 (K2)	RB	777'	Open/Closed Either	NO	N/A	N/A	NONE

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
1	N/A	3HPVA0003 U3 High Pressure Injection	LETDOWN ISOLATION	N/A	OFD-101A-3.1 (K5)	RB	777'	Open/Closed Closed	YES	O-703-K	3XSF-F01C	S,R
1	N/A	3HPVA0004 U3 High Pressure Injection	LETDOWN ISOLATION	N/A	OFD-101A-3.1 (J5)	RB	777'	Open/Closed Closed	YES	O-703-K	3XSF-F01D	S,R
52	N/A	3HPVA0005 U3 High Pressure Injection	LETDOWN ISOLATION	N/A	OFD-101A-3.1 (K8)	AB	809'	Open Closed	YES	O-2705	3DIB-25	S,R
1	N/A	3HPVA0020 U3 High Pressure Injection	RCP SEAL RETURN ISOLATION	N/A	OFD-101A-3.1 (E6)	RB	809'	Open Closed	YES	O-703-K	3XSF-F02C	S,R
17	N/A	3HPVA0021 U3 High Pressure Injection	RCP SEAL RETURN CONTAIN ISOL	N/A	OFD-101A-3.1 (E7)	RB	809'	Open Closed	YES	O-2705	3DIB-25	S,R
N/A	N/A	3HPVA0022 U3 High Pressure Injection	LDST DRAIN	N/A	OFD-101A-3.2 (C8)	AB	783'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	3HPVA0023 U3 High Pressure Injection	HPI LDST SUCTION ISOLATION	N/A	OFD-101A-3.2 (D13)	AB	783'	Open Open	NO	N/A	N/A	R
17	N/A	3HPVA0024 U3 High Pressure Injection	BWST SUCTION ISOLATION	N/A	OFD-101A-3.3 (I2)	AB	771'	Closed Open	YES	O-2703-G	3XS1-R01D	S,R
17	N/A	3HPVA0025	BWST SUCTION ISOLATION	N/A	OFD-101A-3.3 (F2)	AB	771'	Closed Open	YES	O-2703-G	3XS2-R01A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 High Pressure Injection										
31	N/A	3HPVA0026 U3 High Pressure Injection	HPI LOOP 3A INJECTION	N/A	OFD-101A-3.4 (J6)	AB	809'	Closed Open	YES	O-2703-G	3XS1-R02A	S,R
31	N/A	3HPVA0027 U3 High Pressure Injection	HPI TRAIN 3B (EMERGENCY) INJECTION	N/A	OFD-101A-3.4 (D7)	AB	809'	Open Open	YES	O-2703-G	3XS2-R01B	S,R
1	N/A	3HPVA0031 U3 High Pressure Injection	RCP SEAL INJ FLOW CONTROL	N/A	OFD-101A-3.4 (H8)	AB	796'	Modulate Modulate	YES	O-2704	3KM-28	S,R
N/A	N/A	3HPVA0098 U3 High Pressure Injection	HPI PUMP 3B SUCTION	N/A	OFD-101A-3.3 (I3)	AB	758'	Open Open	NO	N/A	N/A	R
N/A	N/A	3HPVA0115 U3 High Pressure Injection	HPI DISCH HEADER SEP	N/A	OFD-101A-3.3 (H11)	AB	758'	Open Open	NO	N/A	N/A	R
N/A	N/A	3HPVA0226 U3 High Pressure Injection	RCP SEAL RETURN ISOL VALVE	N/A	OFD-101A-3.1 (E3)	RB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3HPVA0228 U3 High Pressure Injection	RCP SEAL RETURN ISOL VALVE	N/A	OFD-101A-3.1 (F3)	RB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3HPVA0230 U3 High Pressure Injection	RCP SEAL RETURN ISOL VALVE	N/A	OFD-101A-3.1 (I3)	RB	N/A	Open Either	NO	N/A	N/A	NONE

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

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Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
N/A	N/A	3HPVA0232 U3 High Pressure Injection	RCP SEAL RETURN ISOL VALVE	N/A	OFD-101A-3.1 (G3)	RB	N/A	Open Either	NO	N/A	N/A	NONE
17	N/A	3HPVA0355 U3 High Pressure Injection	HPI AUX SPRAY THROTTLE	N/A	OFD-101A-3.4 (L5)	AB	809'	Closed Open	YES	O-2705	3KVIC-07	S,R
N/A	N/A	3HPVA0405 U3 High Pressure Injection	SSF RCMU BYPASS ISOL	N/A	OFD-101A-3.5 (H10)	RB	777'	Closed Closed	NO	N/A	N/A	R
31	N/A	3HPVA0409 U3 High Pressure Injection	HPI CROSSOVER ISOLATION	N/A	OFD-101A-3.4 (E8)	AB	809'	Closed Open	YES	O-2703-G	3XS3-02D	S,R
N/A	N/A	3HPVA0410 U3 High Pressure Injection	HPI CROSSOVER ISOLATION	N/A	OFD-101A-3.4 (I7)	AB	N/A	Closed Either	NO	N/A	N/A	NONE
N/A	N/A	3HPVA0417 U3 High Pressure Injection	SSF RCMU MINIFLOW ISOL	N/A	OFD-101A-3.5 (H8)	RB	N/A	Closed Either	NO	N/A	N/A	NONE
1	N/A	3HPVA0426 U3 High Pressure Injection	ALT LETDOWN PATH ISOLATION	N/A	OFD-101A-3.5 (J9)	RB	777'	Closed Open	YES	O-703-K	3XSF-F04B	S,R
10	36	3HPVA0428 U3 High Pressure Injection	ALT LETDOWN PATH ISOLATION	N/A	OFD-101A-3.5 (J13)	RB	777'	Closed Open	YES	O-703-K	3XSF-1-F02B	S,R
RB	N/A	3ICSCABS	INTEGRATED CONTROL SYSTEM CABINETS	3ICS CABS	O-2710	AB	822'	In Service In Service	YES	N/A	N/A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 Control Cabinets										
52	N/A	3KA U3 Condensate	120V PPB 3KA	N/A	O-2013	TB	775'	In Service Not Used	YES	O-2703	3XF-01CT	S,R
1	N/A	3KC U3 208V PWR (PPB)	120V PPB 3KC	N/A	N/A	TB	796'	In Service In Service	YES	O-2703-A	3XGA-F05AB	S,R
1	N/A	3KC/XFMR U3 208V PWR (PPB)	600/208V TRANSFORMER 3KC	N/A	O-2704	TB	796'	In Service In Service	YES	O-2703-A	3XGA-F05AB	S
9	120	3KD U3 208V PWR (PPB)	120V PPB 3KD	N/A	O-2704	AB	771'	In Service In Service	YES	O-2703-E	3XN-08BB	S,R
62	N/A	3KE U3 208V PWR (PPB)	120V PPB 3KE	N/A	O-2917D	AB	796'	In Service In Service	YES	O-2703-D	3XO-R03BT	S,R
10	N/A	3KESP U3 Control Panel	KEOWEE EM START PANEL	N/A	O-2710A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
1	121	3KG U3 208V PWR (PPB)	120V PPB 3KG	N/A	O-2704	AB	838'	In Service In Service	YES	O-2703-C	3XT-05BT	S,R
27	123	3KI U3 240/120V AC PWR	120V PPB 3KI	N/A	O-2705A	AB	809'	In Service In Service	YES	O-2705-A	INV 3KI	S,R
9	N/A	3KI/INV U3 240/120V AC PWR	STATIC INVERTER 3KI (INCLUDES STATIC XFER SWITCH)	N/A	O-2705-A	AB	796'	In Service In Service	YES	O-2705-A	3ADF	S,R
1	N/A	3KI/SW/BP U3 240/120V AC PWR	STATIC SWITCH AND INVERTER BYPASS SWITCH 3KI	N/A	O-2705-A	AB	796'	In Service In Service	YES	O-2705-A	INV 3KI	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
1	N/A	3KI/SW/T U3 240/120V AC PWR	TRANSFER SWITCH 3KI	N/A	O-2705-A	AB	796'	In Service In Service	YES	O-2705-A	INV 3KI	S,R
1	N/A	3KI/XFMR U3 240/120V AC PWR	ISOLATION XFMR SHIELDED 3KI	N/A	O-2705-A	AB	796'	In Service In Service	YES	O-2705-A	INV 3KI	S
1	N/A	3KM U3 208V PWR (PPB)	120V PPB 3KM	N/A	O-2710A	AB	809'	In Service In Service	YES	O-2703-D	3XO-R06BT	S,R
1	N/A	3KRA U3 240/120V AC PWR	120V PPB 3KRA	N/A	O-2705-A	AB	809'	In Service In Service	YES	O-2705-A	3A	S,R
36	N/A	3KRB U3 240/120V AC PWR	120V PPB 3KRB	N/A	O-2710-A	AB	809'	In Service In Service	YES	O-2705-A	3A	S,R
1	122	3KTH1 U3 Reactor Coolant	120V PPB 3KTH1	N/A	OEE-362	AB	771'	In Service In Service	YES	O-2703-D	3XL-04BT	S,R
27	123	3KU U3 240/120V AC PWR	120V PPB 3KU	N/A	O-2910A	AB	809'	In Service In Service	YES	O-2705-A	INV 3KU	S,R
10	N/A	3KU/INV U3 240/120V AC PWR	STATIC INVERTER 3KU (INCLUDES STATIC XFER SWITCH)	N/A	O-2719D(3)	AB	796'	In Service In Service	YES	O-2705-A	3ADE	S,R
1	N/A	3KU/SW/BP U3 240/120V AC PWR	STATIC SWITCH AND INVERTER BYPASS SWITCH 3KU	N/A	O-2759-E1	AB	796'	In Service In Service	YES	O-2705-A	INV 3KU	S,R
1	N/A	3KU/SW/T U3 240/120V AC PWR	TRANSFER SWITCH 3KU	N/A	O-2759E	AB	796'	In Service In Service	YES	O-2705-A	INV 3KU	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
1	N/A	3KU/XFMR U3 240/120V AC PWR	ISOLATION XFMR SHIELDED 3KU	N/A	O-2705-A	AB	796'	In Service In Service	YES	O-2705-A	INV 3KU	S
36	N/A	3KVIA U3 240/120V AC PWR	120V PPB 3KVIA	N/A	O-2705	AB	809'	In Service In Service	YES	O-2705	INV 3DIA	S,R
36	N/A	3KVIB U3 240/120V AC PWR	120V PPB 3KVIB	N/A	O-2710A	AB	809'	In Service In Service	YES	O-2705	INV 3DIB	S,R
36	N/A	3KVIC U3 240/120V AC PWR	120V PPB 3KVIC	N/A	O-2710A	AB	809'	In Service In Service	YES	O-2705	INV 3DIC	S,R
36	N/A	3KVID U3 240/120V AC PWR	120V PPB 3KVID	N/A	O-2710A	AB	809'	In Service In Service	YES	O-2705	INV 3DID	S,R
36	N/A	3KX U3 240/120V AC PWR	120V PPB 3KX	N/A	O-2705-A	AB	809'	In Service In Service	YES	O-2705-A	INV 3KX	S,R
9	N/A	3KX/INV U3 240/120V AC PWR	STATIC INVERTER 3KX (INCLUDES STATIC XFER SWITCH)	N/A	O-2705-A	AB	796'	In Service In Service	YES	O-2705-A	3ADG	S,R
1	N/A	3KX/SW/BP U3 240/120V AC PWR	STATIC SWITCH AND INVERTER BYPASS SWITCH 3KX	N/A	O-2705-A	AB	796'	In Service In Service	YES	O-2705-A	INV 3KX	S,R
1	N/A	3KX/SW/T U3 240/120V AC PWR	TRANSFER SWITCH 3KX	N/A	O-2705-A	AB	796'	In Service In Service	YES	O-2705-A	INV 3KX	S,R
1	39	3L21/PPB U3 Emergency Lighting	125V DC PPB 3L21	N/A	O-931	AB	822'	In Service In Service	YES	O-2705-B	3DL2-08	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
1	39	3L22/PPB U3 Emergency Lighting	125V DC PPB 3L22	3L22	O-931	AB	822'	In Service In Service	YES	O-2705-B	3DL2-08	S,R
N/A	N/A	3LPIFE0004 U3 Low Pressure Injection	LPI TRAIN 3B INJ FLOW ELEMENT	N/A	OFD-102A-3.2 (E12)	AB	N/A	Not Used In Service	NO	N/A	N/A	NONE
N/A	N/A	3LPIFE0005 U3 Low Pressure Injection	LPI TRAIN 3A INJ FLOW ELEMENT	N/A	OFD-102A-3.2 (K12)	AB	N/A	Not Used In Service	NO	N/A	N/A	NONE
17	N/A	3LPIFT0004P U3 Low Pressure Injection	LPI TRAIN 3B INJ FLOW TRANS (Powered by ICCM)	N/A	OFD-102A-3.2 (E12)	AB	809'	In Service In Service	YES	O-2705	3KVIB-11	S,R
17	N/A	3LPIFT0005P U3 Low Pressure Injection	LPI TRAIN 3A INJ FLOW TRANS (Powered by ICCM)	N/A	OFD-102A-3.2 (K12)	AB	809'	In Service In Service	YES	O-2705	3KVIA-12	S,R
42	N/A	3LPIHX000A U3 Low Pressure Injection	LPI COOLER 3A	N/A	OFD-102A-3.2 (K10)	AB	771'	Not Used In Service	NO	N/A	N/A	S
42	N/A	3LPIHX000B U3 Low Pressure Injection	LPI COOLER 3B	N/A	OFD-102A-3.2 (E10)	AB	771'	Not Used In Service	NO	N/A	N/A	S
17	N/A	3LPIPU0001 U3 Low Pressure Injection	3LPI PUMP A	N/A	OFD-102A-3.2 (K4)	AB	758'	Off On	YES	O-2702	3TC-09	S,R
10	N/A	3LPIPU0002 U3 Low Pressure Injection	3LPI PUMP B	N/A	OFD-102A-3.2 (E4)	AB	758'	Off On	YES	O-2702	3TD-10	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
10	N/A	3LPIPU0003 U3 Low Pressure Injection	3LPI PUMP C	N/A	OFD-102A-3.2 (H4)	AB	758'	Off On	NO	N/A	N/A	S,R
17	N/A	3LPITE0209 U3 Low Pressure Injection	LPI COOLER OUTLET TEMP (ICS Input)	3LPITE209	OFD-102A-3.2 (E12)	AB	809'	In Service In Service	NO	N/A	N/A	S,R
17	N/A	3LPITE0210 U3 Low Pressure Injection	LPI COOLER OUTLET TEMP (ICS Input)	3LPITE210	OFD-102A-3.2 (K12)	AB	809'	In Service In Service	NO	N/A	N/A	S,R
18	N/A	3LPITK0001 U3 Low Pressure Injection	BWST	N/A	OFD-102A-3.1 (I10)	YD	796'	In Service In Service	NO	N/A	N/A	S
1	N/A	3LPSEP0022 U3 Low Pressure Service Water	DECAY HEAT COOLER E/P CONVERTER (3LPSW-405)	N/A	OEE-338-32	TB	775'	In Service In Service	YES	O-2705	3KVIB-17	S,R
1	N/A	3LPSEP0023 U3 Low Pressure Service Water	DECAY HEAT COOLER E/P CONVERTER (3LPSW-404)	N/A	OEE-338-32	TB	775'	In Service In Service	YES	O-2705	3KVIC-14	S,R
N/A	N/A	3LPSFL0001 U3 Low Pressure Service Water	NORMAL SUPPLY FILTER TO HPI PUMP	N/A	OFD-124B-3.1 (L5)	AB	783'	In Service In Service	NO	N/A	N/A	S*
N/A	N/A	3LPSFL0002 U3 Low Pressure Service	EM SUPPLY FILTER TO HPI PUMP	N/A	OFD-124B-3.1 (F8)	AB	783'	In Service In Service	NO	N/A	N/A	S*

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		Water										
N/A	N/A	3LPSFL0003 U3 Low Pressure Service Water	PUMP 3A PACKING SEAL FILTER	N/A	OFD-124A-3.1 (K6)	TB	775'	In Service In Service	NO	N/A	N/A	S*
N/A	N/A	3LPSFL0004 U3 Low Pressure Service Water	PUMP 3B PACKING SEAL FILTER	N/A	OFD-124A-3.1 (H6)	TB	775'	In Service In Service	NO	N/A	N/A	S*
10	N/A	3LPSFL000A U3 Low Pressure Service Water	LPSW PUMP A STRAINER	N/A	OFD-124A-3.1(J3)	TB	775'	In Service In Service	NO	N/A	N/A	S
10	N/A	3LPSFL000B U3 Low Pressure Service Water	LPSW PUMP B STRAINER	N/A	OFD-124A-3.1(G3)	TB	775'	In Service In Service	NO	N/A	N/A	S
N/A	N/A	3LPSFL0018 U3 Low Pressure Service Water	CUNO FILTER	N/A	OFD-124B-3.1 (L12)	AB	758'	Not Used Either	NO	N/A	N/A	S*
1	N/A	3LPSFT0124 U3 Low Pressure Service Water	LPI COOLER 3A FLOW XMTR (3LPSW-405)	N/A	OFD-124B-3.1 (J3)	AB	771'	In Service In Service	YES	O-2705	3KVIB-17	S,R
1	N/A	3LPSFT0125	LPI COOLER 3B FLOW XMTR (3LPSW-404)	N/A	OFD-124B-3.1 (J3)	AB	771'	In Service In Service	YES	O-2705	3KVIC-14	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
 Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
 Evaluation type "S" indicates that a seismic evaluation was performed.
 Evaluation type "R" indicates that a relay evaluation was performed.
 Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
 Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
 Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
 The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
 All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 Low Pressure Service Water										
1	N/A	3LSPS0102 U3 Low Pressure Service Water	LPSW HEADER PRESSURE	N/A	OFD-124B-3.1(J2)	TB	775'	In Service In Service	YES	O-2705	3DIB-18	S,R
1	N/A	3LSPS0103 U3 Low Pressure Service Water	LPSW HEADER PRESSURE	N/A	OFD-124B-3.1(I10)	TB	775'	In Service In Service	YES	O-2705	3DIB-18	S,R
10	N/A	3LSPU0001 U3 Low Pressure Service Water	LPSW PUMP 3A	N/A	OFD-124A-3.1(G10)	TB	775'	On/off On	YES	O-2702	3TC-11	S,R
10	N/A	3LSPU0002 U3 Low Pressure Service Water	LPSW PUMP 3B	N/A	OFD-124A-3.1(G5)	TB	775'	On/off On	YES	O-2702	3TD-12	S,R
1	N/A	3LPSVA0004 U3 Low Pressure Service Water	LPI COOLER 3A ISOLATION VALVE	N/A	OFD-124B-3.1(K6)	AB	783'	Closed Open	YES	O-2703-G	3XS1-R03D	S,R
1	N/A	3LPSVA0005 U3 Low Pressure Service Water	LPI COOLER 3B ISOLATION VALVE	N/A	OFD-124B-3.1(H6)	AB	783'	Closed Open	YES	O-2703-G	3XS2-R02D	S,R
N/A	N/A	3LPSVA0006	SUPPLY ISOL TO RC	N/A	OFD-124B-3.4 (L2)	TB	N/A	Open	NO	N/A	N/A	NONE

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 Low Pressure Service Water	PUMP COOLERS					Either				
N/A	N/A	3LPSVA0007 U3 Low Pressure Service Water	RCP COOLER ISOLATION VALVE	N/A	OFD-124B-3.4 (K7)	RB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3LPSVA0008 U3 Low Pressure Service Water	RCP COOLER ISOLATION VALVE	N/A	OFD-124B-3.4 (G8)	RB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3LPSVA0009 U3 Low Pressure Service Water	RCP COOLER ISOLATION VALVE	N/A	OFD-124B-3.4 (F7)	RB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3LPSVA0010 U3 Low Pressure Service Water	RCP COOLER ISOLATION VALVE	N/A	OFD-124B-3.4 (B8)	RB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3LPSVA0011 U3 Low Pressure Service Water	RCP COOLER ISOLATION VALVE	N/A	OFD-124B-3.4 (F9)	RB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3LPSVA0012 U3 Low Pressure Service Water	RCP COOLER ISOLATION VALVE	N/A	OFD-124B-3.4 (B9)	RB	N/A	Open Either	NO	N/A	N/A	NONE

Notes:

- Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
- Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
- Evaluation type "S" indicates that a seismic evaluation was performed.
- Evaluation type "R" indicates that a relay evaluation was performed.
- Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
- Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
- Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
- The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
- All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
N/A	N/A	3LPSVA0013 U3 Low Pressure Service Water	RCP COOLER ISOLATION VALVE	N/A	OFD-124B-3.4 (L9)	RB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3LPSVA0014 U3 Low Pressure Service Water	RCP COOLER ISOLATION VALVE	N/A	OFD-124B-3.4 (G11)	RB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3LPSVA0015 U3 Low Pressure Service Water	RETURN ISOL FROM RC PUMP COOLERS	N/A	OFD-124B-3.4 (L2)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3LPSVA0016 U3 Low Pressure Service Water	RBCU 3A SUPPLY VALVE	N/A	OFD-124B-3.2(K3)	AB	822'	Open Open	NO	N/A	N/A	R
17	N/A	3LPSVA0018 U3 Low Pressure Service Water	RBCU 3A RETURN VALVE	N/A	OFD-124B-3.2(D3)	AB	809'	Thrtld Open	YES	O-2703-G	3XS1-R03E	S,R
N/A	N/A	3LPSVA0019 U3 Low Pressure Service Water	RBCU 3B SUPPLY VALVE	N/A	OFD-124B-3.2(K8)	AB	809'	Open Open	NO	N/A	N/A	R
17	N/A	3LPSVA0021 U3 Low Pressure Service Water	RBCU 3B RETURN VALVE	N/A	OFD-124B-3.2(D8)	AB	809'	Thrtld Open	YES	O-2703-G	3XS3-05C	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
 Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
 Evaluation type "S" indicates that a seismic evaluation was performed.
 Evaluation type "R" indicates that a relay evaluation was performed.
 Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
 Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
 Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
 The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
 All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
N/A	N/A	3LPSVA0022 U3 Low Pressure Service Water	RBCU 3C SUPPLY VALVE	N/A	OFD-124B-3.2(K12)	AB	809'	Open Open	NO	N/A	N/A	R
17	N/A	3LPSVA0024 U3 Low Pressure Service Water	RBCU 3C RETURN VALVE	N/A	OFD-124B-3.2(D12)	AB	809'	Thrtld Open	YES	O-2703-G	3XS2-R02E	S,R
9	N/A	3LPSVA0045 U3 Low Pressure Service Water	NONESSENTIAL HEADER ISOLATION VALVE	N/A	OFD-124A-3.1(E10)	TB	775'	Open Closed	YES	O-2703-G	3XS3-05D	S,R
N/A	N/A	3LPSVA0051 U3 Low Pressure Service Water	MTOT ISOL VALVE	N/A	OFD-124A-3.2 (G10)	TB	N/A	Open Either	NO	N/A	N/A	NONE
N/A	N/A	3LPSVA0120 U3 Low Pressure Service Water	LPSW PUMP A SUCTION VALVE	N/A	OFD-124A-3.1(D2)	TB	775'	Open Open	NO	N/A	N/A	R
N/A	N/A	3LPSVA0123 U3 Low Pressure Service Water	LPSW PUMP B SUCTION VALVE	N/A	OFD-124A-3.1(J2)	TB	775'	Open Open	NO	N/A	N/A	R
21	N/A	3LPSVA0137 U3 Low Pressure Service Water	TDEFW ISOLATION VALVE	N/A	OFD-124A-3.3(K11)	TB	775'	Closed Open	YES	O-2703	3XA-A-R05C	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
Evaluation type "S" indicates that a seismic evaluation was performed.
Evaluation type "R" indicates that a relay evaluation was performed.
Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
Evaluation type "NSSF" indicates that the equipment is part of the NSSF system and does not require a seismic evaluation.
The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
N/A	N/A	3LPSVA0138 U3 Low Pressure Service Water	TDEFW ISOLATION VALVE	N/A	OFD-124A-3.3(L11)	TB	N/A	Closed Either	NO	N/A	N/A	NONE
9	N/A	3LPSVA0196 U3 Low Pressure Service Water	PUMP 3A SEAL FLOW REGULATOR	N/A	OFD-124A-3.1 (K5)	TB	775'	Throttled Throttled	NO	N/A	N/A	S
9	N/A	3LPSVA0203 U3 Low Pressure Service Water	PUMP 3B SEAL FLOW REGULATOR	N/A	OFD-124A-3.1 (H5)	TB	775'	Throttled Throttled	NO	N/A	N/A	S
N/A	N/A	3LPSVA0356 U3 Low Pressure Service Water	COMPONENT COOLER THROTTLE VALVE	N/A	OFD-124B-3.1 (E10)	AB	N/A	Open/Closed Either	NO	N/A	N/A	NONE
21	N/A	3LPSVA0404 U3 Low Pressure Service Water	LPI COOLER 3B CONTROL VALVE	N/A	OFD-124B-3.1(H7)	TB	775'	Closed Open	YES	O-2705	3KVIB-16	S,R
21	N/A	3LPSVA0405 U3 Low Pressure Service Water	LPI COOLER 3A CONTROL VALVE	N/A	OFD-124B-3.1(J7)	TB	775'	Closed Open	YES	O-2705	3KVIA-16	S,R
21	N/A	3LPSVA0516 U3 Emergency Feedwater	EFW PUMP 3A LPSW ISOLATION VALVE	N/A	OFD-124A-3.3(K5)	TB	775'	Closed Open	YES	O-2705	3DIB-32	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

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Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
21	N/A	3LPSVA0525 U3 Emergency Feedwater	EFW PUMP 3B LPSW ISOLATION VALVE	N/A	OFD-124A-3.3(J5)	TB	775'	Closed Open	YES	O-2705	3DIC-28	S,R
1	N/A	3LPSVA0565 U3 Low Pressure Service Water	RB AUX COOLERS SUPPLY VALVE	N/A	OFD-124B-3.2(J8)	RB	825'	Open Closed	YES	O-2703-G	3XS3-03CT	S,R
10	N/A	3LPSVA0566 U3 Low Pressure Service Water	RBCU 3B INLET VALVE	N/A	OFD-124B-3.2(I8)	RB	797'	Closed Open	YES	O-2703-G	3XS3-03CB	S,R
N/A	N/A	3LPSVA0692 U3 Low Pressure Service Water	BATT RM AC ISOL VALVE	N/A	OFD-124A-3.3 (D2)	TB	N/A	In Service Either	NO	N/A	N/A	NONE
N/A	N/A	3LPSVA0830 U3 Low Pressure Service Water	PRESS REG VALVE	N/A	OFD-124A-3.2 (E9)	TB	N/A	In Service Either	NO	N/A	N/A	NONE
N/A	N/A	3LPSVA0831 U3 Low Pressure Service Water	PRESS REG VALVE	N/A	OFD-124A-3.2 (F9)	TB	N/A	In Service Either	NO	N/A	N/A	NONE
10	N/A	3LPVA0001 U3 Low Pressure Injection	LPI DROPLINE ISOL FROM RCS	N/A	OFD-102A-3.1 (H2)	RB	797'	Closed Open	YES	O-2703-G	3XS1-F04D	S,R
10	N/A	3LPVA0002	LPI DROPLINE ISOL	N/A	OFD-102A-3.1 (H2)	RB	797'	Closed	YES	O-2703-G	3XS1-F05C	S,R

Notes:

- Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
- Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
- Evaluation type "S" indicates that a seismic evaluation was performed.
- Evaluation type "R" indicates that a relay evaluation was performed.
- Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
- Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
- Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
- The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
- All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 Low Pressure Injection	FROM RCS					Open				
17	N/A	3LPVA0003 U3 Low Pressure Injection	LPI HOT LEG SUCTION	N/A	OFD-102A-3.1 (H6)	AB	758'	Closed Open	YES	O-2703-G	3XS1-R01B	S,R
N/A	N/A	3LPVA0005 U3 Low Pressure Injection	LPI PUMP 3A SUCTION	N/A	OFD-102A-3.1 (F8)	AB	758'	Open Open	NO	N/A	N/A	R
17	N/A	3LPVA0006 U3 Low Pressure Injection	LPI SUCTION CROSSOVER	N/A	OFD-102A-3.1 (E8)	AB	758'	Closed Open	YES	O-2703-D	3XL-08E	S,R
17	N/A	3LPVA0007 U3 Low Pressure Injection	LPI SUCTION CROSSOVER	N/A	OFD-102A-3.1 (D8)	AB	758'	Closed Open	YES	O-2703-E	3XN-05E	S,R
N/A	N/A	3LPVA0008 U3 Low Pressure Injection	LPI PUMP 3B SUCTION	N/A	OFD-102A-3.1 (C8)	AB	758'	Open Open	NO	N/A	N/A	R
N/A	N/A	3LPVA0009 U3 Low Pressure Injection	LPI CROSSOVER	N/A	OFD-102A-3.2 (I7)	AB	758'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	3LPVA0010 U3 Low Pressure Injection	LPI CROSSOVER	N/A	OFD-102A-3.2 (G7)	AB	758'	Closed Closed	NO	N/A	N/A	R
17	N/A	3LPVA0012 U3 Low Pressure Injection	LPI COOLER 3A ISOLATION	N/A	OFD-102A-3.2 (K11)	AB	771'	Open Throttled	YES	O-2703-G	3XS1-R01A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

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Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
17	N/A	3LPVA0014 U3 Low Pressure Injection	LPI COOLER 3B ISOLATION	N/A	OFD-102A-3.2 (E11)	AB	771'	Open Throttled	YES	O-2703-G	3XS2-R01C	S,R
17	N/A	3LPVA0015 U3 Low Pressure Injection	LPI TO HPI/RBS PIGGYBACK 3A	N/A	OFD-102A-3.2 (K12)	AB	771'	Closed Open	YES	O-2703-D	3XL-09D	S,R
17	N/A	3LPVA0016 U3 Low Pressure Injection	LPI TO HPI/RBS PIGGYBACK 3B	N/A	OFD-102A-3.2 (D12)	AB	771'	Closed Open	YES	O-2703-E	3XN-06D	S,R
17	N/A	3LPVA0017 U3 Low Pressure Injection	LPI TRAIN 3A INJECTION ISOL	N/A	OFD-102A-3.2 (K13)	AB	809'	Closed Open	YES	O-2703-G	3XS1-F04E	S,R
17	N/A	3LPVA0018 U3 Low Pressure Injection	LPI TRAIN 3B INJECTION ISOL	N/A	OFD-102A-3.2 (E13)	AB	809'	Closed Open	YES	O-2703-G	3XS2-F04E	S,R
31	N/A	3LPVA0019 U3 Low Pressure Injection	RB EM SUMP SUCTION	N/A	OFD-102A-3.1 (E5)	AB	758'	Closed Open	YES	O-2703-G	3XS1-R01C	S,R
31	N/A	3LPVA0020 U3 Low Pressure Injection	RB EM SUMP SUCTION	N/A	OFD-102A-3.1 (D5)	AB	758'	Closed Open	YES	O-2703-G	3XS2-R04C	S,R
17	N/A	3LPVA0021 U3 Low Pressure Injection	BWST SUCTION ISOLATION	N/A	OFD-103A-3.1 (E7)	AB	771'	Open Either	NO	N/A	N/A	NONE
17	N/A	3LPVA0022	BWST SUCTION ISOLATION	N/A	OFD-103A-3.1 (C7)	AB	771'	Open Either	NO	N/A	N/A	NONE

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
Evaluation type "S" indicates that a seismic evaluation was performed.
Evaluation type "R" indicates that a relay evaluation was performed.
Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

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Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 Low Pressure Injection										
52	N/A	3LPVA0061 U3 Low Pressure Injection	BWST VACUUM BREAKER	N/A	OFD-102A-3.1 (J10)	YD	796'	Closed Open	NO	N/A	N/A	S
17	N/A	3LPVA0092 U3 Low Pressure Injection	LPI COOLER BYPASS VALVE	N/A	OFD-102A-3.2 (L10)	AB	771'	Open Open/Closed	YES	O-2704	3KD-17	S,R
17	N/A	3LPVA0093 U3 Low Pressure Injection	LPI COOLER BYPASS VALVE	N/A	OFD-102A-3.2 (F10)	AB	771'	Open Open/Closed	YES	O-2704	3KD-17	S,R
N/A	N/A	3LPVA0103 U3 Low Pressure Injection	BORON DILUTION ISOLATION	N/A	OFD-102A-3.1 (G2)	RB	797'	Closed Closed	NO	N/A	N/A	R
1	124	3MC-25 U3 Main Steam	INSTRUMENT RACK 3MC-25	N/A	O-2422A-3	TB	796'	In Service In Service	NO	N/A	N/A	S,R
9	N/A	3MC-29 U3 Main Steam	INSTRUMENT RACK 3MC-29	N/A	O-2422A-3	TB	796'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	3MC-32 U3 Condensate DC Interlocks	INSTRUMENT RACK 3MC-32	N/A	O-2422A-1	TB	775'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	3MC-33 U3 Condensate DC Interlocks	INSTRUMENT RACK 3MC-33	N/A	O-2422A-1	TB	775'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	3MC-F54 U3 Main Steam	INSTRUMENT RACK 3MC-F54	N/A	O-2422A-3	TB	796'	In Service In Service	NO	N/A	N/A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
Evaluation type "S" indicates that a seismic evaluation was performed.
Evaluation type "R" indicates that a relay evaluation was performed.
Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

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Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
16	N/A	3MFBMRP U3 Main Feeder Bus Monitor	MAIN FDR BUS MONITOR RLY PANEL	N/A	O-2710A	AB	809'	In Service In Service	YES	O-2705	3DIA-05/3DI	S,R
1	N/A	3MSPS0086 U3 Main Steam	MAIN STEAM PRESS SWITCH (3MS-19)	N/A	OEE-345-56	TB	796'	In Service In Service	YES	O-2705-A	3KI-01	S,R
1	N/A	3MSPS0087 U3 Main Steam	MAIN STEAM PRESS SWITCH (3MS-22)	N/A	OEE-345-56	TB	796'	In Service In Service	YES	O-2705-A	3KI-01	S,R
1	N/A	3MSPS0088 U3 Main Steam	MAIN STEAM PRESS SWITCH (3MS-28)	N/A	OEE-345-56	TB	796'	In Service In Service	YES	O-2705-A	3KI-01	S,R
1	N/A	3MSPS0089 U3 Main Steam	MAIN STEAM PRESS SWITCH (3MS-31)	N/A	OEE-345-56	TB	796'	In Service In Service	YES	O-2705-A	3KI-01	S,R
10	N/A	3MSPT0024P U3 Main Steam	SG 3A PRESSURE	N/A	OFD-122A-3.1 (I2)	RB	777'	In Service In Service	YES	O-2705-A	3KI-05	S,R
10	N/A	3MSPT0025P U3 Main Steam	SG 3A PRESSURE	N/A	OFD-122A-3.1 (J2)	RB	777'	In Service In Service	YES	O-2705-A	3KI-05	S,R
10	N/A	3MSPT0026P U3 Main Steam	SG 3B PRESSURE	N/A	OFD-122A-3.1 (D2)	RB	777'	In Service In Service	YES	O-2705-A	3KI-05	S,R
10	N/A	3MSPT0027P	SG 3B PRESSURE	N/A	OFD-122A-3.1 (D2)	RB	777'	In Service	YES	O-2705-A	3KI-05	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
Evaluation type "S" indicates that a seismic evaluation was performed.
Evaluation type "R" indicates that a relay evaluation was performed.
Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

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Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 Main Steam						In Service				
9	12	3MSPY0042 U3 Emergency Feedwater	UNIT 3 UPS (3MSSS0042 - 3MS-87))	N/A	OEE-347-02-A	AB	796'	In Service In Service	YES	O-2704	3KC-32	S,R
27	N/A	3MSVA0001 U3 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-3.1 (J9)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	3MSVA0002 U3 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-3.1 (J4)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	3MSVA0003 U3 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-3.1 (J8)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	3MSVA0004 U3 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-3.1 (J5)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	3MSVA0005 U3 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-3.1 (J8)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	3MSVA0006 U3 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-3.1 (J6)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	3MSVA0007 U3 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-3.1 (J7)	YD	813'	Closed Open	NO	N/A	N/A	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
Evaluation type "S" indicates that a seismic evaluation was performed.
Evaluation type "R" indicates that a relay evaluation was performed.
Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
27	N/A	3MSVA0008 U3 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-3.1 (J6)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	3MSVA0009 U3 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-3.1 (D9)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	3MSVA0010 U3 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-3.1 (D4)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	3MSVA0011 U3 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-3.1 (D8)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	3MSVA0012 U3 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-3.1 (D5)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	3MSVA0013 U3 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-3.1 (D8)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	3MSVA0014 U3 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-3.1 (D6)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	3MSVA0015 U3 Main Steam	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-3.1 (D7)	YD	813'	Closed Open	NO	N/A	N/A	S
27	N/A	3MSVA0016	MAIN STEAM SAFETY RELIEF	N/A	OFD-122A-3.1 (D6)	YD	813'	Closed Open	NO	N/A	N/A	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 Main Steam										
21	N/A	3MSVA0017 U3 Main Steam	TURBINE BYPASS ISOLATION	N/A	OFD-122A-3.2 (I4)	TB	796'	Open Closed	YES	O-2703-B	3XGB-R01A	S,R
40	N/A	3MSVA0019 U3 Main Steam	TURBINE BYPASS VALVE	N/A	OFD-122A-3.2 (I8)	TB	796'	Open/Closed Closed	YES	O-2705-A	3KI-01	S,R
40	N/A	3MSVA0022 U3 Main Steam	TURBINE BYPASS VALVE	N/A	OFD-122A-3.2 (K8)	TB	796'	Open/Closed Closed	YES	O-2705-A	3KI-01	S,R
1	N/A	3MSVA0024 U3 Main Steam	AS ISOLATION	N/A	OFD-122A-3.2 (H3)	TB	796'	Open Closed	YES	O-2703-B	3XGB-R01C	S,R
9	N/A	3MSVA0026 U3 Main Steam	TURBINE BYPASS ISOLATION	N/A	OFD-122A-3.2 (D4)	TB	796'	Open Closed	YES	O-2703-B	3XGB-R01B	S,R
40	N/A	3MSVA0028 U3 Main Steam	TURBINE BYPASS VALVE	N/A	OFD-122A-3.2 (F8)	TB	796'	Open/Closed Closed	YES	O-2705-A	3KI-01	S,R
40	N/A	3MSVA0031 U3 Main Steam	TURBINE BYPASS VALVE	N/A	OFD-122A-3.2 (D8)	TB	796'	Open/Closed Closed	YES	O-2705-A	3KI-01	S,R
1	N/A	3MSVA0033 U3 Main Steam	AS ISOLATION	N/A	OFD-122A-3.2 (E3)	TB	796'	Open Closed	YES	O-2703-B	3XGB-R01C	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSF" indicates that the equipment is part of the NSSF system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
21	N/A	3MSVA0035 U3 Main Steam	FWPT ISOLATION	N/A	OFD-122A-3.3 (L1)	TB	796'	Open Closed	YES	O-2703	3XA-R06A	S,R
21	N/A	3MSVA0036 U3 Main Steam	FWPT ISOLATION	N/A	OFD-122A-3.3 (F1)	TB	796'	Open Closed	YES	O-2703	3XA-R06B	S,R
9	N/A	3MSVA0040 U3 Condensate	FWPT STOP VALVE	N/A	OFD-122A-3.3 (L8)	TB	775'	Open Closed	YES	O-2705-B	3DP-F01AL	S,R
9	N/A	3MSVA0043 U3 Condensate	FWPT STOP VALVE	N/A	OFD-122A-3.3 (F8)	TB	775'	Open Closed	YES	O-2705-B	3DP-F03EL	S,R
21	N/A	3MSVA0047 U3 Main Steam	MS TO CSAE	N/A	OFD-122A-3.3 (D4)	TB	796'	Open Closed	YES	O-2703-B	3XC-R04E	S,R
21	N/A	3MSVA0076 U3 Main Steam	MS RH ISOLATION	N/A	OFD-122A-3.1 (I11)	TB	796'	Open Closed	YES	O-2703	3XA-R06C	S,R
1	N/A	3MSVA0077 U3 Main Steam	MS TO 2ND STAGE RHTR ISOL	N/A	OFD-122C-3.2 (K4)	TB	796'	Open Closed	YES	O-2703	3XA-A-F02A	S,R
1	N/A	3MSVA0078 U3 Main Steam	MS TO 2ND STAGE RHTR ISOL	N/A	OFD-122C-3.2 (K8)	TB	796'	Open Closed	YES	O-2703	3XA-A-F02B	S,R
40	N/A	3MSVA0079	MS RH ISOLATION	N/A	OFD-122A-3.1 (C11)	TB	796'	Open Closed	YES	O-2703	3XA-R06D	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 Main Steam										
40	N/A	3MSVA0080 U3 Main Steam	MS TO 2ND STAGE RHTR ISOL	N/A	OFD-122C-3.2 (F4)	TB	796'	Open Closed	YES	O-2703	3XA-A-F02D	S,R
21	N/A	3MSVA0081 U3 Main Steam	MS TO 2ND STAGE RHTR ISOL	N/A	OFD-122C-3.2 (F8)	TB	796'	Open Closed	YES	O-2703	3XA-A-F02C	S,R
N/A	N/A	3MSVA0082 U3 Emergency Feedwater	TDEFW STEAM SUPPLY	N/A	OFD-122A-3.4 (I2)	TB	796'	Open Open	NO	N/A	N/A	R
N/A	N/A	3MSVA0084 U3 Emergency Feedwater	TDEFW STEAM SUPPLY	N/A	OFD-122A-3.4 (F2)	TB	796'	Open Open	NO	N/A	N/A	R
21	N/A	3MSVA0087 U3 Emergency Feedwater	TDEFW MS ISOLATION VALVE	N/A	OFD-122A-3.4 (G4)	TB	796'	Throttled Throttled	YES	O-2704	3KC-32	S,R
21	N/A	3MSVA0093 U3 Emergency Feedwater	TDEFW MS ISOLATION VALVE	N/A	OFD-122A-3.4 (G7)	TB	775'	Closed Open	YES	O-2705	3KVID-06	S,R
N/A	N/A	3MSVA0094 U3 Emergency Feedwater	EFW TURBINE STOP VALVE	N/A	OFD-122A-3.4 (G8)	TB	775'	Open Open	NO	N/A	N/A	R
9	N/A	3MSVA0095 U3 Emergency Feedwater	TDEFW CONTROL VALVE	N/A	OFD-122A-3.4 (G9)	TB	775'	Throttled Throttled	N/A	OM-200A-0010-001	STEAM	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
20	125	3MSVA0102 U3 Main Steam	TURBINE STOP VALVE	N/A	OFD-122B-3.1 (I3)	TB	796'	Open Closed	YES	O-2705	3DIA-07	S,R
20	125	3MSVA0103 U3 Main Steam	TURBINE STOP VALVE	N/A	OFD-122B-3.1 (I4)	TB	796'	Open Closed	YES	O-2705	3DIA-07	S,R
20	125	3MSVA0104 U3 Main Steam	TURBINE STOP VALVE	N/A	OFD-122B-3.1 (I5)	TB	796'	Open Closed	YES	O-2705	3DIA-07	S,R
20	125	3MSVA0105 U3 Main Steam	TURBINE STOP VALVE	N/A	OFD-122B-3.1 (I5)	TB	796'	Open Closed	YES	O-2705	3DIA-07	S,R
20	126	3MSVA0106 U3 Main Steam	MAIN STEAM CONTROL VALVE	N/A	OFD-122B-3.1 (E3)	TB	796'	Open Closed	YES	O-2705	3DIA-07	S,R
20	126	3MSVA0107 U3 Main Steam	MAIN STEAM CONTROL VALVE	N/A	OFD-122B-3.1 (G5)	TB	796'	Open Closed	YES	O-2705	3DIA-07	S,R
20	126	3MSVA0108 U3 Main Steam	MAIN STEAM CONTROL VALVE	N/A	OFD-122B-3.1 (F4)	TB	796'	Open Closed	YES	O-2705	3DIA-07	S,R
20	126	3MSVA0109 U3 Main Steam	MAIN STEAM CONTROL VALVE	N/A	OFD-122B-3.1 (G5)	TB	796'	Open Closed	YES	O-2705	3DIA-07	S,R
21	N/A	3MSVA0112	MS TO 2ND STAGE RHTR ISOL	N/A	OFD-122C-3.2 (K5)	TB	796'	Open Closed	NO	N/A	N/A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
Evaluation type "S" indicates that a seismic evaluation was performed.
Evaluation type "R" indicates that a relay evaluation was performed.
Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 Main Steam										
52	N/A	3MSVA0126 U3 Main Steam	MS TO AS CONTROL VALVE	N/A	OFD-128A-3.1 (I6)	TB	796'	Open/Closed Closed	YES	O-2705	3KVID-10	S,R
52	N/A	3MSVA0129 U3 Main Steam	MS TO AS CONTROL VALVE	N/A	OFD-128A-3.1 (I7)	TB	796'	Open/Closed Closed	YES	O-2705	3KVID-10	S,R
21	N/A	3MSVA0173 U3 Main Steam	MS TO 2ND STAGE RHTR ISOL	N/A	OFD-122C-3.2 (F5)	TB	796'	Open Closed	YES	O-2422N-28	Pnumatic	S,R
RB	N/A	3MTC1 U3 Control Cabinets	MISC TERM CAB 3MTC1	3MTC1,2	O-2710A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
10	N/A	3MTC1,2 U3 Control Cabinets	MISCELLANEOUS TERMINAL CABINET 3MTC1,2	N/A	N/A	AB	809'	N/A N/A	N/A	N/A	N/A	S,R
RB	N/A	3MTC2 U3 Control Cabinets	MISC TERM CAB 3MTC2	3MTC1,2	O-2710A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
RB	N/A	3MTC3 U3 Control Cabinets	MISC TERM CAB 3MTC3	3MTC3,4	O-2710A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
10	127	3MTC3,4 U3 Control Cabinets	MISCELLANEOUS TERMINAL CABINET 3MTC3,4	N/A	N/A	AB	809'	N/A N/A	N/A	N/A	N/A	S,R
RB	N/A	3MTC4 U3 Control Cabinets	MISC TERM CAB 3MTC4	3MTC3,4	O-2710A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
18	N/A	3PA/BB U3 125/250V DC PWR	PWR BATT 3PA	N/A	OEE-330-01	TB	822'	In Service In Service	YES	O-2705-B	2PA/BC	S
10	128	3PA/BC U3 125/250V DC PWR	PWR BATT CHGR 3PA	N/A	O-2015	TB	796'	In Service In Service	YES	O-2703-D	3XO-F01AT	S,R
52	N/A	3PAMLT0090 U3 Post Accident Monitoring	RB Containment Water Level Train A	N/A	OEE-358-22	RB	777'	Not Used In Service	YES	O-2705-A	3KI-20	S,R
52	N/A	3PAMLT0091 U3 Post Accident Monitoring	RB Containment Water Level Train B	N/A	OEE-358-22	RB	777'	Not Used In Service	YES	O-2705-A	3KU-11	S,R
10	N/A	3PASCP U3 Low Pressure Injection	POST ACCIDENT SAMPLE CONT PANEL (3RC-179)	N/A	OEE-362	AB	771'	In Service In Service	YES	O-2704-B	3KTH1-08	S,R
18	N/A	3PB/BB U3 125/250V DC PWR	PWR BATT 3PB	N/A	OEE-330-01	TB	822'	In Service In Service	YES	O-2705-B	3PB/BC	S
10	128	3PB/BC U3 125/250V DC PWR	PWR BATT CHGR 3PB	N/A	O-2015	TB	796'	In Service In Service	YES	O-2703-E	3XP-F01AT	S,R
16	N/A	3PIR U3 Control Panels	UNIT 3 PNEUMATIC INSTR RACK	N/A	O-2710A	AB	809'	In Service In Service	N/A	N/A	N/A	S,R
52	99	3POWDEXPANEL U3 Condensate	3 POWDEX PANEL	3 POWDEX PANEL	O-2013	TB	771'	Either Either	NO	N/A	N/A	S,R
RB	N/A	3PRZ U3 Pressurizer Heaters	U3 PRESSURIZER	3PZR		RB	818'			N/A	N/A	YES

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

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The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
1	129	3PS157AB/PS101 U3 Main Turbine	LOW HYDRAULIC PRESSURE SWITCH	N/A	OEE-321-05	TB	775'	In Service In Service	YES	O-2705	3DIA-07	S,R
10	N/A	3RBCAH0020A U3 Reactor Building Cooling	RBCU FAN 3A	N/A	OFD-116E-3.1 (H-6)	RB	825'	On-high On-low	YES	O-2703-G	3XS1-F01A	S,R
10	N/A	3RBCAH0020B U3 Reactor Building Cooling	RBCU FAN 3B	N/A	OFD-116E-3.1 (H-8)	RB	825'	Off On-low	YES	O-2703-G	3XS3-01A	S,R
10	N/A	3RBCAH0020C U3 Reactor Building Cooling	RBCU FAN 3C	N/A	OFD-116E-3.1 (H-10)	RB	825'	On-high On-low	YES	O-2703-G	3X09-06C	S,R
10	N/A	3RBCHX000A U3 Reactor Building Cooling	RB COOLING UNIT 3A	N/A	OFD-124B-3.2(G3)	RB	797'	In Service In Service	NO	N/A	N/A	S
10	N/A	3RBCHX000B U3 Reactor Building Cooling	RB COOLING UNIT 3B	N/A	OFD-124B-3.2(G8)	RB	797'	Not Used In Service	NO	N/A	N/A	S
10	N/A	3RBCHX000C U3 Reactor Building Cooling	RB COOLING UNIT 3C	N/A	OFD-124B-3.2(G12)	RB	797'	In Service In Service	NO	N/A	N/A	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
Evaluation type "S" indicates that a seismic evaluation was performed.
Evaluation type "R" indicates that a relay evaluation was performed.
Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
RB	N/A	3RBCHX00A1 U3 Reactor Building Cooling	RB VENT COOLING COIL	3ARBCU_A	OFD-124B-3.3 (L6)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	3RBCHX00A2 U3 Reactor Building Cooling	RB VENT COOLING COIL	3ARBCU_A	OFD-124B-3.3 (K6)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	3RBCHX00A3 U3 Reactor Building Cooling	RB VENT COOLING COIL	3ARBCU_A	OFD-124B-3.3 (J6)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	3RBCHX00A4 U3 Reactor Building Cooling	RB VENT COOLING COIL	3ARBCU_A	OFD-124B-3.3 (I6)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	3RBCHX00B1 U3 Reactor Building Cooling	RB VENT COOLING COIL	3ARBCU_B	OFD-124B-3.3 (L11)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	3RBCHX00B2 U3 Reactor Building Cooling	RB VENT COOLING COIL	3ARBCU_B	OFD-124B-3.3 (K11)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	3RBCHX00B3 U3 Reactor Building Cooling	RB VENT COOLING COIL	3ARBCU_B	OFD-124B-3.3 (J11)	RB	844'	In Service Either	NO	N/A	N/A	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
 Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
 Evaluation type "S" indicates that a seismic evaluation was performed.
 Evaluation type "R" indicates that a relay evaluation was performed.
 Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
 Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
 Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
 The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
 All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
RB	N/A	3RBCHX00B4 U3 Reactor Building Cooling	RB VENT COOLING COIL	3ARBCU_B	OFD-124B-3.3 (I11)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	3RBCHX00C1 U3 Reactor Building Cooling	RB VENT COOLING COIL	3ARBCU_C	OFD-124B-3.3 (F6)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	3RBCHX00C2 U3 Reactor Building Cooling	RB VENT COOLING COIL	3ARBCU_C	OFD-124B-3.3 (E6)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	3RBCHX00C3 U3 Reactor Building Cooling	RB VENT COOLING COIL	3ARBCU_C	OFD-124B-3.3 (D6)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	3RBCHX00C4 U3 Reactor Building Cooling	RB VENT COOLING COIL	3ARBCU_C	OFD-124B-3.3 (C6)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	3RBCHX00D1 U3 Reactor Building Cooling	RB VENT COOLING COIL	3ARBCU_D	OFD-124B-3.3 (F11)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	3RBCHX00D2 U3 Reactor Building Cooling	RB VENT COOLING COIL	3ARBCU_D	OFD-124B-3.3 (E11)	RB	844'	In Service Either	NO	N/A	N/A	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
Evaluation type "S" indicates that a seismic evaluation was performed.
Evaluation type "R" indicates that a relay evaluation was performed.
Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
RB	N/A	3RBCHX00D3 U3 Reactor Building Cooling	RB VENT COOLING COIL	3ARBCU_D	OFD-124B-3.3 (D11)	RB	844'	In Service Either	NO	N/A	N/A	S
RB	N/A	3RBCHX00D4 U3 Reactor Building Cooling	RB VENT COOLING COIL	3ARBCU_D	OFD-124B-3.3 (C11)	RB	844'	In Service Either	NO	N/A	N/A	S
10	N/A	3RCLT0004P1 U3 Reactor Coolant	PRZ LEVEL TRANSMITTER	N/A	OFD-100A-3.2 (G8)	RB	797'	In Service In Service	YES	O-2705	3KVIA-12	S,R
10	N/A	3RCLT0004P3 U3 Reactor Coolant	PRZ LEVEL TRANSMITTER	N/A	OFD-100A-3.2 (G8)	RB	797'	In Service In Service	YES	O-2705	3KVIB-11	S,R
52	N/A	3RCLT0123 U3 ICCM	3A RCS HOT LEG LVL (ICCM A)	N/A	OFD-100A-3.1 (H2)	RB	809'	Not Used In Service	YES	O-2705	3KVIA-12	S,R
52	N/A	3RCLT0124 U3 ICCM	3B RCS HOT LEG LVL (ICCM B)	N/A	OFD-100A-3.1 (H13)	RB	809'	Not Used In Service	YES	O-2705	3KVIA-11	S,R
52	N/A	3RCLT0125 U3 ICCM	RV HEAD LEVEL (ICCM A)	N/A	OFD-100A-3.1 (J5)	RB	809'	Not Used In Service	YES	O-2705	3KVIA-12	S,R
52	N/A	3RCLT0126 U3 ICCM	RV HEAD LEVEL (ICCM B)	N/A	OFD-100A-3.1 (J6)	RB	809'	Not Used In Service	YES	O-2705	3KVIA-11	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSF" indicates that the equipment is part of the NSSF system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
9	130	3RCPS0364 U3 Low Pressure Injection	RC PRESS SWITCH	N/A	OFD-100A-3.2	RB	825'	In Service In Service	YES	O-2703-G	3XS1-F05C	S,R
1	N/A	3RCPT0017P U3 Reactor Coolant	RCS LOOP A PRESS TRANS	N/A	OFD-100A-3.1 (H4)	RB	825'	In Service In Service	YES	O-2705	3KVIA-01	S,R
1	N/A	3RCPT0021P U3 Engineered Safeguards	RC PRESS XMTR (ES CH A)	N/A	OFD-100A-3.1	RB	825'	In Service In Service	YES	O-2705	3KVIA-02	S,R
1	N/A	3RCPT0022P U3 Engineered Safeguards	RC PRESS XMTR (ES CH B)	N/A	OFD-100A-3.1	RB	825'	In Service In Service	YES	O-2705	3KVIC-02	S,R
1	N/A	3RCPT0023P U3 Engineered Safeguards	RC PRESS XMTR (ES CH C)	N/A	OFD-100A-3.1	RB	825'	In Service In Service	YES	O-2705	3KVIB-02	S,R
1	N/A	3RCPT0166P U3 Reactor Coolant	RCS LOOP B PRESS TRANS	N/A	OFD-100A-3.1 (H1)	RB	825'	In Service In Service	YES	O-2705-A	3KI-10	S,R
52	N/A	3RCPT0244 U3 ICCM	WR RCS PRESS TRAIN A (ICCM)	N/A	OFD-100A-3.1 (H2)	AB	809'	In Service In Service	YES	O-2705	3KVIA-12	S,R
52	N/A	3RCPT0245 U3 ICCM	WR RCS PRESS TRAIN B (ICCM)	N/A	OFD-100A-3.1 (H2)	AB	809'	In Service In Service	YES	O-2705	3KVIB-11	S,R
10	N/A	3RCRD0005B	RCS COLD LEG RTD	N/A	OFD-100A-3.1 (E5)	RB	797'	In Service In Service	YES	O-2705-A	3KI-18	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
Evaluation type "S" indicates that a seismic evaluation was performed.
Evaluation type "R" indicates that a relay evaluation was performed.
Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
Evaluation type "NSSF" indicates that the equipment is part of the NSSF system and does not require a seismic evaluation.
The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 Reactor Coolant										
1	N/A	3RCRD0006A U3 Reactor Coolant	RCS COLD LEG RTD	N/A	OFD-100A-3.1 (C5)	RB	797'	In Service In Service	YES	O-2705-A	3KI-18	S,R
35	N/A	3RCRD0007B U3 Reactor Coolant	RCS COLD LEG RTD	N/A	OFD-100A-3.2 (E11)	RB	797'	In Service In Service	YES	O-2705-A	3KI-18	S,R
1	N/A	3RCRD0008A U3 Reactor Coolant	RCS COLD LEG RTD	N/A	OFD-100A-3.2 (C11)	RB	797'	In Service In Service	YES	O-2705-A	3KI-18	S,R
1	N/A	3RCRD0043A U3 Reactor Coolant	PRZ RTD	N/A	OFD-100A-3.2 (G6)	RB	797'	In Service In Service	YES	O-2705	3KVIA-12	S,R
1	N/A	3RCRD0043B U3 Reactor Coolant	PRZ RTD	N/A	OFD-100A-3.2 (G6)	RB	797'	In Service In Service	YES	O-2705	3KVIB-11	S,R
45	N/A	3RCRD0084B U3 Reactor Coolant	HOT LEG 3A RTD	N/A	OFD-100A-3.1 (H5)	RB	844'	In Service In Service	YES	O-2705-A	3KI-18	S,R
1	N/A	3RCRD0085B U3 Reactor Coolant	HOT LEG 3B RTD	N/A	OFD-100A-3.1 (H5)	RB	844'	In Service In Service	YES	O-2705-A	3KI-18	S,R
N/A	N/A	3RCVA0001 U3 Reactor Coolant	PRZ SPRAY ISOLATION VALVE	N/A	OFD-100A-3.2 (G10)	RB	N/A	Open/Closed Either	NO	N/A	N/A	NONE

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
1	19	3RCVA0003 U3 Reactor Coolant	PRZ SPRAY ISOLATION	N/A	OFD-100A-3.2 (H9)	RB	850'	Open Open/Closed	YES	O-2703-D	3XO-R03D	S,R
1	19	3RCVA0004 U3 Reactor Coolant	PRZ PORV BLOCK VALVE	N/A	OFD-100A-3.2 (J8)	RB	850'	Open Open/Closed	YES	O-703-K	3XSF-F06C	S,R
52	N/A	3RCVA0005 U3 Reactor Coolant	PRZ STEAM SAMPLE ISOLATION	N/A	OFD-110A-3.1 (I3)	RB	810'	Open/Closed Closed	NO	N/A	N/A	S,R
52	N/A	3RCVA0006 U3 Reactor Coolant	PRZ WATER SAMPLE ISOLATION	N/A	OFD-110A-3.1 (H3)	RB	810'	Open/Closed Closed	NO	N/A	N/A	S,R
52	N/A	3RCVA0007 U3 Reactor Coolant	PRZ WATER SAMPLE ISOLATION	N/A	OFD-110A-3.1 (H3)	AB	809'	Open/Closed Closed	NO	N/A	N/A	S,R
1	20	3RCVA0066 U3 Reactor Coolant	PRZ PORV	N/A	OFD-100A-3.2 (K8)	RB	850'	Closed Open/Closed	YES	O-2705	3DIB-24	S,R
1	20	3RCVA0067 U3 Reactor Coolant	PRZ CODE SAFETY	N/A	OFD-100A-3.2 (K7)	RB	850'	Closed Open/Closed	NO	N/A	N/A	S
1	21	3RCVA0068 U3 Reactor Coolant	PRZ CODE SAFETY	N/A	OFD-100A-3.2 (K6)	RB	850'	Closed Open/Closed	NO	N/A	N/A	S
N/A	N/A	3RCVA0155	RCS HOT LEG 3A VENT	N/A	OFD-100A-3.1 (J4)	RB	825'	Closed Closed	NO	N/A	N/A	R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 Reactor Coolant										
N/A	N/A	3RCVA0157 U3 Reactor Coolant	RCS HOT LEG 3B VENT	N/A	OFD-100A-3.1 (I11)	RB	825'	Closed Closed	NO	N/A	N/A	R
9	N/A	3RCVA0159 U3 Reactor Coolant	RV VENT ISOLATION	N/A	OFD-100A-3.1 (I9)	RB	844'	Closed Open/Closed	YES	O-2704-C	3SKL-08	S,R
1	N/A	3RCVA0160 U3 Reactor Coolant	RV VENT ISOLATION	N/A	OFD-100A-3.1 (I9)	RB	844'	Closed Open/Closed	YES	O-2704-C	3SKL-08	S,R
10	N/A	3RCVA0162 U3 Reactor Coolant	POST ACC SAMPLE PATH ISOL	N/A	OFD-110A-3.4 (G1)	RB	777'	Closed Open/Closed	YES	O-2705	3KVI8-08	S,R
10	N/A	3RCVA0163 U3 Reactor Coolant	POST ACC SAMPLE PATH ISOL	N/A	OFD-110A-3.4 (G2)	RB	777'	Closed Open	YES	O-2705	3KVIC-08	S,R
1	N/A	3RCVA0179 U3 Reactor Coolant	POST ACC SAMPLE THROTTLE	N/A	OFD-110A-3.4 (G6)	AB	758'	Closed Open	YES	O-2704-B	3KTH1-08	S,R
58	118	3RPS U3 GENERIC	UNIT 3 RPS CABINETS	N/A	O-2710	AB	822'	In Service In Service	YES	O-2705	3KVI8-01/3K	N/A
1	N/A	3RSC-3CCW-287/ENCL U3 Condenser Circulating Water	REMOTE STARTER ENCLOSURE FOR 3CCW-287	N/A	OEE-351-47	SSF	758'	Not Used Not Used	NO	N/A	N/A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
1	22.1	3RSC-3FDW-368/ENCL U3 Emergency Feedwater	REMOTE STARTER ENCLOSURE FOR 3FDW-368	N/A	OEE-347-12	AB	809'	Not Used Not Used	NO	N/A	N/A	S,R
1	22.1	3RSC-3FDW-369/ENCL U3 Emergency Feedwater	REMOTE STARTER ENCLOSURE FOR 3FDW-369	N/A	OEE-347-11	AB	809'	Not Used Not Used	NO	N/A	N/A	S,R
1	22.1	3RSC-3FDW-372/ENCL U3 Emergency Feedwater	REMOTE STARTER ENCLOSURE FOR 3FDW-372	N/A	OEE-347-07	AB	809'	Not Used Not Used	NO	N/A	N/A	S,R
1	22.1	3RSC-3FDW-374/ENCL U3 Emergency Feedwater	REMOTE STARTER ENCLOSURE FOR 3FDW-374	N/A	OEE-347-08	AB	809'	Not Used Not Used	NO	N/A	N/A	S,R
1	22.1	3RSC-3FDW-382/ENCL U3 Emergency Feedwater	REMOTE STARTER ENCLOSURE FOR 3FDW-382	N/A	OEE-347-09	AB	809'	Not Used Not Used	NO	N/A	N/A	S,R
1	22.1	3RSC-3FDW-384/ENCL U3 Emergency Feedwater	REMOTE STARTER ENCLOSURE FOR 3FDW-384	N/A	OEE-347-10	AB	809'	Not Used Not Used	NO	N/A	N/A	S,R
1	131	3RSC-3HP-409/ENCL U3 High Pressure Injection	REMOTE STARTER ENCLOSURE FOR 3HP-409	N/A	OEE-351-31	AB	796'	In Service In Service	YES	O-2703-G	3XS3-02D	S,R
1	131	3RSC-3HP-410/ENCL U3 High Pressure Injection	REMOTE STARTER ENCLOSURE FOR 3HP-410	N/A	OEE-351-32	AB	796'	In Service In Service	YES	O-2703-G	3XS3-02D	S,R
1	132	3RSC-3LP-126/ENCL	REMOTE STARTER ENCLOSURE FOR 3LP-126	N/A	OEE-362-03	AB	771'	In Service In Service	YES	O-2703-D	3XL-04CT	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 Low Pressure Injection										
1	N/A	3RSC-3LPSW-565/ENCL U3 Low Pressure Service Water	REMOTE STARTER ENCLOSURE FOR 3LPSW-565	N/A	OEE-338-30	AB	796'	In Service In Service	YES	O-2703-G	3XS3-03CT	S,R
1	N/A	3RSC-3LPSW-566/ENCL U3 Low Pressure Service Water	REMOTE STARTER ENCLOSURE FOR 3LPSW-566	N/A	OEE-338-31	AB	796'	In Service In Service	YES	O-2703-G	3XS3-03CB	S,R
1	22	3RSC-3PR-59/ENCL U3 Penetration Rm Ventilation	REMOTE STARTER ENCLOSURE FOR 3PR-59	N/A	OEE-358-20	AB	809'	In Service In Service	YES	O-2703-D	3XI-01BB	S,R
1	22	3RSC-3PR-60/ENCL U3 Penetration Rm Ventilation	REMOTE STARTER ENCLOSURE FOR 3PR-60	N/A	OEE-358-21	AB	809'	In Service In Service	YES	O-2703-E	3XI-01BT	S,R
10	N/A	3SCHX000A U3 Stator Coolant	GENERATOR WATER COOLER 3A	N/A	OFD-121A-3.4 (D7)	TB	775'	In Service In Service	NO	N/A	N/A	S
10	N/A	3SCHX000B U3 Stator Coolant	GENERATOR WATER COOLER 3B	N/A	OFD-121A-3.4 (C7)	TB	775'	In Service In Service	NO	N/A	N/A	S
N/A	N/A	3SCWP U3 Main Turbine	UNIT 3 STATOR COOLING WATER PANEL	N/A	OEE-321-05	TB	775'	In Service In Service	N/A	N/A	N/A	R
10	171	3SFTK0002	INCORE INST HANDLING	N/A	OFD-104A-3.1 (I9)	RB	816'	Not Used	NO	N/A	N/A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
Evaluation type "S" indicates that a seismic evaluation was performed.
Evaluation type "R" indicates that a relay evaluation was performed.
Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 Emergency Feedwater	TANK					Not Used				
1	N/A	3SGFP U3 Condensate	SG FWP PANEL	N/A	OEE-346	TB	775'	In Service In Service	YES	O-2705-B	3DP-F01AL	S,R
1	172	3SGLC U3 Steam Generator	STEAM GEN LOGIC CABINET	N/A	O-2778	AB	809'	In Service In Service	YES	O-2705	3KCIA-17	S,R
1	N/A	3SKJ U3 208V PWR (PPB)	120V PPB 3SKJ	N/A	O-2710A	AB	809'	In Service In Service	YES	O-2703-G	3XS1-R03BB	S,R
1	N/A	3SKK U3 208V PWR (PPB)	120V PPB 3SKK	N/A	O-2710A	AB	809'	In Service In Service	YES	O-2703-G	3XS2-R03CT	S,R
1	N/A	3SKL U3 208V PWR (PPB)	120V PPB 3SKL	N/A	O-2710A	AB	809'	In Service In Service	YES	O-2703-G	3XS3-04BT	S,R
RB	N/A	3SL-5 U3 Control Cabinets	CRD SYSTEM LOGIC CAB 5	3CRDLC	O-2710-A	AB	809'	In Service In Service	N/A	O-2705/O-2705-A	3KVIA-14/3K	S,R
RB	N/A	3SL-6 U3 Control Cabinets	CRD SYSTEM LOGIC CAB 6	3CRDLC	O-2710-A	AB	809'	In Service In Service	N/A	O-2705/O-2705-A	3KVIA-14/3K	S,R
N/A	N/A	3SSHVA0001 U3 Main Turbine	STEAM SEAL HEADER ISOLATION	N/A	OFD-122B-3.1 (K6)	TB	796'	Closed Closed	NO	N/A	N/A	R
N/A	N/A	3SSHVA0003 U3 Main Turbine	STEAM SEAL HEADER ISOLATION	N/A	OFD-122B-3.1 (J6)	TB	796'	Closed Closed	NO	N/A	N/A	R
1	N/A	3TB-2111 U3 Condenser Circulating	TERM BOX 2111	N/A	OEE-336-13	YD	796'	In Service In Service	YES	O-2705	3KVID-03	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

11/11/97

Composite Safe Shutdown Equipment List (SSEL) Oconee Units 1,2 & 3

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		Water										
1	N/A	3TB-2112 U3 Condenser Circulating Water	TERM BOX 2112	N/A	OEE-336-13	YD	796'	In Service In Service	YES	O-2705	3KVID-03	S,R
11	N/A	3TBATWS1 U3 Emergency Feedwater	ATSW TERM BOX 1	N/A	O-2729-G	AB	809'	In Service In Service	YES	O-2704	3KG-26	S,R
11	N/A	3TBATWS2 U3 Emergency Feedwater	ATSW TERM BOX 2	N/A	O-2729-G	AB	809'	In Service In Service	YES	O-2704	3KG-27	S,R
27	133	3TC U3 4160 V PWR	4KV SWGR 3TC	N/A	O-2702	TB	796'	In Service In Service	YES	O-2702	MFB	S,R
10	134	3TCPA U3 Control Cabinets	TURB CONT PANEL 3TCPA	N/A	O-2751-O	TB	796'	In Service In Service	YES	O-2705	3DIA-31	S,R
27	133	3TD U3 4160 V PWR	4KV SWGR 3TD	N/A	O-2702	TB	796'	In Service In Service	YES	O-2702	MFB	S,R
16	N/A	3TDC3 U3 Reactor Coolant	TRANSDUCER CAB 3TDC3	N/A	OEE-350-23	AB	809'	In Service In Service	YES	O-2705-A	3KI-18	S,R
27	133	3TE U3 4160 V PWR	4KV SWGR 3TE	N/A	O-2702	TB	796'	In Service In Service	YES	O-2702	MFB	S,R
N/A	N/A	3TOFL0009 U3 Emergency Feedwater	EFW PUMP TURBINE OIL FILTER	N/A	OFD-135B-3.1 (I10)	TB	775'	Not Used In Service	NO	N/A	N/A	S*
RB	N/A	3TOHX0001	EFWPT OIL COOLER	3TOTK0002	OFD-133A-3.2 (I14)	TB	775'	Not Used	NO	N/A	N/A	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
Evaluation type "S" indicates that a seismic evaluation was performed.
Evaluation type "R" indicates that a relay evaluation was performed.
Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 Emergency Feedwater						In Service				
1	135	3TOHX000A U3 Main Turbine	MAIN TURB OIL TANK OIL COOLER	N/A	OFD-124A-3.2 (H7)	TB	796'	In Service Either	NO	N/A	N/A	S
1	135	3TOHX000B U3 Main Turbine	MAIN TURB OIL TANK OIL COOLER	N/A	OFD-124A-3.2 (F7)	TB	796'	In Service Either	NO	N/A	N/A	S
1	N/A	3TOPS0176B U3 Condensate DC Interlocks	FWPT 3A BEARING OIL PRESS LOW	N/A	OEE-345-00-A	TB	775'	In Service In Service	YES	O-2705	3DIA-20	S,R
1	N/A	3TOPS0192B U3 Condensate DC Interlocks	FWPT 3B BEARING OIL PRESS LOW	N/A	OEE-345-00-A	TB	775'	In Service In Service	YES	O-2705	3DIA-20	S,R
10	N/A	3TOPU0022 U3 Emergency Feedwater	EFWPT AUX OIL PUMP	N/A	OFD-135B-3.1 (H4)	TB	775'	Off On	YES	O-2705-B	3DP-R03A	S,R
RB	N/A	3TOPU0029 U3 Emergency Feedwater	EFWPT SHAFT DRIVEN OIL PUMP	3TOPU0022	OFD-135B-3.1 (F4)	TB	775'	Off On	NO	N/A	N/A	S
9	174	3TOTK0002 U3 Emergency Feedwater	EFW PUMP TURBINE OIL TANK	N/A	OFD-135B-3.1 (J2)	TB	775'	Not Used In Service	NO	N/A	N/A	S
20	N/A	3TOVA0059	EFW PUMP TURBINE OIL	N/A	OFD-135B-3.1 (H11)	TB	775'	Closed	NO	N/A	N/A	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSF" indicates that the equipment is part of the NSSF system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 Emergency Feedwater	PR VALVE					Throttled				
10	136	3TTC4 U3 Cabinet	TURB TERM CAB 3TTC4	N/A	O-2931	TB	796'	In Service In Service	NO	N/A	N/A	S,R
RB	N/A	3UB1 U3 Control Boards	CONTROL BOARD 3UB1	3UB1,2,3AB1,2,3,3A, EB1-8	O-2710	AB	822'	In Service In Service	N/A	N/A	N/A	S,R
59	137	3UB1,2,3AB1,2,2A,3,3A,EB 1-8 U3 Control Boards	CONTROL BOARDS 3UB1,2,AB3,3A,EB1,2,3,4	3UB1,2,3AB1,2,3,3A, EB1-8	N/A	AB	822'	In Service In Service	N/A	N/A	N/A	S,R
RB	N/A	3UB2 U3 Control Boards	CONTROL BOARD 3UB2	3UB1,2,3AB1,2,3,3A, EB1-8	O-2710	AB	822'	In Service In Service	N/A	N/A	N/A	S,R
RB	N/A	3VB1 U3 Control Boards	CONTROL BOARD 3VB1	3VB1,2,3	O-2710	AB	822'	In Service In Service	N/A	N/A	N/A	S,R
59	N/A	3VB1,2,3 U3 Control Boards	CONTROL BOARDS 3VB1,2,3	N/A	N/A	AB	822'	In Service In Service	N/A	N/A	N/A	S,R
RB	N/A	3VB2 U3 Control Boards	CONTROL BOARD 3VB2	3VB1,2,3	O-2710	AB	822'	In Service In Service	N/A	N/A	N/A	S,R
RB	N/A	3VB3 U3 Control Boards	CONTROL BOARD 3VB3	3VB1,2,3	O-2710	AB	822'	In Service In Service	N/A	N/A	N/A	S,R
51	138	3VSAH0013 HVAC	AHU-3-13	N/A	OEE-331-07	AB	838'	On On	YES	O-2703-C	3XT-01E	S,R
51	138	3VSAH0014	AHU-3-14	N/A	OEE-331-07	AB	838'	On On	YES	O-2703-C	3XT-01F	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

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Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		HVAC										
20	139	3VSAH0017 U3 Plant Heating	BATTERY RM AIR CONDITIONER	N/A	OFD-124A-3.3 (C2)	TB	822'	In Service Either	NO	N/A	N/A	S
51	140	3VSAH0026 HVAC	OUTSIDE AIR BOOSTER FAN 'A' (F3-8)	N/A	OEE-331-11	AB	838'	Off On	YES	O-2703-C	3XR-02D	S,R
51	141	3VSAH0027 HVAC	OUTSIDE AIR BOOSTER FAN 'B' (F3-9)	N/A	OEE-331-32	AB	838'	Off On	YES	O-2703-C	3XT-02C	S,R
20	142	3VSAH0029 U3 Plant Heating	ALTERREX CAB COOLING COIL	N/A	OFD-124A-3.3 (D5)	TB	822'	In Service Either	NO	N/A	N/A	S
N/A	N/A	3VSFL0026 HVAC	CRVS PAC FILTER "A" (UNIT 3)	N/A	N/A	AB	838'	In Service In Service	NO	N/A	N/A	NONE
N/A	N/A	3VSFL0027 HVAC	CRVS PAC FILTER "B" (UNIT 3)	N/A	N/A	AB	838'	In Service In Service	NO	N/A	N/A	NONE
51	N/A	3VSMN0001 HVAC	CHLORINE DETECTOR MONITOR PANEL	N/A	OEE-331-33	AB	838'	In Service In Service	YES	O-2704	3KG-34	S,R
20	N/A	3VVA0186 U3 Main Turbine	COND VACUUM BREAKER	N/A	OFD-121C-3.1 (I14)	TB	796'	Closed Open	YES	O-2703	3XA-R03A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
Evaluation type "S" indicates that a seismic evaluation was performed.
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Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
10	179	3X01 U3 600V PWR (LOAD CENTERS)	600V LC 3X01	N/A	O-2703	TB	796'	In Service In Service	YES	O-2702	3TC-02	S,R
RB	N/A	3X01/XFMR U3 600V PWR (LOAD CENTERS)	600V LC 3X01 XFMR (4160V TO 600V)	3X01	OEE-317-13	TB	796'	In Service In Service	YES	O-2702	3TC-02	S
10	179	3X02 U3 600V PWR (LOAD CENTERS)	600V LC 3X02	N/A	OM-2303-11	TB	796'	In Service In Service	YES	O-2702	3TD-02	S,R
RB	N/A	3X02/XFMR U3 600V PWR (LOAD CENTERS)	600V LC 3X02 XFMR (4160V TO 600V)	3X02	O-2703-A	TB	796'	In Service In Service	YES	O-2702	3TD-02	S
10	179	3X03 U3 600V PWR (LOAD CENTERS)	600V LC 3X03	N/A	OM-2303-11	TB	796'	In Service In Service	YES	O-2702	3TE-02	S,R
RB	N/A	3X03/XFMR U3 600V PWR (LOAD CENTERS)	600V LC 3X03 XFMR (4160V TO 600V)	3X03	O-2703-B	TB	796'	In Service In Service	YES	O-2702	3TE-02	S
16	143	3X04 U3 600V PWR (LOAD CENTERS)	600V LC 3X04	N/A	O-2703-C	TB	796'	In Service In Service	YES	O-2702	3TC-03	S,R
RB	N/A	3X04/XFMR U3 600V PWR (LOAD CENTERS)	600V LC 3X04 XFMR (4160V TO 600V)	3X04	O-2703-B, -C	TB	796'	In Service In Service	YES	O-2702	3TC-03	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		CENTERS)										
16	N/A	3X05 U3 600V PWR (LOAD CENTERS)	600V LC 3X05	N/A	OM-2303-11	TB	796'	In Service In Service	YES	O-2702	3TD-03	S,R
RB	N/A	3X05/XFMR U3 600V PWR (LOAD CENTERS)	600V LC 3X05 XFMR (4160V TO 600V)	3X05	O-2703-D	TB	796'	In Service In Service	YES	O-2702	3TD-03	S
16	N/A	3X06 U3 600V PWR (LOAD CENTERS)	600V LC 3X06	N/A	OM-2303-11	TB	796'	In Service In Service	YES	O-2702	3TE-03	S,R
RB	N/A	3X06/XFMR U3 600V PWR (LOAD CENTERS)	600V LC 3X06 XFMR (4160V TO 600V)	3X06	O-2703-E	TB	796'	In Service In Service	YES	O-2702	3TE-03	S
16	N/A	3X08 U3 600V PWR (LOAD CENTERS)	600V LC 3X08	N/A	OM-2303-12	AB	796'	In Service In Service	YES	O-2702	3TC-13	S,R
RB	N/A	3X08/XFMR U3 600V PWR (LOAD CENTERS)	600V LC XFMR 3X08 (4160V TO 600V)	3X08	O-2703-G	AB	796'	In Service In Service	YES	O-2702	3TC-13	S
16	N/A	3X09 U3 600V PWR (LOAD CENTERS)	600V LC 3X09	N/A	OM 2303-12	AB	796'	In Service In Service	YES	O-2702	3TD-13	S,R
RB	N/A	3X09/XFMR	600V LC XFMR 3X09	3X09	O-2703-G	AB	796'	In Service	YES	O-2702	3TD-13	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 600V PWR (LOAD CENTERS)	(4160V TO 600V)					In Service				
10	N/A	3X10/XFMR U3 600V PWR (LOAD CENTERS)	XFMR 3X10 (4160V TO 600V)	3X10	O-2703-G	TB	796'	In Service In Service	YES	O-2702	3TE-12	S
1	144	3XA U3 600V PWR (MCC)	MCC 3XA	N/A	O-2931	TB	796'	In Service In Service	YES	O-2703	3X01-04C	S,R
RB	N/A	3XA(208V) U3 600/208V MOTOR CONTROL CENTERS	208V MCC 3XA	3XA	O-2703	TB	796'	In Service In Service	YES	O-2703	3XA-FO7AT	S,R
RB	N/A	3XA(600V) U3 600/208V MOTOR CONTROL CENTERS	600V MCC 3XA	3XA	O-2703	TB	796'	In Service In Service	YES	O-2703	3XA-F03A	S,R
1	145	3XA-A U3 600/208V MOTOR CONTROL CENTERS	208V MCC 3XA-A	N/A	O-2931	TB	796'	In Service In Service	YES	O-2703	3XA-R05BB	S,R
1	N/A	3XA/XFMR U3 600/208V MOTOR CONTROL CENTERS	XFMR 3X1 (600V TO 208V)	N/A	O-2703	TB	796'	In Service In Service	YES	O-2703	3XA-FO7AT	S
10	86	3XB U3 600/208V MOTOR CONTROL CENTERS	600V MCC 3XB	N/A	O-2703-B	TB	775'	In Service In Service	YES	O-2703-A	3X02-04C	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
Evaluation type "S" indicates that a seismic evaluation was performed.
Evaluation type "R" indicates that a relay evaluation was performed.
Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
Evaluation type "NSSF" indicates that the equipment is part of the NSSF system and does not require a seismic evaluation.
The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
1	N/A	3XC U3 600/208V MOTOR CONTROL CENTERS	MCC 3XC	N/A	O-2928	TB	775'	In Service In Service	YES	O-2703-B	3XC-04D	S,R
RB	N/A	3XC(208V) U3 600/208V MOTOR CONTROL CENTERS	208V MCC 3XC	3XC	O-2703-B	TB	775'	In Service In Service	YES	O-2703-B	3XC-F06AT	S,R
RB	N/A	3XC(600V) U3 600/208V MOTOR CONTROL CENTERS	600V MCC 3XC	3XC	O-2703-B	TB	775'	In Service In Service	YES	O-2703-B	3XC-F03A	S,R
1	N/A	3XC/XFMR U3 600/208V MOTOR CONTROL CENTERS	XFMR 3XC (600V TO 208V)	N/A	O-2703-B	TB	775'	In Service In Service	YES	O-2703-B	3XC-F06AT	S
35	146	3XGA U3 600/208V MOTOR CONTROL CENTERS	MCC 3XGA	N/A	O-2930A	TB	796'	In Service In Service	YES	O-2703-A	3X02-05B	S,R
RB	N/A	3XGA(208V) U3 600/208V MOTOR CONTROL CENTERS	208V MCC 3XGA	3XGA	O-2703-A	TB	796'	In Service In Service	YES	O-2703-A	3XGA-F02A	S,R
RB	N/A	3XGA(600V) U3 600/208V MOTOR CONTROL CENTERS	600V MCC 3XGA	3XGA	O-2703-A	TB	796'	In Service In Service	YES	O-2703-A	3X02-05B	S,R
1	147	3XGA/XFMR	XFMR 3XGA (600V TO	N/A	O-2703-A	TB	796'	In Service	YES	O-2703-A	3XGA-F05AT	S

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 600/208V MOTOR CONTROL CENTERS	208V)					In Service				
35	148	3XGB U3 600V PWR (MCC)	MCC 3XGB	N/A	O-2931A	TB	796'	In Service In Service	YES	O-2703-B	3X03-05A	S,R
RB	N/A	3XGB(208V) U3 600/208V MOTOR CONTROL CENTERS	208V MCC 3XGB	3XGB	O-2703-B	TB	796'	In Service In Service	YES	O-2703-B	3XGB-F01E	S,R
RB	N/A	3XGB(600V) U3 600/208V MOTOR CONTROL CENTERS	600V MCC 3XGB	3XGB	O-2703-B	TB	796'	In Service In Service	YES	O-2703-B	3XGB-F01E	S,R
1	147	3XGB/XFMR U3 600/208V MOTOR CONTROL CENTERS	XFMR 3XGB (600V TO 208V)	N/A	O-2703-B	TB	796'	In Service In Service	YES	O-2703-B	3XGB-F01E	S
16	149	3XI U3 600/208V MOTOR CONTROL CENTERS	600V MCC 3XI	N/A	O-2913	AB	809'	In Service In Service	YES	O-2703-D	3X05-04C	S,R
16	149	3XJ U3 600/208V MOTOR CONTROL CENTERS	600V MCC 3XJ	N/A	O-2703-E	AB	809'	In Service In Service	YES	O-2703-E	3X06-04C	S,R
35	N/A	3XL U3 600V PWR (MCC)	MCC 3XL	N/A	O-2907	AB	771'	In Service In Service	YES	O-2703-D	3X05-04D	S,R
RB	N/A	3XL(208V)	208V MCC 3XL	3XL	O-2703-D	AB	771'	In Service	YES	O-2703-D	3XL-04AT	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 600/208V MOTOR CONTROL CENTERS						In Service				
RB	N/A	3XL(600V) U3 600/208V MOTOR CONTROL CENTERS	600V MCC 3XL	3XL	O-2703-D	AB	771'	In Service In Service	YES	O-2703-D	3X05-04D	S,R
1	N/A	3XL/XFMR U3 600/208V MOTOR CONTROL CENTERS	XFMR 3XL (600V TO 208V)	N/A	O-2703-D	AB	771'	In Service In Service	YES	O-2703-D	3XL-04AT	S
10	N/A	3XN U3 600V PWR (MCC)	MCC 3XN	N/A	O-2907	AB	771'	In Service In Service	YES	O-2703-E	3X06-04D	S,R
RB	N/A	3XN(208V) U3 600/208V MOTOR CONTROL CENTERS	208V MCC 3XN	3XN	O-2703-E	AB	771'	In Service In Service	YES	O-2703-E	3XN-02AT	S,R
RB	N/A	3XN(600V) U3 600/208V MOTOR CONTROL CENTERS	600V MCC 3XN	3XN	O-2703-E	AB	771'	In Service In Service	YES	O-2703-E	3X06-04D	S,R
1	N/A	3XN/XFMR U3 600/208V MOTOR CONTROL CENTERS	XFMR 3XN (600V TO 208V)	N/A	O-2703-E	AB	771'	In Service In Service	YES	O-2703-E	3XN-02AT	S
35	151	3XO U3 600V PWR (MCC)	MCC 3XO	N/A	O-2917D	AB	796'	In Service In Service	YES	O-2703-D	3X05-05A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

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Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
RB	N/A	3XO(208V) U3 600/208V MOTOR CONTROL CENTERS	208V MCC 3XO	3XO	O-2703-D	AB	796'	In Service In Service	YES	O-2703-D	3XO-F05B	S,R
RB	N/A	3XO(600V) U3 600/208V MOTOR CONTROL CENTERS	600V MCC 3XO	3XO	O-2703-D	AB	796'	In Service In Service	YES	O-2703-D	3X05-05A	S,R
1	N/A	3XO/XFMR U3 600/208V MOTOR CONTROL CENTERS	XFMR 3XO (600V TO 208V)	N/A	O-2703-D	AB	796'	In Service In Service	YES	O-2703-D	3XO-F05B	S
35	N/A	3XP U3 600V PWR (MCC)	MCC 3XP	N/A	O-2703-E	AB	796'	In Service In Service	YES	O-2703-E	3X06-05A	S,R
RB	N/A	3XP(208V) U3 600/208V MOTOR CONTROL CENTERS	208V MCC 3XP	3XP	O-2703-E	AB	796'	In Service In Service	YES	O-2703-E	3XP-F05B	S,R
RB	N/A	3XP(600V) U3 600/208V MOTOR CONTROL CENTERS	600V MCC 3XP	3XP	O-2703-E	AB	796'	In Service In Service	YES	O-2703-E	3XP-F02A	S,R
1	N/A	3XP/XFMR U3 600/208V MOTOR CONTROL CENTERS	XFMR 3XP (600V TO 208V)	N/A	O-2703-E	AB	796'	In Service In Service	YES	O-2703-E	3X06-05A	S
1	152	3XR	600V MCC 3XR	N/A	O-2703-C	AB	838'	In Service	YES	O-2703-C	3X04-05A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

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Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 600/208V MOTOR CONTROL CENTERS						In Service				
1	153	3XS1 U2 600/208V MOTOR CONTROL CENTERS	MCC 3XS1	N/A	O-2917D	AB	796'	In Service In Service	YES	O-2703-G	3X08-05A	S,R
RB	N/A	3XS1(208V) U3 600/208V MOTOR CONTROL CENTERS	208V MCC 3XS1	3XS1	O-2703-G	AB	796'	In Service In Service	YES	O-2703-G	3XS1-F05AT	S,R
RB	N/A	3XS1(600V) U3 600/208V MOTOR CONTROL CENTERS	600V MCC 3XS1	3XS1	O-2703-G	AB	796'	In Service In Service	YES	O-2703-G	3X08-05A	S,R
11	N/A	3XS1A/XFMR U3 600/208V MOTOR CONTROL CENTERS	XFMR 3XS1A (600V TO 208V)	N/A	O-2703-G	AB	796'	In Service In Service	YES	O-2703-G	3XS1-F05AT	S
1	N/A	3XS2 U3 600V PWR (MCC)	MCC 3XS2	N/A	O-2917D	AB	796'	In Service In Service	YES	O-2703-G	3X09-05A	S,R
RB	N/A	3XS2(208V) U3 600/208V MOTOR CONTROL CENTERS	208V MCC 3XS2	3XS2	O-2703-G	AB	796'	In Service In Service	YES	O-2703-G	3XS2-F04AT	S,R
RB	N/A	3XS2(600V) U3 600/208V MOTOR CONTROL CENTERS	600V MCC 3XS2	3XS2	O-2703-G	AB	796'	In Service In Service	YES	O-2703-G	3X09-05A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
 Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
 Evaluation type "S" indicates that a seismic evaluation was performed.
 Evaluation type "R" indicates that a relay evaluation was performed.
 Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
 Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
 Evaluation type "NSSF" indicates that the equipment is part of the NSSF system and does not require a seismic evaluation.
 The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
 All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
11	N/A	3XS2A/XFMR U3 600/208V MOTOR CONTROL CENTERS	XFMR 3XS2A (600V TO 208V)	N/A	O-2703-G	AB	796'	In Service In Service	YES	O-2703-G	3XS2-F04AT	S
31	154	3XS3 U3 600V PWR (MCC)	MCC 3XS3	N/A	O-2703-G	AB	796'	In Service In Service	YES	O-1702	2TE-12	S,R
RB	N/A	3XS3(208V) U3 600/208V MOTOR CONTROL CENTERS	208V MCC 3XS3	3XS3	O-2703-G	AB	796'	In Service In Service	YES	O-2703-G	3XS3-03BT	S,R
RB	N/A	3XS3(600V) U3 600/208V MOTOR CONTROL CENTERS	600V MCC 3XS3	3XS3	O-2703-G	AB	796'	In Service In Service	YES	O-2702	3TE-12	S,R
11	N/A	3XS3A/XFMR U3 600/208V MOTOR CONTROL CENTERS	XFMR 3XS3A (600V TO 208V)	N/A	O-2703-G	AB	796'	In Service In Service	YES	O-2703-G	3XS3-03BT	S
1	N/A	3XSF(208V) U3 600/208V MOTOR CONTROL CENTERS	MCC 3XSF(208V)	N/A	OM 308-361	SSF	817'	In Service In Service	YES	O-703-K	3XSF-F01A	S,R
10	N/A	3XSF(600V) U3 600/208V MOTOR CONTROL CENTERS	MCC 3XSF(600V)	N/A	OM 308-361	SSF	817'	In Service In Service	YES	O-2703-G/O-702-B	3X08-05B/OX	S,R
RB	N/A	3XSF-1(208V)	MCC 3XSF-1 (208V)	XSF-1(1,2,&3)	OM 308-361	SSF	797'	In Service	YES	O-703-K	3XSF-F02BL	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSF" indicates that the equipment is part of the NSSF system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		U3 600/208V MOTOR CONTROL CENTERS						In Service				
1	N/A	3XSf/XFMR U3 600/208V MOTOR CONTROL CENTERS	XFMR 3XSf (600V TO 208V)	N/A	OM 308-361	SSF	817'	In Service In Service	YES	O-703-K	3XSf-F04A	S
1	155	3XT U3 600V PWR (MCC)	MCC 3XT	N/A	O-2703-C	AB	838'	In Service In Service	YES	O-2703-C	3X04-05B	S,R
RB	N/A	3XT(208V) U3 600/208V MOTOR CONTROL CENTERS	208V MCC 3XT	3XT	O-2703-C	AB	838'	In Service In Service	YES	O-2703-C	3XT-01A	S,R
RB	N/A	3XT(600V) U3 600/208V MOTOR CONTROL CENTERS	600V MCC 3XT	3XT	O-2703-C	AB	838'	In Service In Service	YES	O-2703-C	3XT-02A	S,R
1	155	3XT/XFMR U3 600/208V MOTOR CONTROL CENTERS	XFMR 3XT (600V TO 208V)	N/A	O-2703-C	AB	838'	In Service In Service	YES	O-2703-C	3XT-01A	S
10	N/A	B1T U1 4160V NORMAL PWR	4KV SWGR B1T	N/A	OM-302-70.01	BH	796'	In Service In Service	YES	O-702-A	1T/2T	S,R
10	N/A	B2T U1 4160V NORMAL PWR	4KV SWGR B2T	N/A	OM-302-71	BH	796'	In Service In Service	YES	O-702-A	1T/2T	S,R
51	N/A	CD-05A	AHU-11 DISCHARGE	N/A	N/A	AB	838'	Open/closed	NO	N/A	N/A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

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Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		HVAC	DAMPER					Open/closed				
51	N/A	CD-05B HVAC	AHU-12 DISCHARGE DAMPER	N/A	N/A	AB	838'	Open/closed Open/closed	NO	N/A	N/A	S,R
51	156	CD-06A HVAC	AHU-11 INLET DAMPER	N/A	N/A	AB	838'	Open/closed Open/closed	NO	N/A	N/A	S,R
51	156	CD-06B HVAC	AHU-12 INLET DAMPER	N/A	N/A	AB	838'	Open/closed Open/closed	NO	N/A	N/A	S,R
51	N/A	CD-07A HVAC	AHU 3-13 DISCHARGE DAMPER	N/A	N/A	AB	838'	Open/closed Open/closed	NO	N/A	N/A	S,R
51	N/A	CD-07B HVAC	AHU 3-14 DISCHARGE DAMPER	N/A	N/A	AB	838'	Open/closed Open/closed	NO	N/A	N/A	S,R
51	N/A	CD-08A HVAC	AHU 3-13 INLET DAMPER	N/A	N/A	AB	838'	Open/closed Open/closed	NO	N/A	N/A	S,R
51	N/A	CD-08B HVAC	AHU 3-14 INLET DAMPER	N/A	N/A	AB	838'	Open/closed Open/closed	NO	N/A	N/A	S,R
51	N/A	CD-10A HVAC	BOOSTER FAN "A" INLET DAMPER (UNIT 1&2)	N/A	OEE-131-61	AB	838'	Closed Open	YES	O-704	1KG-21	S,R
51	N/A	CD-10B HVAC	BOOSTER FAN "B" INLET DAMPER (UNIT 1&2)	N/A	OEE-131-61	AB	838'	Closed Open	YES	O-704	1KG-21	S,R
51	N/A	CD-11A HVAC	BOOSTER FAN "A" INLET DAMPER (UNIT 3)	N/A	OEE-331-29	AB	838'	Closed Open/closed	YES	O-2704	3KG-02	S,R
51	N/A	CD-11B HVAC	BOOSTER FAN "B" INLET DAMPER (UNIT 3)	N/A	OEE-331-29	AB	838'	Closed Open/closed	YES	O-2704	3KG-02	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSF" indicates that the equipment is part of the NSSF system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
2	157	CT1 CT-1	XFMR CT-1	N/A	O-950	YD	796'	In Service In Service	YES	FSAR FIG 8-1	PCB-18	S,R
2	157	CT2 CT-2	XFMR CT-2	N/A	O-950	YD	796'	In Service In Service	YES	FSAR FIG 8-1	PCB-27	S,R
2	157	CT3 CT-3	XFMR CT-3	N/A	OM 2300-24	YD	796'	In Service In Service	YES	FSAR FIG 8-1	PCB-30	S,R
2	157	CT4 CT-4	XFMR CT-4	N/A	O-950	YD	796'	In Service In Service	YES	19	N/A	S,R
1	N/A	CT4FSC HVAC	CT4 FAN SPEED CABINET	N/A	N/A	BH	796'	N/A N/A	N/A	N/A	N/A	S,R
2	157	CT5 CT-5	XFMR CT-5	N/A	N/A	YD	796'	In Service In Service	NO	N/A	N/A	S,R
10	N/A	IC1/IC2/MEC U3 SSF Control Cabinet	SSF EOC CABINETS IC1/IC2/MEC	N/A	O-320-Z	SSF	797'	In Service In Service	N/A	N/A	N/A	S,R
9	N/A	KSFC/PPB U0 Standby Shutdown Facility	120V PPB KSFC	KSFC	O-315-A	SSF	777'	In Service In Service	YES	O-706	DCSF-02C	S,R
10	N/A	OTS1 U2 Standby Shutdown Facility	4KV SWGR OTS1	N/A	OEE-117-93-A	SSF	777'	In Service In Service	YES	O-702-A	B2T-04	S,R
10	N/A	PHC/SSF U3 SSF Pressurizer Cabinet	PZR HEATER CAB (SSF)	N/A	O-941	SSF	777'	In Service In Service	N/A	N/A	N/A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group	Outlier Ref. No.	Equipment ID Sytem	Name	Walkdown Host	Ref. Dwg/Zone	Bldg.	Floor Elev.	Norm. State Des. State	Power Req'd	Supp Sys. Dwg No/Rev.	Power Source	Eval. Type
1	N/A	RSC-1KSG-01/ENCL HVAC	Remote Starter Cabinet for 1KSG-01	N/A	OEE-131-09	BH	796'	In Service In Service	YES	O-703-G	1XS1-F04C	S,R
1	N/A	RSC-1KSG-02/ENCL HVAC	Remote Starter Cabinet for 1KSG-02	N/A	OEE-131-09	BH	796'	In Service In Service	YES	O-703-G	1XS1-F04C	S,R
1	N/A	RSC-1KSG-03/ENCL HVAC	Remote Starter Cabinet for 1KSG-03	N/A	OEE-131-08	BH	796'	In Service In Service	YES	O-703-G	1XS1-F04C	S,R
1	N/A	RSC-1KSG-04/ENCL HVAC	Remote Starter Cabinet for 1KSG-04	N/A	OEE-131-08	BH	796'	In Service In Service	YES	O-703-G	1XS1-F04C	S,R
1	N/A	SGFSC HVAC	BIT FAN SPEED CABINET	N/A	N/A	BH	796'	N/A N/A	N/A	N/A	N/A	S,R
N/A	N/A	SSFCCWAE U0 Condenser Circulating Water	SSF CCW AIREJECTOR	N/A	OFD-133A-2.5 (K11)	SSF	777'	Not Used Not Used	NO	N/A	N/A	S*
10	N/A	SSFCP U0 Standby Shutdown Facility	SSF CONTROL PANEL	N/A	O-942	SSF	797'	In Service In Service	N/A	N/A	N/A	S,R
9	160	XOD1 U1 600/208V MOTOR CONTROL CENTERS	208V MCC XOD1	N/A	O-703-A	YD	796'	In Service In Service	NO	N/A	N/A	S,R
10	N/A	XOD2A U1 600/208V MOTOR	208V MCC XOD2A	N/A	O-703-I	YD	796'	In Service In Service	NO	N/A	N/A	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.
Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.
Evaluation type "S" indicates that a seismic evaluation was performed.
Evaluation type "R" indicates that a relay evaluation was performed.
Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.
Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.
Evaluation type "NSSS" indicates that the equipment is part of the NSSS system and does not require a seismic evaluation.
The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.
All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix B

Composite Safe Shutdown Equipment List (SSEL)

Oconee Units 1,2 & 3

11/11/97

Signature Group (Cont.)	Outlier Ref. No. (Cont.)	Equipment ID Sytem (Cont.)	Name (Cont.)	Walkdown Host (Cont.)	Ref. Dwg/Zone (Cont.)	Bldg. (Cont.)	Floor Elev. (Cont.)	Norm. State Des. State (Cont.)	Power Req'd (Cont.)	Supp Sys. Dwg No/Rev. (Cont.)	Power Source (Cont.)	Eval. Type (Cont.)
		CONTROL CENTERS										
10	N/A	XOD2B U2 600/208V MOTOR CONTROL CENTERS	208V MCC XOD2B	N/A	O-703-I	YD	796'	In Service In Service	NO	N/A	N/A	S,R
1	N/A	XSF(600V) U0 600/208V MOTOR CONTROL CENTERS	MCC XSF(600V)	N/A	O-702-B	SSF	777'	In Service In Service	YES	O-702-B/1703-G	OXSF-04C/2	S,R
1	161	XSF-1(1,2,&3) U1 600/208V MOTOR CONTROL CENTERS	MCC XSF-1(1,2&3)(208V)	N/A	OM 308-361	SSF	797'	In Service In Service	YES	O-703-K	IXSF-F02BL/	S,R

Notes: Evaluation type "NONE" indicates that equipment is passive. No seismic or relay evaluation required.

Evaluation type "S*" or "S*,R" indicates that equipment is a rugged, passive, in-line device. No seismic evaluation is required.

Evaluation type "S" indicates that a seismic evaluation was performed.

Evaluation type "R" indicates that a relay evaluation was performed.

Evaluation type "S,R" indicates that both a seismic and relay evaluation was performed.

Signature group "RB" indicates that the equipment is a "Rule of the Box" item. The seismic evaluation for these items is included with the equipment designated in the "Walkdown Host" field.

Evaluation type "NSSF" indicates that the equipment is part of the NSSF system and does not require a seismic evaluation.

The results of the seismic evaluation for all equipment designated as "S" or "S,R" can be located in Appendix D (SVDS) by signature group.

All equipment outliers can be located in Tables 8.1 & 8.2 by their Outlier Ref. No.

Appendix C

Seismic Review Safe Shutdown Equipment List
Oconee Units 1, 2 & 3

Appendix C

SEISMIC REVIEW SAFE SHUTDOWN EQUIPMENT LIST (SSEL) OCONEE UNITS 1,2 & 3

The Seismic Review SSEL is contained within the Appendix B Composite SSEL. All components comprising the Seismic Review SSEL are identified within Appendix B by either a "S" or "S,R" under "Eval. Type". Equipment which was evaluated by "Rule of the Box" with another component is designated with a "RB" in the Signature Group field. The seismic evaluation for these items can be found with the equipment listed in the "Walkdown Host" field. The results of the seismic evaluations for all equipment comprising the Seismic Review SSEL can be found in the SVDS forms located in Appendix D. These items are grouped within Appendix D by there SVDS signature group. All outliers are addressed in Table 8.1 and 8.2. Outliers can be identified within the Composite SSEL by their Outlier Reference Number. Outliers in Tables 8.1 & 8.2 are indexed by there Outlier Ref. No.

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Appendix D

Screening Verification Data Sheets (SVDS)
Equipment Categories 0-21

Appendix D.1

SCREENING VERIFICATION DATA SHEET (SVDS) GIP CATEGORY 0-21

The following SVDS forms are grouped by the signatures of SRT's associated with the walkdowns for each individual item. A signature page follows each SVDS group. SVDS forms were generated for the entire Oconee A-46 project. The SVDS forms contained in this Appendix address Oconee Units 1,2 & 3 items only. The page numbers are not consecutive due to the omission of Emergency Power items previously submitted.

Note Details:

The numbers in the "Notes" column represent the following comments.

1. Equipment was found to meet the intent of at least one caveat. See Table 5.4 of the A-46 report.
2. Equipment is on the SSEL for pressure boundary only. Capacity vs Demand determination does not apply.
3. Anchorage adequacy evaluated per a "Tug Test".
4. Tanks are supported on legs. Configuration is outside the GIP.
5. All Category "0" equipment is considered an Outlier. See Tables 8.1 & 8.2 for Outlier Resolution or Proposed Resolution.
6. Equipment was inaccessible for seismic walkdown. Equipment will be evaluated at earliest opportunity.
7. Tanks are seismically adequate but do not meet the configuration requirements of the GIP.

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 1

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
1	08	0LPSVA0139	NONESSENTIAL HEADER ISOLATION VALVE	TB	775'+0"	J-25	796	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	18	1AHCC	AIR HANDLING UNITS 11 & 12 CONTROL PANEL	AB	838'+0"		843'	No	ABS	RRS	Yes	Yes	No	Yes	No	1,3
1	20	1ASP	AUX SHUTDOWN PANEL	TB	822'+0"	M-31	822'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	20	1ATS	AREA TERMINATION CABINET 5	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	20	1ATWSCP	UI ATWS CONTROL PANEL	AB	838'+0"		838	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	1BSPS0018	RB PRESS SWITCH (ES CH 1A)	AB	809'+0"	QA-66	-816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	1BSPS0019	RB PRESS SWITCH (ES CH 1A)	AB	809'+0"	QA-66	-816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	1BSPS0020	RB PRESS SWITCH (ES CH 1B)	AB	809'+0"	S-70	-816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	1BSPS0021	RB PRESS SWITCH (ES CH 1B)	AB	809'+0"	S-70	-816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	1BSPS0022	RB PRESS SWITCH (ES CH 1C)	AB	809'+0"	V-71	-816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	1BSPS0023	RB PRESS SWITCH (ES CH 1C)	AB	809'+0"	V-71	-816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	1BSPT0004P	RB PRESS XMTR (ES CH 1A)	AB	809'+0"	QA-66	-816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	1BSPT0005P	RB PRESS XMTR (ES CH 1B)	AB	809'+0"	S-70	-816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	1BSPT0006P	RB PRESS XMTR (ES CH 1C)	AB	809'+0"	V-70	-816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	08	1BSVA0001	RB SPRAY HEADER 1A ISOLATION	AB	809'+0"	Qa-67	<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	08	1BSVA0002	RB SPRAY HEADER 1B ISOLATION	AB	809'+0"	X-69	<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	

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SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 2

SVDS Group	Eq. CL	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
1	08	1BSVA0003	BS PUMP SUCTION ISOLATION VALVE	AB	758'+0"	T-71	758'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	1BSVA0004	BS PUMP SUCTION ISOLATION VALVE	AB	758'+0"	T-72	758'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	18	1CPS0227	CONDENSATE BOOSTER PUMP SUCTION HEADER PRESS LOW	TB	775'+0"		775'+0"	Yes	DOC	GRS	Yes	Yes	Yes	Yes	Yes	
1	00	1CREL	UNIT 1 CONTROL ROOM EMERGENCY LIGHTS	AB	822'+0"		822'+0"	N/A	N/A	N/A	Yes	N/A	Yes	Yes	No	5
1	14	1DL2/PPB	125V DC PPB 1DL2	AB	796'+6"	P-72	800'	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	20	1EPSLP1	EPSL PANEL 1EPSLP1	AB	809'+0"	N-72	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	No	No	
1	20	1EPSLP2	EPSL PANEL 1EPSLP2	AB	809'+0"	S-72	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	1FDWPS0300	1EFPT LOW HYDRAULIC OIL PRESS SWITCH	TB	775'+0"		775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	1
1	18	1FDWPS0383	FWPT 1B CONTROL OIL PRESS SWITCH	TB	775'+0"	B/C-25/	775	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	1FDWPS0384	FWPT 1A CONTROL OIL PRESS SWITCH	TB	775'+0"	B/C-23/	775	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	1FDWPS0385	FWPT 1B CONTROL OIL PRESS SWITCH	TB	775'+0"	B/C-25/	775	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	1FDWPS0386	MDEFWP 1A DISCH PRESS SWITCH	TB	775'+0"	E-23	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	1FDWPS0387	MDEFWP 1A DISCH PRESS SWITCH	TB	775'+0"	E-23	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	1FDWPS0388	FWPT 1B DISCH PRESS SWITCH	TB	775'+0"	E-26	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	

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SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 3

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
1	18	1FDWPS0389	FWPT 1B DISCH PRESS SWITCH	TB	775'+0"	E-26	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	1FDWPS1009	MAIN FWP DISCH HDR PRESS SWITCH	TB	775'+0"	E-24	780	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	1FDWPS1010	MAIN FWP B DISCHARGE PRESSURE SWITCH	TB	775'+0"	E-25	780	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	1FDWPS1011	FWP 1A CONTROL OIL PRESSURE SWITCH	TB	775'+0"	B-23	775	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	1FDWPS1012	FWP 1B CONTROL OIL PRESS SWITCH	TB	775'+0"	B-25	775	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	07	1FDWVA0106	SG 1A SAMPLE ISOLATION	AB	809'+0"	Qa-70	809'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	1
1	07	1FDWVA0108	SG 1B SAMPLE ISOLATION	AB	809'+0"	V-71	809	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	07	1FDWVA0315	MDEFW PUMP 1A ISOLATION	AB	809'+0"	Qa-67	<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	07	1FDWVA0316	MDEFW PUMP 1B ISOLATION	AB	809'+0"	W-70	<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	20	1HBP	UNIT 1 HEATER BLANKETING PANEL	TB	822'+0"	J-17	822'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	1HDPS0377	1ST STAGE RH PRESS SWITCH	TB	822'+0"	G-18	822'+0"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	1HPIEP0002	RCP SEAL INJECTION FLOW	TB	775'+0"		787	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	1HPIFT0007A	HPI A TRAIN INJ FLOW TRANS	AB	758'+0"	R-71	<811	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	1HPIFT0008A	HPI A TRAIN INJ FLOW TRANS	AB	758'+0"	R-71	<811	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	1HPIFT0101	RC PUMP SEAL INLET FLOW XMTR	AB	783'+0"		<811	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	1HPIFT0102	RC PUMP SEAL INLET FLOW XMTR	AB	783'+0"		<811	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	

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SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 4

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
1	18	1HPIFT0103	RC PUMP SEAL INLET FLOW XMTR	AB	783'+0"		<811	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	1HPIFT0104	RC PUMP SEAL INLET FLOW XMTR	AB	783'+0"		<811	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	1HPIFT0160	B LOOP INJ FLOW TRANSMITTER	AB	809'+0"	S-70	~816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	07	1HPVA0021	RCP SEAL RETURN ISOLATION	AB	809'+0"	Qa-68	809	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	1HPVA0024	BWST SUCTION ISOLATION	AB	771'+0"	R-71	775	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	1HPVA0025	BWST SUCTION ISOLATION	AB	771'+0"	R-72	775	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	1HPVA0026	HPI TRAIN 1A INJECTION	AB	809'+0"	Qa-68	809	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	1HPVA0027	HPI TRAIN 1B (EMERGENCY) INJ	AB	809'+0"	X-68	809	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	07	1HPVA0355	HPI AUX SPRAY THROTTLE	AB	809'+0"	Qa-68	809	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	1HPVA0409	HPI CROSSOVER ISOLATION	AB	809'+0"	X-67	<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	08	1HPVA0410	HPI CROSSOVER ISOLATION	AB	809'+0"	Qa-68	<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	20	1ICCM A	UNIT 1 ICCM TRAIN A CABINET	AB	822'+0"		822'+0"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	20	1ICCM B	UNIT 1 ICCM TRAIN B CABINET	AB	822'+0"		822'+0"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	14	1KC	120V PPB 1KC	TB	796'+6"	J-26	801'+6"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	04	1KC/XFMR	XFMR 1KC (600:208:120V)	TB	796'+6"	J-26	796'+6"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	14	1KG	120V PPB 1KG	AB	838'+0"		842'+0"	No	ABS	RRS	No	Yes	No	Yes	No	1

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SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

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SVDS Group	Eq. CL	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
1	14	1KI	120V PPB 1KI	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	14	1KI/SW/BP	STATIC SWITCH AND INVERTER BYPASS SWITCH 1KI	AB	796'+6"		802'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	1
1	14	1KI/SW/T	TRANSFER SWITCH 1KI	AB	796'+6"	R-73	802'-0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	04	1KI/XFMR	ISOLATION XFMR SHIELDED 1KI	AB	796'+6"	R-73	796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	14	1KRA	120V PPB 1KRA	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	14	1KSG	208/120V POWER PANELBOARD 1KSG	BH	796'+6"		796'	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	04	1KSG/XFMR	600/120V PPB 1KSG TRANS FORMER	BH	796'+6"		801'	Yes	BS	GRS	Yes	Yes	Yes,	Yes	Yes	
1	14	1KU	120V PPB 1KU	AB	809'+0"	R-72	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	20	1KU/SW/BP	STATIC SWITCH AND INVERTER BYPASS SWITCH 1KU	AB	796'+6"		802'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	1
1	20	1KU/SW/T	ASCO XFER SWITCH 1KU	AB	796'+6"		802'-0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	04	1KU/XFMR	ISOLATION XFMR SHIELDED 1KU	AB	796'+6"	R-72	796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	20	1KX/SW/BP	STATIC SWITCH AND INVERTER BYPASS SWITCH 1KX	AB	796'+6"		802'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	1
1	20	1KX/SW/T	ASCO XFER SWITCH 1KX	AB	796'+6"	R-72	802'-0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	14	1L21/PPB	125V DC PPB 1L21	AB	822'+0"	R-72	826'	Yes	BS	GRS	Yes	No	No	Yes	No	

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1	18	1LPIFT0004P	LPI TRAIN 1B INJ FLOW TRANS	AB	809'+0"	S-71	-816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	1LPIFT0005P	LPI TRAIN 1A INJ FLOW TRANS	AB	809'+0"	Q-68	-816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	19	1LPITE0209	LPI COOLER 1B OUTLET TEMP	AB	809'+0"	QA	-816'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	19	1LPITE0210	LPI COOLER 1A OUTLET TEMP	AB	771'+0"	Q-65	-816'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	18	1LPSEP0022	DECAY HEAT COOLER E/P CONVERTER (1LPSW-251)	TB	775'+0"	M-20	780	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	1LPSEP0023	DECAY HEAT COOLER E/P CONVERTER (1LPSW-252)	TB	775'+0"	L-23	780	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	1LPSFT0124	LPI COOLER 1A FLOW XMTR (1LPSW-251)	AB	771'+0"	Q65	774'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	1LPSFT0125	LPI COOLER 1B FLOW XMTR (1LPSW-252)	AB	771'+0"	Q-70	774'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	1LSPSP0095	LPSW HEADER PRESSURE	TB	775'+0"	H-25	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	1LSPSP0096	LPSW HEADER PRESSURE	TB	775'+0"	G-25	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	08	1LPSVA0005	LPI COOLER 1B ISOLATION VALVE	AB	783'+0"	Q-70	791	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	1LPSVA0018	RBCU 1A RETURN VALVE	AB	809'+0"	Q-67	<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	08	1LPSVA0021	RBCU 1B RETURN VALVE	AB	809'+0"	Q-67	<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	08	1LPSVA0024	RBCU 1C RETURN VALVE	AB	809'+0"	Q-67	<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	08	1LPVA0003	LPI HOT LEG SUCTION	AB	809'+0"	W-70	<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	08	1LPVA0006	LPI SUCTION CROSSOVER	AB	758'+0"	T-72	770'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	

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1	08	1LPVA0007	LPI SUCTION CROSSOVER	AB	758'+0"	T-72	770'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	1LPVA0017	LPI TRAIN 1A INJECTION ISOLATION	AB	809'+0"	Qa-69	<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	08	1LPVA0018	LPI TRAIN 1B INJECTION ISOLATION	AB	809'+0"	W-69	<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	08	1LPVA0019	RB EM SUMP SUCTION	AB	758'+0"	T-71	768'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	1LPVA0020	RB EM SUMP SUCTION	AB	758'+0"	T-72	768'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	1LPVA0069	LPI SWITCHOVER FLOW CONTROL	AB	758'+0"	T-71	758'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	1LPVA0126	LPI POST ACCIDENT SAMPLE ISOL	AB	758'+0"	T-72	768'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	18	1MC-20	INSTRUMENT RACK 1MC-20	TB	796'+6"	M-20	796'+6"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	1MC-E16	INSTRUMENT RACK 1MC-E16	TB	796'+6"	E-16	796	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	1MC-E25	INSTRUMENT RACK 1MC-E25	TB	775'+0"		775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	1MC-F15	INSTRUMENT RACK 1MC-F15	TB	796'+6"	F-15	796'+6"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	1MSPS0086	MAIN STEAM PRESS SWITCH (IMS-19)	TB	796'+6"	M-19	820	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	1MSPS0087	MAIN STEAM PRESS SWITCH (IMS-22)	TB	796'+6"	M-18	820	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	1MSPS0088	MAIN STEAM PRESS SWITCH (IMS-28)	TB	796'+6"	M-19	820	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	1MSPS0089	MAIN STEAM PRESS SWITCH (IMS-31)	TB	796'+6"	M-20	820	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	

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1	08	1MSVA0017	TURBINE BYPASS ISOLATION	TB	796'+6"	M-18	822'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	07	1MSVA0019	TURBINE BYPASS VALVE	TB	796'+6"	M-19	822'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	07	1MSVA0022	TURBINE BYPASS VALVE	TB	796'+6"	M-18	822'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	1MSVA0024	AS ISOLATION	TB	796'+6"	M-17	796'+6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	07	1MSVA0028	TURBINE BYPASS VALVE	TB	796'+6"	M-19	822'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	07	1MSVA0031	TURBINE BYPASS VALVE	TB	796'+6"	M-20	822'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	1MSVA0033	AS ISOLATION	TB	796'+6"	M-16	796'+6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	1MSVA0080	MS TO 2ND STAGE RHTR ISOL	TB	796'+6"	H-13	822'+0	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	18	1PS157AB/PS101	LOW HYDRAULIC PRESSURE SWITCH	TB	775'+0"		775'	Yes	ABS	RRS	Yes	No	No	Yes	No	
1	18	1RCPT0021P	RC PRESS XMTR (ES CH A)	RB	825'+0"		830'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	19	1RCRD0007B	B2 COLD LEG RTD	RB	797'+0"		805'-3	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	19	1RCRD0008A	B1 COLD LEG RTD	RB	797'+0"		802'+2"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	19	1RCRD0084B	A HOT LEG RTD	RB	844'+6"		844'+8	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	19	1RCRD0085B	B HOT LEG RTD	RB	844'+6"		844'+8	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	08	1RCVA0003	PRZ SPRAY ISOLATION	RB	850'+0"		848'+7	No	ABS	RRS	No	Unkno	N/A	Yes	No	
1	08	1RCVA0004	PRZ PORV BLOCK VALVE	RB	850'+0"		849'+6	No	ABS	RRS	No	Unkno	N/A	Yes	No	
1	08	1RCVA0066	PRZ PORV	RB	850'+0"		852'+4.5	No	ABS	RRS	No	Yes	N/A	Yes	No	
1	07	1RCVA0067	PRZ CODE SAFETY	RB	850'+0"		849'+6	No	ABS	RRS	No	Yes	N/A	Yes	No	

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1	07	1RCVA0068	PRZ CODE SAFETY	RB	850'+0"		849'+6	No	ABS	RRS	No	Yes	N/A	Yes	No	
1	07	1RCVA0179	SG 1B SAMPLE THROTTLE	AB	758'+0"	T-71	758'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	1
1	14	1RSC-1CCW-287/ENC L	REMOTE STARTER ENCLOSURE FOR 1CCW-287	SSF	758'+0"	D-14	758	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	1
1	14	1RSC-1FDW-368/ENC L	REMOTE STARTER ENCLOSURE FOR 1FDW-368	AB	809'+0"	D-14	809'+0"	Yes	BS	GRS	Yes	Yes	No	Yes	No	1
1	14	1RSC-1FDW-369/ENC L	REMOTE STARTER ENCLOSURE FOR 1FDW-369	AB	809'+0"	D-14	809'+0"	Yes	BS	GRS	Yes	Yes	No	Yes	No	1
1	14	1RSC-1FDW-372/ENC L	REMOTE STARTER ENCLOSURE FOR 1FDW-372	AB	809'+0"	N-70/71	809'+0"	Yes	BS	GRS	Yes	Yes	No	Yes	No	1,3
1	14	1RSC-1FDW-374/ENC L	REMOTE STARTER ENCLOSURE FOR 1FDW-374	AB	809'+0"	N-70/71	809'+0"	Yes	BS	GRS	Yes	Yes	No	Yes	No	1
1	14	1RSC-1FDW-382/ENC L	REMOTE STARTER ENCLOSURE FOR 1FDW-382	AB	809'+0"	N-70/71	809'+0"	Yes	BS	GRS	Yes	Yes	No	Yes	No	1
1	14	1RSC-1FDW-384/ENC L	REMOTE STARTER ENCLOSURE FOR 1FDW-384	AB	809'+0"	N-70/71	809'+0"	Yes	BS	GRS	Yes	Yes	No	Yes	No	1
1	14	1RSC-1HP-409/ENCL	REMOTE STARTER ENCLOSURE FOR 1HP-409	AB	796'+6"	D-14	796	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	1
1	14	1RSC-1HP-410/ENCL	REMOTE STARTER ENCLOSURE FOR 1HP-410	AB	796'+6"	D-14	796	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	1
1	14	1RSC-1LPSW-565/ENCL	REMOTE STARTER ENCLOSURE FOR 1LPSW-565	AB	796'+6"	D-14	796	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	1
1	14	1RSC-1LPSW-566/ENCL	REMOTE STARTER ENCLOSURE FOR 1LPSW-566	AB	796'+6"	D-14	796	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	1
1	14	1RSC-1PR-59/ENCL	REMOTE STARTER ENCLOSURE FOR 1PR-59	AB	809'+0"	D-14	809'+0"	Yes	BS	GRS	Yes	Yes	No	Yes	No	1

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SVDS Group	Eq. CL	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
1	14	1RSC-1PR-60/ENCL	REMOTE STARTER ENCLOSURE FOR 1PR-60	AB	809'+0"	D-14	809'+0"	Yes	BS	GRS	Yes	Yes	No	Yes	No	1
1	20	1SGFP	SG FWP PANEL	TB	775'+0"	B25	775	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	20	1SGLC	STEAM GEN LOGIC CABINET	AB	809'+0"		809	Yes	ABS	RRS	Yes	No	No	Yes	No	
1	20	1TB-111	TERM BOX 111	YD	796'+6"		796'+6"	Yes	BS	GRS	Yes	No	Yes	Yes	No	1
1	20	1TB-112	TERM BOX 112	YD	796'+6"		796'+6"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	20	1TOPS0176B	FWPT 1A BEARING OIL PRESS LOW	TB	775'+0"		775	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	20	1TOPS0192B	FWPT 1B BEARING OIL PRESS LOW	TB	775'+0"		775	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	3
1	09	1VSAH-B1T-EV-A	B1T & B2T ENCLOSURE VENT FAN A	BH	796'+6"		817'	Yes	BS	GRS	Yes	Unkno	Unkno	Yes	No	
1	09	1VSAH-B1T-EV-B	B1T & B2T ENCLOSURE VENT FAN B	BH	796'+6"		817'	Yes	BS	GRS	Yes	Unkno	Unkno	Yes	No	
1	09	1VSAH-CT4-EV-A	CT4 ENCLOSURE VENT FAN A	BH	796'+6"		817'	Yes	BS	GRS	Yes	Unkno	Unkno	Yes	No	
1	09	1VSAH-CT4-EV-B	CT4 ENCLOSURE VENT FAN B	BH	796'+6"		817'	Yes	BS	GRS	Yes	Unkno	Unkno	Yes	No	
1	01	1XA	MCC 1XA	TB	796'+6"		796'+6"	Yes	ABS	RRS	No	No	No	Yes	No	1
1	01	1XA-A	208V MCC 1XA-A	TB	796'+6"		796'+6"	Yes	ABS	RRS	No	No	No	Yes	No	1
1	04	1XA/XFMR	XFMR 1XA	TB	796'+6"	D-14	796'+6"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	01	1XC	MCC 1XC	TB	775'+0"		775'+0"	Yes	ABS	RRS	Yes	No	Yes	Yes	No	1
1	04	1XC/XFMR	XFMR 1XC (600V TO 208V)	TB	775'+0"		775'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	

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1	04	1XGA/XFMR	XFMR 1XGA	TB	796'+6"	K-21	796'+6"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	04	1XGB/XFMR	XFMR 1XGB	TB	796'+6"	M-16	796'+6"	Yes	BS	GRS	Yes	No	No	Yes	No	
1	01	1XL,1XN	MCC 1XL	AB	771'+0"		771'+0"	Yes	BS	RRS	Yes	No	No	No	No	
1	04	1XL/XFMR	XFMR 1XL (600V TO 208V)	AB	771'+0"	S-72	771'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	04	1XN/XFMR	XFMR 1XN (600V TO 208V)	AB	771'+0"	S-72	771'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	04	1XO/XFMR	XFMR 1XO (600V TO 208V)	AB	796'+6"		796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	01	1XR	600V MCC 1XR	AB	838'+0"		838	No	DOC	RRS	No	No	No	Yes	No	
1	04	1XR/XFMR	XFMR 1XR (600V 208V)	AB	838'+0"	N-73	838	No	ABS	RRS	No	Yes	Yes	Yes	No	
1	01	1XSF (208V)	MCC 1XSF(208V)	SSF	817'+0"		817'+0"	Yes	DOC	RRS	Yes	N/A	Yes	Yes	Yes	
1	04	1XSF/XFMR	600/208V XFMR 1XSF	SSF	817'+0"	F-15	817'+0"	Yes	DOC	RRS	Yes	N/A	Yes	Yes	Yes	
1	20	2ASP	AUX SHUTDOWN PANEL	TB	822'+0"	M-28/2	822'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	20	2AT8	AREA TERM CAB 2AT8	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	No	No	
1	20	2ATWSCP	U2 ATWS CONTROL PANEL	AB	838'+0"		838	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	2BSPS0018	RB PRESS SWITCH (ES CH 2A)	AB	809'+0"	S-76	-816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	2BSPS0019	RB PRESS SWITCH (ES CH 2A)	AB	809'+0"	S-76	-816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	2BSPS0020	RB PRESS SWITCH (ES CH 2B)	AB	809'+0"	R-81	-816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	2BSPS0021	RB PRESS SWITCH (ES CH 2B)	AB	809'+0"	R-81	-816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	2BSPS0022	RB PRESS SWITCH (ES CH 2C)	AB	809'+0"	V-76	-816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	

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1	18	2BSPS0023	RB PRESS SWITCH (ES CH 2C)	AB	809'+0"	V-76	-816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	2BSPT0004P	RB PRESS XMTR (ES CH 2A)	AB	809'+0"	S-76	-816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	2BSPT0005P	RB PRESS XMTR (ES CH 2B)	AB	809'+0"	R-81A	-816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	2BSPT0006P	RB PRESS XMTR (ES CH 2C)	AB	809'+0"	V-76	-816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	08	2BSVA0001	RB SPRAY HEADER 2A ISOLATION	AB	809'+0"		<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	08	2BSVA0002	RB SPRAY HEADER 2B ISOLATION	AB	809'+0"		<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	08	2BSVA0003	BS PUMP SUCTION ISOL VALVE	AB	758'+0"		758'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	2BSVA0004	BS PUMP SUCTION ISOL VALVE	AB	758'+0"		758'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	18	2CPS0227	CONDENSATE BOOSTER PUMP SUCTION HEADER PRESS LOW	TB	775'+0"		775'+0"	Yes	DOC	GRS	Yes	Yes	Yes	Yes	Yes	
1	00	2CREL	UNIT 2 CONTROL ROOM EMERGENCY LIGHTS	AB	822'+0"		822'+0"	N/A	N/A	N/A	Yes	N/A	Yes	Yes	No	5
1	14	2DIA/PPB	125V PPB 2DIA	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	14	2DIB/PPB	125V PPB 2DIB	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	14	2DIC/PPB	125V PPB 2DIC	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	14	2DID/PPB	125V PPB 2DID	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	14	2DL2/PPB	125V DC PPB 2DL2	AB	796'+6"	P-74	800'	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	20	2EPLP1	EPLP PANEL 2EPLP1	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	

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SVDS Group	Eq. CL	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
1	20	2EPSLP2	EPSL PANEL 2EPSLP2	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	No	Yes	No	No	
1	18	2FDWPS0300	2EFPT LOW HYDRAULIC OIL PRESS SWITCH	TB	775'+0"		775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	1
1	18	2FDWPS0382	FWPT 2B CONTROL OIL PRESS SWITCH	TB	775'+0"	B/C-29/	775	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	2FDWPS0383	FWPT 2A CONTROL OIL PRESS SWITCH	TB	775'+0"	B/C-29/	775	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	2FDWPS0384	FWPT 2A CONTROL OIL PRESS SWITCH	TB	775'+0"	B/C-29/	775	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	2FDWPS0385	FWPT 2B CONTROL OIL PRESS SWITCH	TB	775'+0"	B/C-29/	775	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	2FDWPS0386	MDEFWP 2A DISCH PRESS SWITCH	TB	775'+0"	E-32	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	2FDWPS0387	MDEFWP 2A DISCH PRESS SWITCH	TB	775'+0"	E-32	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	2FDWPS0388	FWPT 2B DISCH PRESS SWITCH	TB	775'+0"	E-30	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	2FDWPS0389	FWPT 2B DISCH PRESS SWITCH	TB	775'+0"	E-30	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	2FDWPS1009	MAIN FWP DISCH PRESS SWITCH (2MS-93)	TB	775'+0"	E-31	780	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	2FDWPS1010	MAIN FWP DISCH PRESS SWITCH (2MS-93)	TB	775'+0"	E-29	780	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	2FDWPS1011	FWP 2A DISCH HDR PRESS SWITCH	TB	775'+0"	B-31	775	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	2FDWPS1012	MAIN FWP 2B DISCH HDR PRESS SWITCH	TB	775'+0"	B-29	775	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	

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1	07	2FDWVA0086	PRESS REG TD PUMP SEALS	TB	775'+0"	C-35	775'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	1
1	07	2FDWVA0087	PRESS REG TD PUMP SEALS	TB	775'+0"	C-35	775'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	1
1	08	2FDWVA0105	SG 2A SAMPLE ISOLATION	RB	797'+0"		>817'+6"	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	1
1	07	2FDWVA0106	SG 2A SAMPLE ISOLATION	AB	809'+0"	R-77	809	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	07	2FDWVA0108	SG 2B SAMPLE ISOLATION	AB	809'+0"	V-75	809	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	07	2FDWVA0129	PRESS REG TD PUMP SEALS	TB	775'+0"	C-35	775'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	1
1	07	2FDWVA0218	PRESS REG TD PUMP SEALS	TB	775'+0"	C-35	775'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	1
1	07	2FDWVA0315	MDEFW PUMP 2A ISOLATION	AB	809'+0"	Qe-79	<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	07	2FDWVA0316	MDEFW PUMP 2B ISOLATION	AB	809'+0"	W-76	<838'	No	ABS	RRS	Yes	No	N/A	Yes	No	
1	20	2HBP	UNIT 2 HEATER BLANKETING PANEL	TB	822'+0"	J-17	822'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	2HDPS0377	1ST STAGE RH PRESS SWITCH	TB	822'+0"	D-37	822'+0"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	2HPIEP0002	RCP SEAL INJECTION FLOW	TB	775'+0"		787	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	2HPIFT0007A	HPI A TRAIN INJ FLOW TRANSMITTER	AB	758'+0"	R-71	<811	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	2HPIFT0008A	HPI B TRAIN INJ FLOW TRANSMITTER	AB	758'+0"		<811	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	2HPIFT0101	RC PUMP SEAL INLET FLOW XMTR	AB	783'+0"		<811	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	2HPIFT0102	RC PUMP SEAL INLET FLOW XMTR	AB	783'+0"		<811	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	

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1	18	2HPIFT0103	RC PUMP SEAL INLET FLOW XMTR	AB	783'+0"		<811	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	2HPIFT0104	RC PUMP SEAL INLET FLOW XMTR	AB	783'+0"		<811	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	2HPIFT0160	B LOOP INJ FLOW TRANSMITTER	AB	809'+0"	S-75	<816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	07	2HPVA0021	RCP SEAL RETURN ISOLATION	AB	809'+0"		809	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	2HPVA0024	BWST SUCTION ISOLATION	AB	771'+0"		775	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	2HPVA0025	BWST SUCTION ISOLATION	AB	771'+0"		775	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	2HPVA0026	HPI TRAIN 2A INJECTION	AB	809'+0"		816	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	08	2HPVA0027	HPI TRAIN 2B (EMERGENCY) INJECTION	AB	809'+0"		809'+0"	Yes	DOC	GRS	Yes	Yes	N/A	Yes	Yes	
1	07	2HPVA0031	RCP SEAL INJ FLOW CONTROL	AB	796'+6"	R-77	798'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	07	2HPVA0355	HPI AUX SPRAY THROTTLE	AB	809'+0"	Qn-78	814	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	08	2HPVA0409	HPI CROSSOVER ISOLATION	AB	809'+0"		<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	08	2HPVA0410	HPI CROSSOVER ISOLATION	AB	809'+0"		<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	20	2ICCM A	UNIT 2 ICCM TRAIN A CABINET	AB	822'+0"		822'+0"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	20	2ICCM B	UNIT 2 ICCM TRAIN B CABINET	AB	822'+0"		822'+0"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	14	2KB	120V PPB 2KB	TB	796'+6"	J-21	801'+6"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	04	2KB/XFMR	XFMR 2KB (600:208:120V)	TB	796'+6"		796'+6"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	

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1	20	2KESP	KEOWEE EMERGENCY START PANEL	AB	809'+0"	R-73	809'+0"	Yes	ABS	RRS	Yes	No	Yes	Yes	No	
1	14	2KI	120V PPB 2KI	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	20	2KI/SW/BP	STATIC SWITCH AND INVERTER BYPASS SWITCH 2KI	AB	796'+6"		802'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	1
1	20	2KI/SW/T	ASCO XFER SWITCH 2KI	AB	796'+6"	R-74	802'-0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	04	2KI/XFMR	ISOLATION XFMR SHIELDED 2KI	AB	796'+6"	R-74	796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	14	2KM	120V PPB 2KM	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	14	2KRB	120V PPB 2KRB	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	14	2KU	120V PPB 2KU	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	20	2KU/SW/BP	STATIC SWITCH AND INVERTER BYPASS SWITCH 2KU	AB	796'+6"		802'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	1
1	20	2KU/SW/T	ASCO XFER SWITCH 2KU	AB	796'+6"		802'-0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	04	2KU/XFMR	ISOLATION XFMR SHIELDED 2KU	AB	796'+6"	R-74	796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	14	2KVIA	120V PPB 2KVIA	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	14	2KVIB	120V PPB 2KVIB	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	14	2KVIC	120V PPB 2KVIC	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	14	2KVID	120V PPB 2KVID	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	14	2KX	120V PPB 2KX	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	

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1	20	2KX/SW/BP	STATIC SWITCH AND INVERTER BYPASS SWITCH 2KX	AB	796'+6"		802'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	1
1	20	2KX/SW/T	ASCO XFER SWITCH 2KX	AB	796'+6"	R-74	802'-0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	14	2L21/PPB	125V DC PPB 2L21	AB	822'+0"	Q/R-74	826'	Yes	BS	GRS	Yes	No	No	Yes	No	
1	18	2LPIFT0004P	LPI TRAIN 2B INJ FLOW TRANS	AB	809'+0"		-816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	2LPIFT0005P	LPI TRAIN 2A INJ FLOW TRANS	AB	809'+0"		-816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	19	2LPITE0209	LPI COOLER 2B OUTLET TEMP	AB	809'+0"		-816'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	19	2LPITE0210	LPI COOLER 2A OUTLET TEMP	AB	809'+0"		-816'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	18	2LPSEP0022	DECAY HEAT COOLER E/P CONVERTER (2LPSW-251)	TB	775'+0"	M-35	780	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	2LPSEP0023	DECAY HEAT COOLER E/P CONVERTER (2LPSW-252)	TB	775'+0"	M-31	780	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	2LPSFT0124	LPI COOLER 2A FLOW XMTR (2LPSW-251)	AB	771'+0"		774'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	2LPSFT0125	LPI COOLER 2B FLOW XMTR (2LPSW-252)	AB	771'+0"	Q-76	774'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	08	2LPSVA0004	LPI COOLER 2A ISOLATION VALVE	AB	783'+0"	Qa-82	788'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	2LPSVA0018	RBCU 2A RETURN VALVE	AB	809'+0"	Qa-79	<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	08	2LPSVA0021	RBCU 2B RETURN VALVE	AB	809'+0"	Qa-79	<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	08	2LPSVA0024	RBCU 2C RETURN VALVE	AB	809'+0"	Qa-79	<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	08	2LPVA0003	LPI HOT LEG SUCTION	AB	758'+0"	S-76	<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	

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SVDS Group	Eq. CL	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
1	08	2LPVA0006	LPI SUCTION CROSSOVER	AB	758'+0"	T-74	770'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	2LPVA0007	LPI SUCTION CROSSOVER	AB	758'+0"	T-74	770'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	2LPVA0017	LPI TRAIN 2A INJECTION ISOL	AB	822'+0"	Qa-77	<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	08	2LPVA0018	LPI TRAIN 2B INJECTION ISOL	AB	809'+0"	X-76a	<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	08	2LPVA0019	RB EM SUMP SUCTION	AB	758'+0"		768'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	2LPVA0020	RB EM SUMP SUCTION	AB	758'+0"		768'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	2LPVA0069	LPI SWITCHOVER FLOW CTRL	AB	758'+0"	T-75	758'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	2LPVA0126	LPI POST ACC SAMPLE ISOL	AB	758'+0"	T-75	760	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	18	2MC-1	INSTRUMENT RACK 2MC-1	TB	775'+0"		775'+0"	Yes	ABS	RRS	Yes	No	No	Yes	No	
1	18	2MC-12	INSTRUMENT RACK 2MC-12	TB	796'+6"	E-16	796	Yes	ABS	RRS	No	Yes	No	Yes	No	
1	18	2MC-16	INSTRUMENT RACK 2MC-16	TB	796'+6"	M-35	796'+6"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	2MC-F40	INSTRUMENT RACK 2MC-F40	TB	796'+6"	F-40	796'+6"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	20	2MFBMRP	MAIN FDR BUS MONITOR RLY PANEL	AB	809'+0"	P-75	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	No	No	
1	18	2MSPS0086	MAIN STEAM PRESS SWITCH (MS-19)	TB	796'+6"	M-36	820	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	2MSPS0087	MAIN STEAM PRESS SWITCH (MS-22)	TB	796'+6"	M-36	820	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	2MSPS0088	MAIN STEAM PRESS SWITCH (MS-28)	TB	796'+6"	M-35	820	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	2MSPS0089	MAIN STEAM PRESS SWITCH	TB	796'+6"	M-35	820	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	

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SVDS Group	Eq. CL	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
			(MS-31)													
1	08	2MSVA0017	TURBINE BYPASS ISOLATION	TB	796'+6"	M-37	822'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	07	2MSVA0019	TURBINE BYPASS VALVE	TB	796'+6"	M-36	822'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	07	2MSVA0022	TURBINE BYPASS VALVE	TB	796'+6"	M-36	822'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	2MSVA0024	AS ISOLATION	TB	796'+6"	M-38	796'+6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	07	2MSVA0028	TURBINE BYPASS VALVE	TB	796'+6"	M-36	822'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	07	2MSVA0031	TURBINE BYPASS VALVE	TB	796'+6"	M-35	822'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	2MSVA0033	AS ISOLATION	TB	796'+6"	M-38	796'+6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	2MSVA0079	MS RH ISOLATION	TB	796'+6"	E-42	822'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	2MSVA0080	MS TO 2ND STAGE RHTR ISOL	TB	796'+6"		822	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	18	2PS157AB/PS101	LOW HYDRAULIC PRESSURE SWITCH	TB	775'+0"		775'	Yes	ABS	RRS	Yes	No	No	Yes	No	
1	19	2RCRD0005B	A2 COLD LEG RTD	RB	797'+0"		811'-0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	19	2RCRD0006A	A1 COLD LEG RTD	RB	797'+0"		811'-0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	19	2RCRD0007B	B2 COLD LEG RTD	RB	797'+0"		811'-0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	19	2RCRD0008A	B1 COLD LEG RTD	RB	797'+0"		811'-0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	19	2RCRD0043A	PRZ RTD	RB	797'+0"		>817'+6"	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	19	2RCRD0043B	PRZ RTD	RB	797'+0"		>817'+6"	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	08	2RCVA0003	PRZ SPRAY ISOLATION	RB	850'+0"		848+7	No	ABS	RRS	No	Unkno	N/A	Yes	No	

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SVDS Group	Eq. CL	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
1	08	2RCVA0004	PRZ PORV BLOCK VALVE	RB	850'+0"		849'+6"	No	ABS	RRS	No	Unkno	N/A	Yes	No	
1	08	2RCVA0066	PRZ PORV	RB	850'+0"		849'+6"	No	ABS	RRS	No	Yes	N/A	Yes	No	
1	07	2RCVA0067	PRZ CODE SAFETY	RB	850'+0"		849'-5.75"	No	ABS	RRS	No	Yes	N/A	Yes	No	
1	07	2RCVA0068	PRZ CODE SAFETY	RB	850'+0"		849'-5.75"	No	ABS	RRS	No	Yes	N/A	Yes	No	
1	08	2RCVA0159	RV VENT ISOLATION	RB	844'+6"		845	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	08	2RCVA0160	RV VENT ISOLATION	RB	844'+6"		845	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	07	2RCVA0179	POST ACC SAMPLE THROTTLE	AB	758'+0"	T-75	758'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	1
1	14	2RSC-2CCW-287/ENC L	REMOTE STARTER ENCLOSURE FOR 2CCW-287	SSF	758'+0"	D-14	758	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	1
1	14	2RSC-2FDW-368/ENC L	REMOTE STARTER ENCLOSURE FOR 2FDW-368	AB	809'+0"	D-14	809'+0"	Yes	BS	GRS	Yes	Yes	No	Yes	No	1
1	14	2RSC-2FDW-369/ENC L	REMOTE STARTER ENCLOSURE FOR 2FDW-369	AB	809'+0"	D-14	809'+0"	Yes	BS	GRS	Yes	Yes	No	Yes	No	1
1	14	2RSC-2FDW-372/ENC L	REMOTE STARTER ENCLOSURE FOR 2FDW-372	AB	809'+0"		809'+0"	Yes	BS	GRS	Yes	Yes	No	Yes	No	1
1	14	2RSC-2FDW-374/ENC L	REMOTE STARTER ENCLOSURE FOR 2FDW-374	AB	809'+0"		809'+0"	Yes	BS	GRS	Yes	Yes	No	Yes	No	1
1	14	2RSC-2FDW-382/ENC L	REMOTE STARTER ENCLOSURE FOR 2FDW-382	AB	809'+0"		809'+0"	Yes	BS	GRS	Yes	Yes	No	Yes	No	1
1	14	2RSC-2FDW-384/ENC L	REMOTE STARTER ENCLOSURE FOR 2FDW-384	AB	809'+0"		809'+0"	Yes	BS	GRS	Yes	Yes	No	Yes	No	1
1	14	2RSC-2HP-409/ENCL	REMOTE STARTER ENCLOSURE FOR 2HP-409	AB	796'+6"	D-14	796	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	1

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1	14	2RSC-2HP-410/ENCL	REMOTE STARTER ENCLOSURE FOR 2HP-410	AB	796'+6"	D-14	796	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	1
1	14	2RSC-2LPSW-565/ENCL	REMOTE STARTER ENCLOSURE FOR 2LPSW-565	AB	796'+6"	D-14	796	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	1
1	14	2RSC-2LPSW-566/ENCL	REMOTE STARTER ENCLOSURE FOR 2LPSW-566	AB	796'+6"	D-14	796	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	1
1	14	2RSC-2PR-59/ENCL	REMOTE STARTER ENCLOSURE FOR 2PR-59	AB	809'+0"	D-14	809'+0"	Yes	BS	GRS	Yes	Yes	No	Yes	No	1
1	14	2RSC-2PR-60/ENCL	REMOTE STARTER ENCLOSURE FOR 2PR-60	AB	809'+0"	D-14	809'+0"	Yes	BS	GRS	Yes	Yes	No	Yes	No	1
1	20	2SGFP	SG FWP PANEL	TB	775'+0"	B31	775	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	20	2SGLC	STEAM GEN LOGIC CABINET	AB	809'+0"		809	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	14	2SKJ	120V PPB 2SKJ	AB	809'+0"		809'-0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	14	2SKK	120V PPB 2SKK	AB	809'+0"		809'-0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	14	2SKL	120V PPB 2SKL	AB	809'+0"		809'-0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	20	2TB-1001	TERMINAL BOX TB-1001	BH	796'+6"		796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	20	2TB-1111	TERM BOX TB-1111	YD	796'+6"		796'+6"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	20	2TB-1112	TERM BOX TB-1112	YD	796'+6"		796'+6"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	02	2X04	600V LC 2X04	TB	796'+6"		796'+6"	Yes	BS	GRS	Yes	Yes	No	Yes	No	
1	01	2XA	MCC 2XA	TB	796'+6"	D39/40	796'+6"	Yes	ABS	RRS	No	Yes	Yes	No	No	1
1	01	2XA-A	208V MCC 2XA-A	TB	796'+6"	D39	796'+6"	Yes	DOC	RRS	Yes	No	No	Yes	No	

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1	04	2XA/XFMR	XFMR 2XA (600V TO 208V)	TB	796'+6"	D-39	796'+6"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	01	2XC	MCC 2XC	TB	775'+0"	B30	775'+0"	Yes	ABS	RRS	Yes	No	Yes	Yes	No	1
1	04	2XC/XFMR	XFMR 2XC (600V TO 208V)	TB	775'+0"	B-30	775'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	04	2XGA/XFMR	XFMR 2XGA(600V TO 208V)	TB	796'+6"		796'+6"	Yes	BS	GRS	Yes	No	No	Yes	No	
1	04	2XGB/XFMR	XFMR 2XGB (600V TO 208V)	TB	796'+6"	M-39	796'+6"	Yes	BS	GRS	Yes	No	No	Yes	No	
1	01	2XL,2XN	MCC 2XL	AB	771'+0"	S74	771'+0"	Yes	BS	RRS	Yes	No	Yes	Yes	No	
1	04	2XL/XFMR	XFMR 2XL (600V TO 208V)	AB	771'+0"	S-74	771'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	04	2XN/XFMR	XFMR 2XN (600V TO 208V)	AB	771'+0"	S-71	771'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	04	2XO/XFMR	XFMR 2XO (600V TO 208V)	AB	796'+6"	P-73	796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	04	2XP/XFMR	XFMR 2XP (600V TO 208V)	AB	796'+6"	Q-74	796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	01	2XR	600V MCC 2XR	AB	838'+0"		838	No	DOC	RRS	No	No	Yes	No	No	
1	01	2XSF (208V)	MCC 2XSF(208V)	SSF	817'+0"		817'+0"	Yes	DOC	RRS	Yes	N/A	Yes	No	No	
1	04	2XSF/XFMR	XFMR 2XSF (600V TO 208V)	SSF	817'+0"	F-15	817'+0"	Yes	DOC	RRS	Yes	N/A	Yes	Yes	Yes	
1	18	3AHCC(13&14)	AIR HANDLING UNITS 13 & 14 CONTROL PANEL	AB	838'+0"		838	No	ABS	RRS	Yes	No	No	Yes	No	
1	20	3ASP	AUX SHUTDOWN PANEL	TB	822'+0"	M-43	822'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	20	3AT3	AREA TERMINATION CABINET 3	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	20	3ATWSCP	U3 ATWS CONTROL PANEL	AB	838'+0"		838	No	ABS	RRS	Yes	Yes	No	Yes	No	

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1	18	3BSPS0018	RB PRESS SWITCH (ES CH 3A)	AB	809'+0"	S-91	-816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	3BSPS0019	RB PRESS SWITCH (ES CH 3A)	AB	809'+0"	S-91	-816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	3BSPS0020	RB PRESS SWITCH (ES CH 3B)	AB	809'+0"	R-96	-816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	3BSPS0021	RB PRESS SWITCH (ES CH 3B)	AB	809'+0"	R-96	-816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	3BSPS0022	RB PRESS SWITCH (ES CH 3C)	AB	809'+0"	N-91	-816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	3BSPS0023	RB PRESS SWITCH (ES CH 3C)	AB	809'+0"	N-91	-816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	3BSPT0004P	RB PRESS XMTR (ES CH 3A)	AB	809'+0"	S-91	-816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	3BSPT0005P	RB PRESS XMTR (ES CH 3B)	AB	809'+0"	R-96	-816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	3BSPT0006P	RB PRESS XMTR (ES CH 3C)	AB	809'+0"	W-91	-816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	3CPS0227	CONDENSATE BOOSTER PUMP SUCTION HEADER PRESS LOW	TB	775'+0"		775'+0"	Yes	DOC	GRS	Yes	Yes	Yes	Yes	Yes	
1	00	3CREL	UNIT 3 CONTROL ROOM EMERGENCY LIGHTS	AB	822'+0"		822'+0"	N/A	N/A	N/A	Yes	N/A	Yes	Yes	No	5
1	14	3DL2/PPB	125V DC PPB 3DL2	AB	796'+6"	Qa-90	800'	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	1
1	01	3DP	125/250V DC 3DP	TB	796'+6"	L-44	796'+6"	Yes	ABS	RRS	No	Yes	Yes	Yes	No	1
1	18	3FDWPS0300	3EFPT LOW HYDR OIL PRESS SWITCH	TB	775'+0"		775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	1
1	18	3FDWPS0382	FWPT 3A CONTROL OIL PRESS SWITCH (3TD-00)	TB	775'+0"	B	775	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	3FDWPS0383	FWPT 3A CONTROL OIL PRESS SWITCH (3TE-00)	TB	775'+0"	B	775	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	

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1	18	3FDWPS0384	FWPT 3B CONTROL OIL PRESS SWITCH (3TD-00)	TB	775'+0"	B	775	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	3FDWPS0385	FWPT 3B CONTROL OIL PRESS SWITCH (3TE-00)	TB	775'+0"	B	775	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	3FDWPS0386	MDEFWP 3A DISCH PRESS SWITCH (3TD-00)	TB	775'+0"	E-46	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	3FDWPS0387	MDEFWP 3A DISCH PRESS SWITCH (3TE-00)	TB	775'+0"	E-46	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	3FDWPS0388	FWPT 3B DISCH PRESS SWITCH	TB	775'+0"	E-44	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	3FDWPS0389	FWPT 3B DISCH PRESS SWITCH	TB	775'+0"	E-44	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	08	3FDWVA0105	SG 3A SAMPLE ISOLATION	RB	797'+0"		>817'+6"	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	1
1	20	3HBP	UNIT 3 HEATER BLANKETING PANEL	TB	822'+0"	J-51	822'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	3HDPS0377	1ST STAGE RH PRESS SWITCH	TB	822'+0"	D-48	822'+0"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	3HPIEP0002	RCP SEAL INJECTION FLOW	TB	775'+0"		787	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	3HPIFT0007A	A LOOP INJ FLOW TRANSMITTER	AB	758'+0"	R-89	<811	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	3HPIFT0008A	HPI LOOP 3B FLOW XMTR	AB	758'+0"	S-89	<811	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	3HPIFT0101	RC PUMP SEAL INLET FLOW XMTR	AB	783'+0"	Qa-92	<811	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	3HPIFT0102	RC PUMP SEAL INLET FLOW XMTR	AB	783'+0"	Qa-92	<811	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	3HPIFT0103	RC PUMP SEAL INLET FLOW XMTR	AB	783'+0"	Qa-92	<811	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	

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1	18	3HPFT0104	RC PUMP SEAL INLET FLOW XMTR	AB	783'+0"	Qa-92	<811	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	08	3HPVA0001	LETDOWN INLET ISOLATION	RB	777'+0"	C-27	777'+6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	3HPVA0002	LETDOWN INLET ISOLATION	RB	777'+0"	C-27	777'+6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	3HPVA0003	LETDOWN ISOLATION	RB	777'+0"	C-28	777'+6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	3HPVA0004	LETDOWN ISOLATION	RB	777'+0"	C-05	777'+6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	3HPVA0020	RCP SEAL RETURN ISOLATION	RB	809'+0"	C-17	812'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	07	3HPVA0031	RCP SEAL INJ FLOW CONTROL	AB	796'+6"		798'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	3HPVA0426	ALT LETDOWN PATH ISOLATION	RB	777'+0"	C-22	783'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	20	3ICCM A	UNIT 3 ICCM TRAIN A CABINET	AB	822'+0"		822'+0"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	20	3ICCM B	UNIT 3 ICCM TRAIN B CABINET	AB	822'+0"		822'+0"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	14	3KC	120V PPB 3KC	TB	796'+6"	K-44	780'	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	1
1	04	3KC/XFMR	600/208V TRANSFORMER 3KC	TB	796'+6"		796'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	14	3KG	120V PPB 3KG	AB	838'+0"	P-88	842'+0"	No	ABS	RRS	Yes	Yes	No	Yes	No	1
1	20	3KI/SW/BP	STATIC SWITCH AND INVERTER BYPASS SWITCH 3KI	AB	796'+6"		802'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	1
1	20	3KI/SW/T	ASCO XFER SWITCH 3KI	AB	796'+6"		802'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	04	3KI/XFMR	ISOLATION XFMR SHIELDED 3KI	AB	796'+6"		796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	

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1	14	3KM	120V PPB 3KM	AB	809'+0"	Q-90	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	14	3KRA	PPB 3KRA	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	14	3KTH1	120V PPB 3KTH1	AB	771'+0"	Qa-88	771'+0"	Yes	BS	GRS	Yes	Yes	No	Yes	No	1,3
1	20	3KU/SW/BP	STATIC SWITCH AND INVERTER BYPASS SWITCH 3KU	AB	796'+6"		802'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	1
1	20	3KU/SW/T	ASCO XFER SWITCH 3KU	AB	796'+6"	Qa-88	802'-0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	04	3KU/XFMR	ISOLATION XFMR SHIELDED 3KU	AB	796'+6"	Qa-88	796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	20	3KX/SW/BP	STATIC SWITCH AND INVERTER BYPASS SWITCH 3KX	AB	796'+6"		802'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	1
1	20	3KX/SW/T	ASCO XFER SWITCH 3KX	AB	796'+6"		802'-0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	14	3L21/PPB	125V DC PPB 3L21	AB	822'+0"	Q-87/88	826'	Yes	BS	GRS	Yes	No	No	Yes	No	
1	14	3L22/PPB	125V DC PPB 3L22	AB	822'+0"	Q-89/90	826'	Yes	BS	GRS	Yes	No	No	Yes	No	
1	18	3LPSEP0022	DECAY HEAT COOLER E/P CONVERTER (3LPBW-405)	TB	775'+0"	M-51	780	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	3LPSEP0023	DECAY HEAT COOLER E/P CONVERTER (3LPBW-404)	TB	775'+0"	M-47	780	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	3LPST0124	LPI COOLER 3A FLOW XMTR (3LPBW-405)	AB	771'+0"		774'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	3LPST0125	LPI COOLER 3B FLOW XMTR (3LPBW-404)	AB	771'+0"		774'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	3LPSP0102	LPSW HEADER PRESSURE	TB	775'+0"	L-47	775	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	

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1	18	3LPSP0103	LPSW HEADER PRESSURE	TB	775'+0"	L-47	775	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	08	3LPSPA0004	LPI COOLER 3A ISOLATION VALVE	AB	783'+0"	Qa-97	788'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	3LPSPA0005	LPI COOLER 3B ISOLATION VALVE	AB	783'+0"	Qa-91	788	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	3LPSPA0565	RB AUX COOLERS SUPPLY VALVE	RB	825'+0"	C-06	841'6"	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	18	3MC-25	INSTRUMENT RACK 3MC-25	TB	796'+6"	M-49	796'+6"	Yes	ABS	RRS	No	No	No	Yes	No	
1	18	3MC-32	INSTRUMENT RACK 3MC-32	TB	775'+0"		775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	3MC-33	INSTRUMENT RACK 3MC-33	TB	775'+0"		775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	3MC-F54	INSTRUMENT RACK 3MC-F54	TB	796'+6"	F-54	796'+6"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	3MSPS0086	MAIN STEAM PRESS SWITCH (3MS-19)	TB	796'+6"	M-49	820	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	3MSPS0087	MAIN STEAM PRESS SWITCH (3MS-22)	TB	796'+6"	M-49	820	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	3MSPS0088	MAIN STEAM PRESS SWITCH (3MS-28)	TB	796'+6"	M-49	820	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	18	3MSPS0089	MAIN STEAM PRESS SWITCH (3MS-31)	TB	796'+6"	M-49	820	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	08	3MSVA0024	AS ISOLATION	TB	796'+6"	M-54	796'+6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	3MSVA0033	AS ISOLATION	TB	796'+6"	M-55	796'+6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	3MSVA0077	MS TO 2ND STAGE RHTR ISOL	TB	796'+6"	H-56	822'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	08	3MSVA0078	MS TO 2ND STAGE RHTR ISOL	TB	796'+6"	G-55	822'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	

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1	18	3PS157AB/PS101	LOW HYDRAULIC PRESSURE SWITCH	TB	775'+0"		775'	Yes	ABS	RRS	Yes	No	No	Yes	No	
1	19	3RCPT0017P	RCS LOOP A PRESS TRANS	RB	825'+0"		828'+0"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	3RCPT0021P	RC PRESS XMTR (ES CH A)	RB	825'+0"		828'+0"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	3RCPT0022P	RC PRESS XMTR (ES CH B)	RB	825'+0"		828'+0"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	3RCPT0023P	RC PRESS XMTR (ES CH C)	RB	825'+0"		828'+0"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	18	3RCPT0166P	RCS LOOP B PRESS TRANS	RB	825'+0"		828'+0"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	19	3RCRD0006A	RCS COLD LEG RTD	RB	797'+0"		805'-0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	19	3RCRD0008A	RCS COLD LEG RTD	RB	797'+0"		805'-0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
1	19	3RCRD0043A	PRZ RTD	RB	797'+0"		>817'+6"	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	19	3RCRD0043B	PRZ RTD	RB	797'+0"		>817'+6"	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	19	3RCRD0085B	HOT LEG 3B RTD	RB	844'+6"		846.0'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	08	3RCVA0003	PRZ SPRAY ISOLATION	RB	850'+0"		848+7	No	ABS	RRS	No	Unkno	N/A	Yes	No	
1	08	3RCVA0004	PRZ PORV BLOCK VALVE	RB	850'+0"		849+6	No	ABS	RRS	No	Unkno	N/A	Yes	No	
1	08	3RCVA0066	PRZ PORV	RB	850'+0"		852'-0"	No	ABS	RRS	No	Yes	N/A	Yes	No	
1	07	3RCVA0067	PRZ CODE SAFETY	RB	850'+0"		849'-6"	No	ABS	RRS	No	Yes	N/A	Yes	No	
1	07	3RCVA0068	PRZ CODE SAFETY	RB	850'+0"		849'-6"	No	ABS	RRS	No	Yes	N/A	Yes	No	
1	08	3RCVA0160	RV VENT ISOLATION	RB	844'+6"	W	845'-0"	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
1	07	3RCVA0179	POST ACC SAMPLE THRTL	AB	758'+0"	T-90	758'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	1

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SVDS Group	Eq. CL	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
1	14	3RSC-3CCW-287/ENC L	REMOTE STARTER ENCLOSURE FOR 3CCW-287	SSF	758'+0"	D-14	758	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	1
1	14	3RSC-3FDW-368/ENC L	REMOTE STARTER ENCLOSURE FOR 3FDW-368	AB	809'+0"	D-14	809'+0"	Yes	BS	GRS	Yes	Yes	No	Yes	No	1,3
1	14	3RSC-3FDW-369/ENC L	REMOTE STARTER ENCLOSURE FOR 3FDW-369	AB	809'+0"	D-14	809'+0"	Yes	BS	GRS	Yes	Yes	No	Yes	No	1,3
1	14	3RSC-3FDW-372/ENC L	REMOTE STARTER ENCLOSURE FOR 3FDW-372	AB	809'+0"		809'+0"	Yes	BS	GRS	Yes	Yes	No	Yes	No	1
1	14	3RSC-3FDW-374/ENC L	REMOTE STARTER ENCLOSURE FOR 3FDW-374	AB	809'+0"		809'+0"	Yes	BS	GRS	Yes	Yes	No	Yes	No	1
1	14	3RSC-3FDW-382/ENC L	REMOTE STARTER ENCLOSURE FOR 3FDW-382	AB	809'+0"		809'+0"	Yes	BS	GRS	Yes	Yes	No	Yes	No	1
1	14	3RSC-3FDW-384/ENC L	REMOTE STARTER ENCLOSURE FOR 3FDW-384	AB	809'+0"		809'+0"	Yes	BS	GRS	Yes	Yes	No	Yes	No	1
1	14	3RSC-3HP-409/ENCL	REMOTE STARTER ENCLOSURE FOR 3HP-409	AB	796'+6"	D-14	796	Yes	BS	GRS	Yes	Yes	No	Yes	No	1,3
1	14	3RSC-3HP-410/ENCL	REMOTE STARTER ENCLOSURE FOR 3HP-410	AB	796'+6"	D-14	796	Yes	BS	GRS	Yes	Yes	No	Yes	No	1,3
1	14	3RSC-3LP-126/ENCL	REMOTE STARTER ENCLOSURE FOR 3LP-126	AB	771'+0"	D-14	771	Yes	BS	GRS	Yes	Yes	No	Yes	No	1,3
1	14	3RSC-3LPSW-565/EN CL	REMOTE STARTER ENCLOSURE FOR 3LPSW-565	AB	796'+6"	D-14	796	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	1
1	14	3RSC-3LPSW-566/EN CL	REMOTE STARTER ENCLOSURE FOR 3LPSW-566	AB	796'+6"	D-14	796	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	1
1	14	3RSC-3PR-59/ENCL	REMOTE STARTER ENCLOSURE FOR 3PR-59	AB	809'+0"	D-14	809'+0"	Yes	BS	GRS	Yes	Yes	No	Yes	No	1

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1	14	3RSC-3PR-60/ENCL	REMOTE STARTER ENCLOSURE FOR 3PR-60	AB	809'+0"	D-14	809'+0"	Yes	BS	GRS	Yes	Yes	No	Yes	No	1
1	20	3SGFP	SG FWP PANEL	TB	775'+0"	C-45	775	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	20	3SGLC	STEAM GEN LOGIC CABINET	AB	809'+0"		809	Yes	ABS	RRS	Yes	No	No	Yes	No	
1	14	3SKJ	120V PPB 3SKJ	AB	809'+0"	Q-89	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	14	3SKK	120V PPB 3SKK	AB	809'+0"	P-89	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	14	3SKL	120V PPB 3SKL	AB	809'+0"	R-89	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	20	3TB-2111	TERM BOX 2111	YD	796'+6"		796'+6"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	20	3TB-2112	TERM BOX 2112	YD	796'+6"		796'+6"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	00	3TOHX000A	MAIN TURB OIL TANK OIL COOLER	TB	796'+6"	G-55	796'+6"	N/A	N/A	N/A	Yes	N/A	Unkno	Yes	No	5
1	00	3TOHX000B	MAIN TURB OIL TANK OIL COOLER	TB	796'+6"	G-55	796'+6"	N/A	N/A	N/A	Yes	N/A	Unkno	Yes	No	5
1	20	3TOPS0176B	FWPT 3A BEARING OIL PRESS LOW	TB	775'+0"		775	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	20	3TOPS0192B	FWPT 3B BEARING OIL PRESS LOW	TB	775'+0"		775	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	3
1	01	3XA	MCC 3XA	TB	796'+6"	D-53	796'+6"	Yes	ABS	RRS	No	No	No	No	No	1
1	01	3XA-A	208V MCC 3XA-A	TB	796'+6"	D-53	796'+6"	Yes	ABS	RRS	No	No	No	Yes	No	1
1	04	3XA/XFMR	XFMR 3X1 (600V TO 208V)	TB	796'+6"	D-53	796'+6"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	01	3XC	MCC 3XC	TB	775'+0"	B-44	775'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	1

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1	04	3XC/XFMR	XFMR 3XC (600V TO 208V)	TB	775'+0"	B-44	796'+6"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	04	3XGA/XFMR	XFMR 3XGA (600V TO 208V)	TB	796'+6"	K-48	796'+6"	Yes	BS	GRS	Yes	No	No	Yes	No	
1	04	3XGB/XFMR	XFMR 3XGB (600V TO 208V)	TB	796'+6"	M-52	796'+6"	Yes	BS	GRS	Yes	No	No	Yes	No	
1	01	3XL,3XN	MCC 3XL	AB	771'+0"	T-88	771'+0"	Yes	DOC	RRS	No	No	Yes	Yes	No	
1	04	3XL/XFMR	XFMR 3XL (600V TO 208V)	AB	771'+0"	S-89	771'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	04	3XN/XFMR	XFMR 3XN (600V TO 208V)	AB	771'+0"	T-89	771'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	04	3XO/XFMR	XFMR 3XO (600V TO 208V)	AB	796'+6"	R-90	796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	04	3XP/XFMR	XFMR 3XP (600V TO 208V)	AB	796'+6"	R-90	796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	01	3XR	600V MCC 3XR	AB	838'+0"		838	No	DOC	RRS	No	No	Yes	No	No	
1	01	3XS1	MCC 3XS1	AB	796'+6"	P-90	796'+6"	Yes	ABS	RRS	Yes	No	No	Yes	No	1
1	01	3XS2	MCC 3XS2	AB	796'+6"	P-89	796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	1
1	01	3XSF (208V)	MCC 3XSF(208V)	SSF	817'+0"		817'+0"	Yes	DOC	RRS	Yes	N/A	Yes	No	No	
1	04	3XSF/XFMR	XFMR 3XSF (600V TO 208V)	SSF	817'+0"	F-15	817'+0"	Yes	DOC	RRS	Yes	N/A	Yes	Yes	Yes	
1	01	3XT	MCC 3XT	AB	838'+0"	N87	838'+0"	No	ABS	RRS	Yes	No	Yes	No	No	
1	04	3XT/XFMR	XFMR 3XT (600V TO 208V)	AB	838'+0"	N-87	838'+0"	No	ABS	RRS	Yes	Yes	Yes	No	No	
1	14	CT4FSC	CT4 FAN SPEED CABINET	BH	796'+6"		796	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	1
1	14	RSC-1KSG-01/ENCL	Remote Starter Cabinet for 1KSG-01	BH	796'+6"		796	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	1
1	14	RSC-1KSG-02/ENCL	Remote Starter Cabinet for	BH	796'+6"		796	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	

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SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
			1KSG-02													
1	14	RSC-1KSG-03/ENCL	Remote Starter Cabinet for 1KSG-03	BH	796'+6"		796	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	14	RSC-1KSG-04/ENCL	Remote Starter Cabinet for 1KSG-04	BH	796'+6"		796	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
1	14	SGFSC	B1T & B2T FAN SPEED CABINET	BH	796'+6"		796	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	1
1	01	XSF(600V)	MCC XSF(600V)	SSF	777'+0"		777	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
1	01	XSF-1(1,2,&3)	MCC XSF-1(1,2&3)(208V)	SSF	797'+0"		796'+6"	Yes	ABS	RRS	Yes	No	Yes	No	No	

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All signatures on this page apply to items identified as SVDS Signature Group

1 and contained on printout dated 11/14/96

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

R P Childs

Print or Type Name

Signature

Date

L B Elrod

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

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Print or Type Name

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Date

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SVDS Group	Eq. CL	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
9	14	1A/1B/SW	1A/1B REG XFER SW	AB	796'+6"		796	Yes	ABS	RRS	Yes	No	No	Yes	No	1
9	14	1A/MCB	1A REGULATOR OUTPUT BKR	AB	796'+6"		796	Yes	ABS	RRS	Yes	No	No	Yes	No	1
9	14	1B/MCB	1B REGULATOR OUTPUT BKR	AB	796'+6"		796	Yes	ABS	RRS	Yes	No	No	Yes	No	1
9	08	1LPSVA0284	CONT VAC PRIMING ISOL VALVE	TB	775'+0"	C-19	777+0	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
9	18	1MC-D24	INSTRUMENT RACK 1MC-D24	TB	775'+0"		775'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
9	00	1MSPY0042	UNIT 1 UPS (1MSSS0042 - 1MS-87)	AB	796'+6"		796'+0"	N/A	N/A	N/A	No	N/A	Yes	Yes	No	5
9	08	1MSVA0081	MS TO 2ND STAGE RHTR ISOL	TB	796'+6"	G-13	822	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
9	07	1MSVA0087	TDEFW MS ISOLATION VALVE	TB	796'+6"	D-15	796+6	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
9	08	1MSVA0095	TDEFW CONTROL VALVE	TB	775'+0"	C-19	775'-0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
9	08	1RCVA0159	RV VENT ISOLATION	RB	844'+6"	W	850+10	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
9	21	1TOTK0002	EFW PUMP TURBINE OIL TANK	TB	775'+0"	C-19	775'+0"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	7
9	01	1XK	600V MCC 1XK	AB	809'+0"	P-65	809'+0"	Yes	DOC	RRS	No	No	Yes	No	No	
9	14	2A/2B/SW	2A/2B REG XFER SW	AB	796'+6"		796	Yes	ABS	RRS	Yes	No	No	Yes	No	1
9	14	2A/MCB	2A REGULATOR OUTPUT BKR	AB	796'+6"		796	Yes	ABS	RRS	Yes	No	No	Yes	No	1
9	14	2B/MCB	2B REGULATOR OUTPUT BKR	AB	796'+6"		796	Yes	ABS	RRS	Yes	No	No	Yes	No	1

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SVDS Group	Eq. CL	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
9	08	2CVA0391	HOTWELL SUPPLY ISOL TO TDEFW	TB	775'+0"		775'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
9	08	2HPVA0001	LETDOWN INLET ISOLATION	RB	777'+0"		797'+6"	Yes	BS	GRS	Yes	No	N/A	Yes	No	
9	08	2HPVA0002	LETDOWN INLET ISOLATION	RB	777'+0"		797'+6"	Yes	BS	GRS	Yes	No	N/A	Yes	No	
9	08	2HPVA0003	LETDOWN ISOLATION	RB	777'+0"		797'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
9	08	2HPVA0004	LETDOWN ISOLATION	RB	777'+0"		797'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
9	14	2KD	120V PPB 2KD	AB	809'+0"		809'	Yes	BS	GRS	Yes	Yes	No	Yes	No	3
9	08	2LPSVA0137	TDEFW ISOLATION VALVE	TB	775'+0"	C-36	797.0	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
9	07	2LPSVA0251	LPI COOLER 2A CONTROL VALVE	TB	775'+0"	M-36	796	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
9	07	2LPSVA0252	LPI COOLER 2B CONTROL VALVE	TB	775'+0"	M-31	796	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
9	07	2LPSVA0516	EFW PUMP 2A ISOLATION VALVE	TB	775'+0"	Dd-31	797'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
9	07	2LPSVA0525	EFW PUMP 2B ISOLATION VALVE	TB	775'+0"	Fa-31	796'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
9	08	2LPSVA0566	RBCU 3B INLET VALVE	RB	797'+0"		>817'+6"	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
9	18	2MC-2	INSTRUMENT RACK 2MC-2	TB	775'+0"		775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
9	00	2MSPY0042	UNIT 2 UPS (2MSS0042 - 2MS-87)	AB	796'+6"		796'+0"	N/A	N/A	N/A	No	N/A	Yes	Yes	No	5

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SVDS Group	Eq. CL	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
9	08	2MSVA0026	TURBINE BYPASS ISOLATION	TB	796'+6"	M-38	822'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
9	08	2MSVA0035	FWPT ISOLATION	TB	796'+6"	F-41	822'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
9	08	2MSVA0036	FWPT ISOLATION	TB	796'+6"	E-42	822'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
9	08	2MSVA0040	FWPT STOP VALVE	TB	775'+0"		775'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
9	08	2MSVA0043	FWPT STOP VALVE	TB	775'+0"		775'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
9	08	2MSVA0047	MS TO CSAE	TB	796'+6"	B-30	822'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
9	08	2MSVA0076	MS RH ISOLATION	TB	796'+6"	G-42	822'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
9	08	2MSVA0077	MS TO 2ND STAGE RHTR ISOL	TB	796'+6"	H42	822'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
9	08	2MSVA0078	MS TO 2ND STAGE RHTR ISOL	TB	796'+6"		822'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
9	08	2MSVA0081	MS TO 2ND STAGE RHTR ISOL	TB	796'+6"		822	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
9	07	2MSVA0087	TDEFW MS ISOLATION VALVE	TB	796'+6"	B-38	796+6	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
9	07	2MSVA0093	TDEFW MS ISOLATION VALVE	TB	775'+0"	C-35	775'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
9	08	2MSVA0095	TDEFW CONTROL VALVE	TB	775'+0"		775'-0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
9	07	2MSVA0112	MS TO 2ND STAGE RHTR ISOL	TB	796'+6"		822	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
9	07	2MSVA0173	MS TO 2ND STAGE RHTR ISOL	TB	796'+6"		822	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
9	18	2TOPS0176B	FWPT 2A BEARING OIL PRESS LOW	TB	775'+0"		775	Yes	ABS	RRS	Yes	No	No	Yes	No	

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SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
9	18	2T0PS0192B	FWPT 2B BEARING OIL PRESS LOW	TB	775'+0"		775	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
9	21	2TOTK0002	EFW PUMP TURBINE OIL TANK	TB	775'+0"	C35	775'+0"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	
9	14	3A/3B/SW	3A/3B REG XFER SW	AB	796'+6"		796	Yes	ABS	RRS	Yes	No	No	Yes	No	1
9	14	3A/MCB	3A REGULATOR OUTPUT BKR	AB	796'+6"		796	Yes	ABS	RRS	Yes	No	No	Yes	No	1
9	14	3B/MCB	3B REGULATOR OUTPUT BKR	AB	796'+6"		796	Yes	ABS	RRS	Yes	No	No	Yes	No	1
9	16	3DIA/INV	120V STATIC INV 3DIA	AB	796'+6"	P-88	796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
9	16	3DIB/INV	120V STATIC INV 3DIB	AB	796'+6"	P-89	796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
9	16	3DIC/INV	120V STATIC INV 3DIC	AB	796'+6"	QA-88	796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
9	16	3DID/INV	120V STATIC INV 3DID	AB	796'+6"	QA-89	796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
9	18	3FDWPS1009	MAIN FWP DISCH PRESS SWITCH (3MS-93)	TB	775'+0"		780	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
9	18	3FDWPS1010	MAIN FWP DISCH PRESS SWITCH (3MS-93)	TB	775'+0"		780	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
9	18	3FDWPS1011	MAIN FWP DISCH HDR PRESS SWITCH (3MS-93)	TB	775'+0"		780	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
9	18	3FDWPS1012	MAIN FWP DISCH HDR PRESS SWITCH (3MS-93)	TB	775'+0"		780	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
9	14	3KD	120V PPB 3KD	AB	771'+0"		771'+0"	Yes	BS	GRS	Yes	No	No	Yes	No	3

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			TANK													
9	14	KSFC/PPB	120V PPB KSFC	SSF	777'+0"		777'	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
9	01	XOD1	208V MCC XOD1	YD	796'+6"		796'+0"	Yes	ABS	RRS	Yes	No	No	No	No	1

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All signatures on this page apply to items identified as SVDS Signature Group 9 and contained on printout dated 11/14/96

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

L B Elrod

Print or Type Name

Signature

Date

R V Hester

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

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Print or Type Name

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10	05	0CCWPU0001	AUX SERVICE WATER PUMP	AB	771'+0"		771'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	0CCWPU0002	SSF AUX SERVICE WATER PUMP	SSF	754'+0"	E-17	755'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	0CCWPU0003	SSF HVAC COOLING WATER PUMP 1	SSF	754'+0"	D-15A	754'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	0CCWPU0004	SSF HVAC COOLING WATER PUMP 2	SSF	754'+0"	D-16	754'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	0CCWPU0005	SSF DIESEL WATER JACKET PUMP	SSF	754'+0"	E-15A	754'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	21	0DJWHX000A	SSF DJW HEAT EXCHANGER A	SSF	777'+0"	E-10	777'+0"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	
10	21	0DJWHX000B	SSF DJW HEAT EXCHANGER B	SSF	777'+0"	E-13	777'+0"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	
10	00	1A/REG	REGULATED PWR SUPP REG 1A	AB	796'+0"	L24	796'+0"	N/A	N/A	N/A	Yes	N/A	No	Yes	No	5
10	20	1ADA	ISOL DIODE ASSEMBLY 1ADA	AB	796'+0"		796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	20	1ADB	ISOL DIODE ASSEMBLY 1ADB	AB	796'+0"		796'+6"	Yes	ABS	RRS	Yes	No	No	Yes	No	1
10	20	1ADC	ISOL DIODE ASSEMBLY 1ADC	AB	796'+0"		796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	20	1ADD	ISOL DIODE ASSEMBLY 1ADD	AB	796'+0"		796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	20	1ADE	ISOL DIODE ASSEMBLY 1ADE	AB	796'+0"		796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	20	1ADF	ISOL DIODE ASSEMBLY 1ADF	AB	796'+0"		796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	20	1ADG	ISOL DIODE ASSEMBLY 1ADG	AB	796'+0"		796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	10	1ARBCU_A	AUX RBCU A	RB	844'+6"		861'+6"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	

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10	10	1ARBCU_B	AUX RBCU B	RB	861'+6"		861'+6"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	10	1ARBCU_C	AUX RBCU C	RB	844'+6"		861'+6"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	10	1ARBCU_D	AUX RBCU D	RB	844'+6"		861'+6"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	00	1B/REG	REGULATED PWR SUPP REG 1B	AB	796'+0"	L24	796'+0"	N/A	N/A	N/A	Yes	N/A	No	Yes	No	5
10	04	1B/XFMR	XFMR 1B (600V TO 240V)	AB	796'+0"		796	Yes	ABS	RRS	Yes	No	No	Yes	No	
10	05	1BSPU0001	RBS PUMP 1A	AB	758'+0"	T-71	758'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	1BSPU0002	RBS PUMP 1B	AB	758'+0"	T-73	758'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	16	1CA/BC	CONTROL BATT CHGR 1CA	AB	796'+0"		797'-0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	20	1CAP	CHEMICAL ADDITION PANEL	AB	771'+0"	Q-68	771	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	16	1CB/BC	CONTROL BATT CHGR 1CB	AB	796'+0"		797'-0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	05	1CCWPU0024	EFWPT OIL COOLER PUMP	TB	775'+0"	C-19	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	21	1CHX002A	CONDENSATE COOLER A	TB	775'+0"	F-25	775'+0"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	7
10	21	1CHX002B	CONDENSATE COOLER B	TB	775'+0"	F-25	775'+0"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	
10	05	1CPU0019	HOLDING PUMP 1A	TB	775'+0"	K-27	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	1CPU0020	HOLDING PUMP 1B	TB	775'+0"	K-26	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	1CPU0021	HOLDING PUMP 1C	TB	775'+0"	K-25	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	1CPU0022	HOLDING PUMP 1D	TB	775'+0"	K-26	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	1CPU0023	HOLDING PUMP 1E	TB	775'+0"	K-25	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	

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10	02	1CRDACBKRCAB	CRD SYSTEM AC BKR CAB	AB	809'+0"	N/P-71	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	1
10	20	1CRDLC	CONTROL ROD DRIVE LOGIC CABINETS	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	21	1CTK0003	SLURRY TANK	TB	775'+0"		775'+0"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	7
10	16	1DIA/INV	120V STATIC INV 1DIA	AB	796'+0"		796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	16	1DIB/INV	120V STATIC INV 1DIB	AB	796'+0"		796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	16	1DIC/INV	120V STATIC INV 1DIC	AB	796'+0"		796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	16	1DID/INV	120V STATIC INV 1DID	AB	796'+0"		796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	20	1EHC1,2,3	EHC CONTROL CABINET 1EHC1,2,3	AB	809'+0"	R-72	809'+0"	Yes	ABS	RRS	Yes	No	No	Yes	No	
10	20	1EHTC1	EHC TERM CAB 1EHTC1	AB	809'+0"	R-72	809'+0"	Yes	ABS	RRS	Yes	No	Yes	Yes	No	
10	20	1ESTC1,2	ESFAS CABINETS ESTC1,2	AB	809'+0"	QA-88	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	18	1FDWLT0080	SG 1A LEVEL TRANSMITTER	RB	777'+6"		777'-6"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	18	1FDWLT0081	SG 1B LEVEL TRANSMITTER	RB	777'+6"		777'-6"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	18	1FDWLT0082	SG 1A LEVEL TRANSMITTER	RB	777'+6"		777'-6"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	18	1FDWLT0083	SG 1B LEVEL TRANSMITTER	RB	777'+6"		777'-6"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	1FDWPU0003	TDEFW PUMP	TB	775'+0"	C-20	775'-0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	1FDWPU0004	MDEFW PUMP 1A	TB	775'+0"	Dd-24	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	1FDWPU0005	MDEFW PUMP 1B	TB	775'+0"	Dd-24	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	

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SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
10	21	1LPIHX000B	LPI COOLER 3B	AB	771'+0"	Q-68	771'+0"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	
10	05	1LPIPU0001	LPI PUMP 1A	AB	758'+0"	S-71	758'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	1LPIPU0002	LPI PUMP 1B	AB	758'+0"	S-73	758'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	1LPIPU0003	LPI PUMP 1C	AB	758'+0"	S-72	758'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	21	1LPSFL000A	LPSW PUMP A STRAINER	TB	775'+0"	G-26	775'+0"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	
10	21	1LPSFL000B	LPSW PUMP B STRAINER	TB	775'+0"	H-26	775'+0"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	
10	21	1LPSFL000C	LPSW PUMP C STRAINER	TB	775'+0"	G-29	775'+0"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	
10	05	1LPSPU0001	LPSW PUMP A	TB	775'+0"	G-25	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	1LPSPU0002	LPSW PUMP B	TB	775'+0"	H-25	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	1LPSPU0003	LPSW PUMP C	TB	775'+0"	G-30	775'-0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	08	1LPSVA0004	LPI COOLER 1A ISOLATION VALVE	AB	783'+0"		792'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	1
10	08	1LPSVA0566	RBCU 3B INLET VALVE	RB	797'+6"		>817'+6"	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
10	08	1LPVA0012	LPI COOLER 3A ISOLATION	AB	771'+0"	Qa-65	783	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	1
10	08	1LPVA0014	LPI COOLER 3B ISOLATION	AB	771'+0"	Qa-68	783	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	1
10	08	1LPVA0015	LPI TO HPI/RBS PIGGYBACK TRAIN 1A	AB	771'+0"	Qa-66	783	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
10	08	1LPVA0016	LPI TO HPI/RBS PIGGYBACK TRAIN 1B	AB	771'+0"	qA-68	783	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
10	18	1MSPT0024P	SG 1A PRESSURE	RB	825'+0"		825'-0"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	

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SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
10	18	1MSPT0025P	SG 1A PRESSURE	RB	825'+0"		825'-0"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	18	1MSPT0026P	SG 1B PRESSURE	RB	825'+0"		825'-0"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	18	1MSPT0027P	SG 1B PRESSURE	RB	825'+0"		825'-0"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	16	1PA/BC	PWR BATT CHGR 1PA	TB	796'+6"		796'+6"	Yes	ABS	RRS	No	Yes	Yes	Yes	No	
10	20	1PASCP	POST ACCIDENT SAMPLE CONT PANEL (IRC-179)	AB	771'+0"	R-71	771	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	16	1PB/BC	PWR BATT CHGR 1PB	TB	796'+6"		796'+6"	Yes	ABS	RRS	No	Yes	Yes	Yes	No	
10	09	1RBCAH0020A	RBCU FAN 1A	RB	825'+0"		844'+6"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	09	1RBCAH0020B	RBCU FAN 1B	RB	825'+0"		844'+6"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	09	1RBCAH0020C	RBCU FAN 1C	RB	825'+0"		844'+6"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	10	1RBCHX000A	RB COOLING UNIT 1A	RB	825'+0"		844'+6"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	10	1RBCHX000B	RB COOLING UNIT 1B	RB	797'+6"		844'+6"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	10	1RBCHX000C	RB COOLING UNIT 1C	RB	797'+6"		844'+6"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	18	1RCLT0004P1	PRZ LEVEL TRANSMITTER	RB	797'+6"		800	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	18	1RCLT0004P3	PRZ LEVEL TRANSMITTER	RB	797'+6"		797+0	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	19	1RCRD0005B	A2 COLD LEG RTD	RB	797'+6"		805-3	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
10	19	1RCRD0006A	A1 COLD LEG RTD	RB	797'+6"		805+3	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
10	08	1RCVA0162	SG 1B SAMPLE ISOLATION	RB	777'+6"		777'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
10	08	1RCVA0163	SG 1B SAMPLE CONTAIN ISOL	RB	777'+6"	W	777'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	

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SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
10	21	1SCHX000A	GENERATOR WATER COOLER 1A	TB	775'+0"	F-27	775'+0"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	
10	21	1SCHX000B	GENERATOR WATER COOLER 1B	TB	775'+0"	F-27	775'+0"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	
10	21	1SFTK0002	INCORE INST HANDLING TANK	RB	816'+6"		816'+6"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	7
10	20	1TCPA	TURB CONT PANEL 1TCPA	TB	796'+6"	B-27	796'+6"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	1TOPU0022	EFWPT AUX OIL PUMP	TB	775'+0"	C-19	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	20	1TTC6	TURB TERM CAB 1TTC6	TB	796'+6"	F-13	796'+6"	Yes	ABS	RRS	No	No	No	Yes	No	
10	02	1X01	600V LC 1X01	TB	796'+6"		796'+6"	Yes	BS	GRS	Yes	Yes	No	Yes	No	
10	02	1X02	600V LC 1X02	TB	796'+6"		796'+6"	Yes	BS	GRS	Yes	Yes	No	Yes	No	
10	02	1X04	600V LC 1X04	TB	796'+6"		796'+6"	Yes	BS	GRS	Yes	No	No	Yes	No	
10	02	1X05	600V LC 1X05	TB	796'+6"		796'+6"	Yes	BS	GRS	Yes	Yes	No	Yes	No	
10	02	1X06	600V LC 1X06	TB	796'+6"		796'+6"	Yes	BS	GRS	Yes	Yes	No	Yes	No	
10	02	1X07	600V LC 1X07	TB	796'+6"		796'+6"	Yes	BS	GRS	Yes	Yes	No	Yes	No	
10	02	1X08	600V LC 1X08	AB	796'+0"		796'+6"	Yes	ABS	RRS	Yes	Yes	No	Yes	No	
10	02	1X09	600V LC 1X09	AB	796'+0"		796'+6"	Yes	ABS	RRS	Yes	No	No	Yes	No	
10	04	1X10/XFMR	600V LC 1X10 XFMR	TB	796'+6"		796'+6"	Yes	BS	GRS	Yes	No	No	Yes	No	
10	01	1XB	600V MCC 1XB	TB	775'+0"		775'+0"	Yes	DOC	RRS	No	No	Yes	Yes	No	
10	01	1XI	600V MCC 1XI	AB	809'+0"		809'+0"	Yes	DOC	RRS	No	No	Yes	No	No	

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10	01	1XJ	600V MCC 1XJ	AB	809'+0"		809'+0"	Yes	DOC	RRS	No	No	Yes	No	No	
10	04	1XP/XFMR	XFMR 1XP (600V TO 208V)	AB	796'+0"		796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	01	1XSF (600V)	MCC 1XSF(600V)	SSF	817'+0"		817'+0"	Yes	DOC	RRS	Yes	N/A	Yes	Yes	Yes	
10	20	2ADA	ISOL DIODE ASSEMBLY 2ADA	AB	796'+0"		796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	20	2ADB	ISOL DIODE ASSEMBLY 2ADB	AB	796'+0"		796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	20	2ADC	ISOL DIODE ASSEMBLY 2ADC	AB	796'+0"		796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	20	2ADD	ISOL DIODE ASSEMBLY 2ADD	AB	796'+0"		796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	20	2ADE	ISOL DIODE ASSEMBLY 2ADE	AB	796'+0"		796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	20	2ADF	ISOL DIODE ASSEMBLY 2ADF	AB	796'+0"		796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	20	2ADG	ISOL DIODE ASSEMBLY 2ADG	AB	796'+0"		796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	10	2ARBCU_A	AUX RBCU A	RB	844'+6"		861'+6"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	10	2ARBCU_B	AUX RBCU B	RB	861'+6"		861'+6"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	10	2ARBCU_C	AUX RBCU C	RB	844'+6"		861'+6"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	10	2ARBCU_D	AUX RBCU D	RB	844'+6"		861'+6"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	05	2BSPU0001	RBS PUMP 2A	AB	758'+0"		758'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	2BSPU0002	RBS PUMP 2B	AB	758'+0"		758'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	16	2CA/BC	CONTROL BATT CHGR 2CA	AB	796'+0"		797'-0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	20	2CAP	CHEMICAL ADDITION PANEL	AB	771'+0"	Q-68	771	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	

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SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
10	16	2CB/BC	CONTROL BATT CHGR 2CB	AB	796'+0"		797'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	05	2CCWPU0024	EFWPT OIL COOLER PUMP	TB	775'+0"	Fa-32	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	21	2CHX002A	CONDENSATE COOLER A	TB	775'+0"	F-30	775'+0"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	
10	21	2CHX002B	CONDENSATE COOLER B	TB	775'+0"	F-30	775'+0"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	
10	05	2CPU0019	HOLDING PUMP 2A	TB	775'+0"	K-30	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	2CPU0020	HOLDING PUMP 2B	TB	775'+0"	K-30	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	2CPU0021	HOLDING PUMP 2C	TB	775'+0"	K-29	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	2CPU0022	HOLDING PUMP 2D	TB	775'+0"	K-29	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	2CPU0023	HOLDING PUMP 2E	TB	775'+0"	K-29	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	02	2CRDACBKRCAB	CRD SYSTEM AC BKR CAB	AB	809'+0"	N/P-75/	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	1
10	20	2CRDLC	CONTROL ROD DRIVE LOGIC CABINETS	AB	809'+0"	P-75	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	21	2CTK0003	SLURRY TANK	TB	775'+0"	L-29	775'+0"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	
10	16	2DIA/INV	120V STATIC INV 2DIA	AB	796'+0"		796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	16	2DIB/INV	120V STATIC INV 2DIB	AB	796'+0"		796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	16	2DIC/INV	120V STATIC INV 2DIC	AB	796'+0"		796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	16	2DID/INV	120V STATIC INV 2DID	AB	796'+0"		796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	20	2EHC1,2,3	EHC CONTROL CABINET 2EHC1,2,3	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	No	Yes	Yes	No	

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10	20	2EHTC1	EHC TERM CAB 2EHTC1	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	No	Yes	Yes	No	
10	20	2EHTC2	EHC TERM CAB 2EHTC2	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	No	Yes	Yes	No	
10	20	2ESTC2A	ESFAS AUX RLY CAB 2ESTC2A	AB	809'+0"		809'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	18	2FDWLT0080	SG 2A LEVEL TRANSMITTER	RB	777'+6"		780'-0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	18	2FDWLT0081	SG 2B LEVEL TRANSMITTER	RB	777'+6"		780'-0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	18	2FDWLT0082	SG 2A LEVEL TRANSMITTER	RB	777'+6"		780'-0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	18	2FDWLT0083	SG 2B LEVEL TRANSMITTER	RB	777'+6"		780'-0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	2FDWPU0003	TDEFW PUMP	TB	775'+0"	C-36	775'-0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	2FDWPU0004	MDEFV PUMP 2A	TB	775'+0"	D-32	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	2FDWPU0005	MDEFV PUMP 2B	TB	775'+0"	D-30	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	21	2HPIHX000A	LETDOWN COOLER 2A	RB	777'+6"		777'+6"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	
10	21	2HPIHX000B	LETDOWN COOLER 2B	RB	777'+6"	B	777'+6"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	
10	06	2HPIPU0001	HPI PUMP 2A	AB	758'+0"	S-74	758'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	06	2HPIPU0002	HPI PUMP 2B	AB	758'+0"	S-74	758'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	06	2HPIPU0003	HPI PUMP 2C	AB	758'+0"	S-73	758'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	21	2HPITK0001	LETDOWN STORAGE TANK	AB	771'+0"		771'+0"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	4
10	08	2HPVA0020	RCP SEAL RETURN ISOLATION	RB	797'+6"		812'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
10	08	2HPVA0426	ALT LETDOWN PATH	RB	777'+6"		797'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	1

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			ISOLATION													
10	08	2HPVA0428	ALT LETDOWN PATH ISOLATION	RB	777'+6"		790'	Yes	BS	GRS	Yes	No	N/A	Yes	No	
10	16	2KI/INV	STATIC INVERTER 2KI (INCLUDES STATIC XFER SWITCH)	AB	796'+0"		796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	16	2KU/INV	STATIC INVERTER 2KU (INCLUDES STATIC XFER SWITCH)	AB	796'+0"		796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	16	2KX/INV	STATIC INVERTER 2KX (INCLUDES STATIC XFER SWITCH)	AB	796'+0"		796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	21	2LPIHX000A	LPI COOLER 2A	AB	771'+0"		771'+0"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	
10	21	2LPIHX000B	LPI COOLER 2B	AB	771'+0"		771'+0"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	
10	05	2LPIPU0001	LPI PUMP 2A	AB	758'+0"	S-75	758'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	2LPIPU0002	LPI PUMP 2B	AB	758'+0"	S-73	758'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	2LPIPU0003	LPI PUMP 2C	AB	758'+0"	S-74	758'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	08	2LPVA0005	LPI COOLER 2B ISOLATION VALVE	AB	783'+0"	Q-76	798	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
10	08	2LPVA0001	LPI DROPLINE ISOL FROM RCS	RB	797'+6"		797'+6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
10	08	2LPVA0002	LPI DROPLINE ISOL FROM RCS	RB	797'+6"		797'+6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
10	08	2LPVA0012	LPI COOLER 2A ISOLATION	AB	771'+0"	Qa-81	783	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	1

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10	08	2LPVA0014	LPI COOLER 2B ISOLATION	AB	771'+0"	Qa-78	783	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	1
10	08	2LPVA0015	LPI TO HPI/RBS PIGGYBACK 2A	AB	771'+0"	Qa-80	783	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
10	08	2LPVA0016	LPI TO HPI/RBS PIGGYBACK 2B	AB	771'+0"	Qa-77	783	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
10	18	2MSPT0024P	SG 2A PRESSURE	RB	825'+0"		830	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	18	2MSPT0025P	SG 2A PRESSURE	RB	825'+0"		830	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	18	2MSPT0026P	SG 2B PRESSURE	RB	825'+0"		830	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	18	2MSPT0027P	SG 2B PRESSURE	RB	825'+0"		830	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	16	2PA/BC	PWR BATT CHGR 2PA	TB	796'+6"		796'+6"	Yes	ABS	RRS	No	Yes	Yes	Yes	No	
10	20	2PACSP	POST ACCIDENT SAMPLE CONT PANEL (2RC-179)	AB	771'+0"	R-71	771	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	16	2PB/BC	PWR BATT CHGR 2PB	TB	796'+6"		796'+6"	Yes	ABS	RRS	No	Yes	Yes	Yes	No	
10	09	2RBCAH0020A	RBCU FAN 2A	RB	825'+0"		844'+6"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	09	2RBCAH0020B	RBCU FAN 2B	RB	825'+0"		844'+6"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	09	2RBCAH0020C	RBCU FAN 2C	RB	825'+0"		844'+6"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	10	2RBCHX000A	RB COOLING UNIT 2A	RB	825'+0"		844'+6"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	10	2RBCHX000B	RB COOLING UNIT 2B	RB	797'+6"		844'+6"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	10	2RBCHX000C	RB COOLING UNIT 2C	RB	797'+6"		844'+6"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	18	2RCLT0004P1	PRZ LEVEL TRANSMITTER	RB	797'+6"	W	800	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	

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10	18	2RCLT0004P3	PRZ LEVEL TRANSMITTER	RB	797'+6"		800	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	07	2RCVA0162	POST ACC SAMPLE PATH ISOL	RB	777'+6"		<817'+6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
10	07	2RCVA0163	POST ACC SAMPLE PATH ISOL	RB	777'+6"		<817'+6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
10	21	2SCHX000A	GENERATOR WATER COOLER 2A	TB	775'+0"	Fa-29	775'+0"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	
10	21	2SCHX000B	GENERATOR WATER COOLER 2B	TB	775'+0"	Fa-29	775'+0"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	
10	21	2SFTK0002	INCORE INST HANDLING TANK	RB	816'+6"		816'+6"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	
10	20	2TCFA	TURB CONT PANEL 2TCFA	TB	796'+6"	B-28/29	796'+6"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	2TOPU0022	EFWPT AUX OIL PUMP	TB	775'+0"	C35	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	20	2TTC4	TURB TERM CAB 2TTC4	TB	796'+6"	F-42	796'+6"	Yes	ABS	RRS	No	No	No	Yes	No	
10	02	2X01	600V LC 2X01	TB	796'+6"	E28	796'+6"	Yes	BS	GRS	Yes	No	No	Yes	No	
10	02	2X02	600V LC 2X02	TB	796'+6"	F28	796'+6"	Yes	BS	GRS	Yes	No	No	Yes	No	
10	02	2X03	600V LC 2X03	TB	796'+6"	F28	796'+6"	Yes	BS	GRS	Yes	Yes	No	Yes	No	
10	02	2X05	600V LC 2X05	TB	796'+6"	H28	796'+6"	Yes	BS	GRS	Yes	Yes	No	Yes	No	
10	02	2X06	600V LC 2X06	TB	796'+6"	K28	796'+6"	Yes	BS	GRS	Yes	Yes	No	Yes	No	
10	02	2X08	600V LC 2X08	AB	796'+0"	P74	796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	02	2X09	600V LC 2X09	AB	796'+0"	P74	796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	04	2X10/XFMR	XFMR 2X10 (4160V TO 600V)	TB	796'+6"		796'+6"	Yes	BS	GRS	Yes	No	No	Yes	No	

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10	05	3CPU0019	HOLDING PUMP	TB	775'+0"	K-45	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	3CPU0020	HOLDING PUMP	TB	775'+0"	K-45	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	3CPU0021	HOLDING PUMP	TB	775'+0"	K-45	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	3CPU0022	HOLDING PUMP	TB	775'+0"	K-44	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	3CPU0023	HOLDING PUMP 3E	TB	775'+0"	K-44	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	02	3CRDACBKRCAB	CRD SYSTEM AC BKR CAB	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	No	No	1
10	21	3CTK0003	SLURRY TANK	TB	775'+0"	L-44	775'+0"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	
10	20	3EHC1,2,3	EHC CONTROL CABINET 3EHC1,2,3	AB	809'+0"	P-87	809'+0"	Yes	ABS	RRS	Yes	No	No	Yes	No	
10	20	3ESTC1	ESFAS ODD CH TERM CAB 3ESTC1	AB	809'+0"	QA-88	809'+0"	Yes	ABS	RRS	Yes	No	No	Yes	No	
10	20	3ESTC2	ESFAS EVEN CH TERM CAB 3ESTC2	AB	809'+0"	QA-88	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	20	3ESTC3	ES ODD & EVEN RLY CAB 3ESTC3	AB	809'+0"	Q-88	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	18	3FDWLT0080	SG 3A LEVEL TRANSMITTER	RB	777'+6"		780'-0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	18	3FDWLT0081	SG 3B LEVEL TRANSMITTER	RB	777'+6"		780'-0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	18	3FDWLT0082	SG 3A LEVEL TRANSMITTER	RB	777'+6"		780'-0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	18	3FDWLT0083	SG 3B LEVEL TRANSMITTER	RB	777'+6"		780'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	3FDWPU0003	TDEFW PUMP	TB	775'+0"	C-50	775'-0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	3FDWPU0004	MDEFW PUMP 3A	TB	775'+0"	E-45	775+0	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	

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SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
10	05	3FDWPU0005	MDEFW PUMP 3B	TB	775'+0"	E-45	775'+0	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	21	3HPIHX000A	LETDOWN COOLER 3A	RB	777'+6"	WX	777'+6"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	
10	21	3HPIHX000B	LETDOWN COOLER 3B	RB	777'+6"	WX	777'+6"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	
10	06	3HPIPU0001	HPI PUMP 3A	AB	758'+0"	S-88	758'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	06	3HPIPU0002	HPI PUMP 3B	AB	758'+0"	S-88	758'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	06	3HPIPU0003	HPI PUMP 3C	AB	758'+0"	S-87	758'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	21	3HPITK0001	LETDOWN STORAGE TANK	AB	771'+0"		771'+0"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	4
10	08	3HPVA0428	ALT LETDOWN PATH ISOLATION	RB	777'+6"	C-22	787'	Yes	BS	GRS	Yes	No	N/A	Yes	No	
10	20	3KESP	KEOWEE EM START PANEL	AB	809'+0"	N-88	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	16	3KU/INV	STATIC INVERTER 3KU (INCLUDES STATIC XFER SWITCH)	AB	796'+0"	Qa-88	796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	05	3LPIPU0002	LPI PUMP 3B	AB	758'+0"	S-87	758'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	3LPIPU0003	LPI PUMP 3C	AB	758'+0"	S-88	758'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	21	3LPSFL000A	LPSW PUMP A STRAINER	TB	775'+0"	K-47	775'+0"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	
10	21	3LPSFL000B	LPSW PUMP B STRAINER	TB	775'+0"	K-46	775'+0"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	
10	05	3LSPU0001	LPSW PUMP 3A	TB	775'+0"	L-47	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	05	3LSPU0002	LPSW PUMP 3B	TB	775'+0"	L-46	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	08	3LPSVA0566	RBCU 3B INLET VALVE	RB	797'+6"	C-06	>817'+6"	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	

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SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
10	08	3LPVA0001	LPI DROPLINE ISOL FROM RCS	RB	797'+6"	C-19	797'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
10	08	3LPVA0002	LPI DROPLINE ISOL FROM RCS	RB	797'+6"	C-19	797'+6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
10	18	3MSPT0024P	SG 3A PRESSURE	RB	777'+6"	C-16	829'+-	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	18	3MSPT0025P	SG 3A PRESSURE	RB	777'+6"	C-17	830	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	18	3MSPT0026P	SG 3B PRESSURE	RB	777'+6"	C-24	830	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	18	3MSPT0027P	SG 3B PRESSURE	RB	777'+6"	C-23	830	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	20	3MTC1,2	MISCELLANEOUS TERMINAL CABINET 3MTC1,2	AB	809'+0"	R-89	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	20	3MTC3,4	MISCELLANEOUS TERMINAL CABINET 3MTC3,4	AB	809'+0"	N/P-90	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	No	No	
10	16	3PA/BC	PWR BATT CHGR 3PA	TB	796'+6"	L-45	796'+6"	Yes	ABS	RRS	No	Yes	Yes	Yes	No	
10	20	3PASCP	POST ACCIDENT SAMPLE CONT PANEL (3RC-179)	AB	771'+0"	Qa-89	771	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	16	3PB/BC	PWR BATT CHGR 3PB	TB	796'+6"	L-43	796'+6"	Yes	ABS	RRS	No	Yes	Yes	Yes	No	
10	09	3RBCAH0020A	RBCU FAN 3A	RB	825'+0"		844'+6"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	09	3RBCAH0020B	RBCU FAN 3B	RB	825'+0"		844'+6"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	09	3RBCAH0020C	RBCU FAN 3C	RB	825'+0"		844'+6"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	10	3RBCHX000A	RB COOLING UNIT 3A	RB	797'+6"	210a	844'+6"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	10	3RBCHX000B	RB COOLING UNIT 3B	RB	797'+6"	180a	844'+6"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 78

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
10	10	3RBCHX000C	RB COOLING UNIT 3C	RB	797'+6"	170oAZ	844'+6"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	18	3RCLT0004P1	PRZ LEVEL TRANSMITTER	RB	797'+6"		797'+0	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	3
10	18	3RCLT0004P3	PRZ LEVEL TRANSMITTER	RB	797'+6"		797'+6"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	3
10	19	3RCRD0005B	RCS COLD LEG RTD	RB	797'+6"		<817'+6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
10	08	3RCVA0162	POST ACC SAMPLE PATH ISO	RB	777'+6"		777'+6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
10	08	3RCVA0163	POST ACC SAMPLE PATH ISO	RB	777'+6"		777'+6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
10	21	3SCHX000A	GENERATOR WATER COOLER 3A	TB	775'+0"	F-43	775'+0"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	
10	21	3SCHX000B	GENERATOR WATER COOLER 3B	TB	775'+0"	F-43	775'+0"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	
10	21	3SFTK0002	INCORE INST HANDLING TANK	RB	816'+6"		816'+6"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	
10	20	3TCPA	TURB CONT PANEL 3TCPA	TB	796'+6"	D-43	796'+6"	Yes	BS	GRS	Yes	Yes	Yes	No	No	
10	05	3TOPU0022	EFWPT AUX OIL PUMP	TB	775'+0"	C-49	775'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	20	3TTC4	TURB TERM CAB 3TTC4	TB	796'+6"	F-56	796'+6"	Yes	ABS	RRS	No	No	No	Yes	No	
10	02	3X01	600V LC 3X01	TB	796'+6"	K-45	796'+6"	Yes	BS	GRS	Yes	Yes	No	Yes	No	
10	02	3X02	600V LC 3X02	TB	796'+6"	L-45	796'+6"	Yes	BS	GRS	Yes	Yes	No	Yes	No	
10	02	3X03	600V LC 3X03	TB	796'+6"	L-44	796'+6"	Yes	BS	GRS	Yes	Yes	No	Yes	No	
10	04	3X10/XFMR	XFMR 3X10 (4160V TO 600V)	TB	796'+6"	J-46	796'+6"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
10	01	3XB	600V MCC 3XB	TB	775'+0"		775'+0"	Yes	DOC	RRS	No	No	Yes	Yes	No	

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 79

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
10	01	3XSF (600V)	MCC 3XSF(600V)	SSF	817'+0"	F-15	817'+0"	Yes	DOC	RRS	Yes	N/A	Yes	No	No	
10	03	BIT	4KV SWGR BIT	BH	796'+6"		796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	03	B2T	4KV SWGR B2T	BH	796'+6"		796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	20	IC1/IC2/MEC	SSF IC CAB 1,2 & MEC	SSF	797'+0"	E-15	797	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	03	OTS1	4KV SWGR OTS1	SSF	777'+0"	E-14/15	777'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	20	PHC/SSF	PZR HEATER CAB (SSF)	SSF	777'+0"	P-64	777'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	20	SSFCP	SSF CONTROL PANEL	SSF	797'+0"	D-14	797	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	01	XOD2A	208V MCC XOD2A	YD	796'+6"		796'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
10	01	XOD2B	208V MCC XOD2B	YD	796'+6"		796'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 80

All signatures on this page apply to items identified as SVDS Signature Group 10 and contained on printout dated 11/14/96

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

R V Hester

Print or Type Name

R V Hester, PE
Signature

11/14/96
Date

R W McAuley

Print or Type Name

R.W. McAuley, PE
Signature

11/18/96
Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 81

SVDS Group	Eq. CL	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
11	04	1A/XFMR	XFMR 1A (600V TO 240V)	AB	796'+6"		796	Yes	ABS	RRS	Yes	No	No	Yes	No	
11	20	1CRDDCBKRCAB	CRD SYSTEM DC BKR CAB	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
11	20	1ESTC3	ESFAS EVEN/ODD TERM CAB 1ESTC3	AB	809'+0"	R-73	809'+0"	Yes	ABS	RRS	Yes	No	Yes	Yes	No	
11	20	1TBATWS1	ATSW TERM BOX 1	AB	809'+0"		815	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
11	20	1TBATWS2	ATSW TERM BOX 2	AB	809'+0"		815	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
11	04	1XS1A/XFMR	XFMR 1XS1A (600V TO 208V)	AB	796'+6"		800'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
11	04	1XS2A/XFMR	XFMR 1XS2A (600V TO 208V)	AB	796'+6"		800'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
11	04	1XS3A/XFMR	XFMR 1XS3A (600V TO 208V)	AB	796'+6"		800'+0"	Yes	ABS	RRS	Yes	Yes	No	Yes	No	
11	00	2A/REG	REGULATED PWR SUPP REG 2A	AB	796'+6"	P-74	796'+0"	N/A	N/A	N/A	Yes	N/A	No	Yes	No	5
11	04	2A/XFMR	XFMR 2A (600V TO 240V)	AB	796'+6"	P-74	796	Yes	ABS	RRS	Yes	No	No	Yes	No	
11	00	2B/REG	REGULATED PWR SUPP REG 2B	AB	796'+6"	P-74	796'+0"	N/A	N/A	N/A	Yes	N/A	No	Yes	No	5
11	04	2B/XFMR	XFMR 2B (600V TO 240V)	AB	796'+6"	P-74	796	Yes	ABS	RRS	Yes	No	No	Yes	No	
11	20	2CRDDCBKRCAB	CRD SYSTEM DC BKR CAB	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
11	20	2TBATWS1	ATSW TERM BOX 1	AB	809'+0"		815	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
11	20	2TBATWS2	ATSW TERM BOX 2	AB	809'+0"		815	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
11	04	2XS1A/XFMR	XFMR 2XS1A (600V TO 208V)	AB	796'+6"	R-75	800'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
11	04	2XS2A/XFMR	XFMR 2XS2A (600V TO 208V)	AB	796'+6"	R-75	800'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	

Appendix D.1

Date: 11/11/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

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SVDS Group	Eq. CL	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
11	04	2XS3A/XFMR	XFMR 2XS3A (600V TO 208V)	AB	796'+6"	R-75	800'+0"	Yes	ABS	RRS	Yes	Yes	No	Yes	No	
11	00	3A/REG	REGULATED PWR SUPP REG 3A	AB	796'+6"		796'+0"	N/A	N/A	N/A	Yes	N/A	No	Yes	No	5
11	04	3A/XFMR	XFMR 3A (600V TO 240V)	AB	796'+6"		796	Yes	ABS	RRS	Yes	No	No	Yes	No	
11	00	3B/REG	REGULATED PWR SUPP REG 3B	AB	796'+6"		796'+0"	N/A	N/A	N/A	Yes	N/A	No	Yes	No	5
11	04	3B/XFMR	XFMR 3B (600V TO 240V)	AB	796'+6"		796	Yes	ABS	RRS	Yes	No	No	Yes	No	
11	20	3CRDDCBKRCAB	CRD SYSTEM DC BKR CAB	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
11	20	3TBATWS1	ATSW TERM BOX 1	AB	809'+0"		815	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
11	20	3TBATWS2	ATSW TERM BOX 2	AB	809'+0"		815	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
11	04	3XS1A/XFMR	XFMR 3XS1A (600V TO 208V)	AB	796'+6"	P-90	800'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
11	04	3XS2A/XFMR	XFMR 3XS2A (600V TO 208V)	AB	796'+6"	P-89	800'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
11	04	3XS3A/XFMR	XFMR 3XS3A (600V TO 208V)	AB	796'+6"	Q-89	800'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 83

All signatures on this page apply to items identified as SVDS Signature Group 11 and contained on printout dated 11/14/96

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

L B Elrod

Print or Type Name

Signature

Date

R W McAuley

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

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SVDS GROUP	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
14	14	1B	PPB 1B	RB	818'+0"	C-11	818'-825'	No	ABS	RRS	Yes	No	Yes	Yes	No	

All signatures on this page apply to items identified as SVDS Signature Group 14 and contained on printout dated 11/14/96

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

R P Childs

Print or Type Name

R.P. Childs P.E.

Signature

11/14/96

Date

R W Hough

Print or Type Name

R.W. Hough, P.E.

Signature

11/20/96

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

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SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
15	14	2B	600V PPB 2B (FOR PRESSURIZER HEATERS GROUP 2B BANK 2)	RB	800'+0"	C-11	800'-0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
15	08	2FDWVA0107	SG 2B SAMPLE ISOLATION	RB	797'+6"		>817'+6"	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	1
15	08	2LPSVA0565	RB AUX COOLERS SUPPLY VALVE	RB	825'+0"		836'-9"	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
15	18	2RCPS0364	RC PRESS SWITCH	RB	825'+0"		835'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
15	18	2RCPT0017P	RCS LOOP A PRESS TRANS	RB	825'+0"	E	830'+6"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
15	18	2RCPT0021P	RC PRESS XMTR (ES CH A)	RB	825'+0"		833'-0"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
15	18	2RCPT0022P	RC PRESS XMTR (ES CH B)	RB	825'+0"		831'-0"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
15	18	2RCPT0023P	RC PRESS XMTR (ES CH C)	RB	825'+0"		829'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
15	18	2RCPT0166P	RCS LOOP B PRESS TRANS	RB	825'+0"		826'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
15	19	2RCRD0084B	A HOT LEG RTD	RB	844'+6"		844'-8"	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
15	19	2RCRD0085B	B HOT LEG RTD	RB	844'+6"		844'-8"	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
15	14	3B	600V PPB 3B (FOR PRESSURIZER HEATERS GROUP 3B BANK 2)	RB	800'+0"	C-11	800'-0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
15	14	3C	600V PPB 3C (FOR PRESSURIZER HEATERS GROUP 3C BANK 2)	RB	818'+0"	C-11	818'+0"	No	ABS	RRS	Yes	No	No	Yes	No	
15	14	3D	600V PPB 3D (FOR PRESSURIZER HEATERS GROUP 3D BANK 2)	RB	818'+0"	C-11	818'+0"	No	ABS	RRS	Yes	No	No	Yes	No	
15	08	3FDWVA0107	SG 3B SAMPLE ISOLATION	RB	797'+6"	C-23	>817'+6"	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	1

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

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All signatures on this page apply to items identified as SVDS Signature Group 15 and contained on printout dated 11/14/96

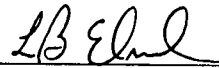
Certification:

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

L B Elrod

Print or Type Name



Signature

11/14/96
Date

R W Hough

Print or Type Name



Signature

11/20/96
Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Date: 11/14/96

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Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

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SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
16	21	3CFTK000B	CORE FLOOD TANK 3B	RB	818'+0"		818'+0"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	
16	20	3CRDLC	CONTROL ROD DRIVE LOGIC CABINETS	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
16	21	3CTK000C	UPPER SURGE TANK DOME	TB	838'+0"		838'+0"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	4
16	20	3EHTC2	EHC TERM CAB 3EHTC2	AB	809'+0"	P-87	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
16	20	3EPSLP1	EPSL PANEL 3EPSLP1	AB	809'+0"	P-88	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
16	20	3EPSLP2	EPSL PANEL 3EPSLP2	AB	809'+0"	P-88	809'+0"	Yes	BS	GRS	Yes	Yes	No	Yes	No	
16	20	3ESTC2A	ESFAS AUX RLY CAB 3ESTC2A	AB	809'+0"	T-87	809'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
16	20	3MFBMRP	MAIN FDR BUS MONITOR RLY PANEL	AB	809'+0"	N-88	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
16	18	3PIR	UNIT 3 PNEUMATIC INSTR RACK	AB	809'+0"	N/P-90	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
16	20	3TDC3	TRANSDUCER CAB 3TDC3	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
16	02	3X04	600V LC 3X04	TB	796'+6"		796'+6"	Yes	BS	GRS	Yes	Yes	No	Yes	No	
16	02	3X05	600V LC 3X05	AB	796'+6"	Q-89	796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	1
16	02	3X06	600V LC 3X06	AB	796'+6"	Q-89	796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	1
16	02	3X08	600V LC 3X08	AB	796'+6"	N-89	796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
16	02	3X09	600V LC 3X09	AB	796'+6"	N-89	796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
16	01	3XI	600V MCC 3XI	AB	809'+0"	P-95	809'+0"	Yes	DOC	RRS	No	No	Yes	No	No	
16	01	3XJ	600V MCC 3XJ	AB	809'+0"	P-96	809'+0"	Yes	DOC	RRS	No	No	Yes	No	No	

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 94

All signatures on this page apply to items identified as SVDS Signature Group 16 and contained on printout dated 11/14/96

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

R P Childs

Print or Type Name

R. P. Childs P.E.
Signature

11/14/96
Date

R V Hester

Print or Type Name

R. V. Hester, P.E.
Signature

11/14/96
Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 95

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
17	05	3BSPU0001	RBS PUMP 3A	AB	758'+0"	T-90	758'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
17	05	3BSPU0002	RBS PUMP 3B	AB	758'+0"	T-88	758'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
17	08	3BSVA0001	RB SPRAY HEADER 3A ISOLATION	AB	809'+0"	Qa-94	<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
17	08	3BSVA0002	RB SPRAY HEADER 3B ISOLATION	AB	809'+0"	X-93a	<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
17	08	3BSVA0003	RBS PUMP SUCTION ISOL	AB	758'+0"	T-90	758'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
17	08	3BSVA0004	RBS PUMP SUCTION ISOL	AB	758'+0"	T-90	758'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
17	07	3FDWVA0106	SG 3A SAMPLE ISOLATION	AB	809'+0"		<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	1
17	07	3FDWVA0108	SG 3B SAMPLE ISOLATION	AB	809'+0"		<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	1
17	07	3FDWVA0315	MDEFW PUMP 3A ISOLATION	AB	809'+0"		<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
17	07	3FDWVA0316	MDEFW PUMP 3B ISOLATION	AB	809'+0"		<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
17	07	3HPVA0021	RCP SEAL RETURN CONTAIN ISOL	AB	809'+0"		<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
17	08	3HPVA0024	BWST SUCTION ISOLATION	AB	771'+0"	R-89	771'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
17	08	3HPVA0025	BWST SUCTION ISOLATION	AB	771'+0"	R-87	771'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
17	07	3HPVA0355	HPI AUX SPRAY THROTTLE	AB	809'+0"	Qa-93	<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
17	18	3LPIFT0004P	LPI TRAIN 3B INJ FLOW. TRANS	AB	809'+0"		~816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	3
17	18	3LPIFT0005P	LPI TRAIN 3A INJ FLOW TRANS	AB	809'+0"	Qa-96	~816'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
17	05	3LPIPU0001	LPI PUMP 3A	AB	758'+0"	S-90	758'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 96

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
17	19	3LPITE0209	LPI COOLER OUTLET TEMP	AB	809'+0"	Qa-91	-816'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
17	19	3LPITE0210	LPI COOLER OUTLET TEMP	AB	809'+0"	Qa-96	-816'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
17	08	3LPSPA0018	RBCU 3A RETURN VALVE	AB	809'+0"	Qa-94	<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
17	08	3LPSPA0021	RBCU 3B RETURN VALVE	AB	809'+0"	Qa-94	<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
17	08	3LPSPA0024	RBCU 3C RETURN VALVE	AB	809'+0"	Qa-94	<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
17	08	3LPVA0003	LPI HOT LEG SUCTION	AB	758'+0"	T-90	758'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
17	08	3LPVA0006	LPI SUCTION CROSSOVER	AB	758'+0"	T-89	758'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
17	08	3LPVA0007	LPI SUCTION CROSSOVER	AB	758'+0"	T-89	758'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
17	08	3LPVA0012	LPI COOLER 3A ISOLATION	AB	771'+0"	Qa-95	771'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
17	08	3LPVA0014	LPI COOLER 3B ISOLATION	AB	771'+0"	Qa-93	771'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
17	08	3LPVA0015	LPI TO HPI/RBS PIGGYBACK 3A	AB	771'+0"	Qa-95	<811	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
17	08	3LPVA0016	LPI TO HPI/RBS PIGGYBACK 3B	AB	771'+0"	R-92	<811	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
17	08	3LPVA0017	LPI TRAIN 3A INJECTION ISOL	AB	809'+0"	Qa-92	<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
17	08	3LPVA0018	LPI TRAIN 3B INJECTION ISOL	AB	809'+0"	X-91a	<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
17	08	3LPVA0021	BWST SUCTION ISOLATION	AB	771'+0"	T-89	771'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
17	08	3LPVA0022	BWST SUCTION ISOLATION	AB	771'+0"	T-89	771'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
17	07	3LPVA0092	LPI COOLER BYPASS VALVE	AB	771'+0"	Q-94	771'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

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SVDS GROUP	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
17	07	3LPVA0093	LPI COOLER BYPASS VALVE	AB	771'+0"	Q-94	771'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	

All signatures on this page apply to items identified as SVDS Signature Group 17 and contained on printout dated 11/14/96

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

R W McAuley

Print or Type Name

R.W. McAuley, P.E.
Signature

Date

11/18/96

R P Childs

Print or Type Name

R.P. Childs, P.E.
Signature

Date

11/14/96

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Date: 11/14/96

Page No. 98

[illegible]

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 99

[illegible]

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 100

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
18	21	3LPITK0001	BWST	YD	796'+6"	Qa-89	796'+6"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	
18	15	3PA/BB	PWR BATT 3PA	TB	822'+0"	L-44	822	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
18	15	3PB/BB	PWR BATT 3PB	TB	822'+0"	Q-89	822	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 101

All signatures on this page apply to items identified as SVDS Signature Group 18 and contained on printout dated 11/14/96

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

Farzin Beigi

Print or Type Name

Farzin Beigi
Signature

12/2/96
Date

Brantley Buerger

Print or Type Name

Brantley Buerger
Signature

12/2/96
Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 102

SVDS GROUP	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
19	00	1CCD000A	CONDENSER HOTWELL 1A	TB	775'+0"	F-18	775'+0"	N/A	N/A	N/A	Yes	N/A	Yes	Yes	No	5
19	00	1CCD000B	CONDENSER HOTWELL 1B	TB	775'+0"	F-20	775'+0"	N/A	N/A	N/A	Yes	N/A	Yes	Yes	No	5
19	00	1CCD000C	CONDENSER HOTWELL 1C	TB	775'+0"	F-22	775'+0"	N/A	N/A	N/A	Yes	N/A	Yes	Yes	No	5
19	00	2CCD000A	CONDENSER HOTWELL 2A	TB	775'+0"		775'+0"	N/A	N/A	N/A	Yes	N/A	Yes	Yes	No	5
19	00	2CCD000B	CONDENSER HOTWELL 2B	TB	775'+0"		775'+0"	N/A	N/A	N/A	Yes	N/A	Yes	Yes	No	5
19	00	2CCD000C	CONDENSER HOTWELL 2C	TB	775'+0"		775'+0"	N/A	N/A	N/A	Yes	N/A	Yes	Yes	No	5
19	00	3CCD000A	CONDENSER HOTWELL 3A	TB	775'+0"	E-51	775'+0"	N/A	N/A	N/A	Yes	N/A	Yes	Yes	No	5
19	00	3CCD000B	CONDENSER HOTWELL 3B	TB	775'+0"	E-49	775'+0"	N/A	N/A	N/A	Yes	N/A	Yes	Yes	No	5
19	00	3CCD000C	CONDENSER HOTWELL 3C	TB	775'+0"	E-47	775'+0"	N/A	N/A	N/A	Yes	N/A	Yes	Yes	No	5

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 103

All signatures on this page apply to items identified as SVDS Signature Group 19 and contained on printout dated 11/14/96

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

James L. White

Print or Type Name

James L. White 12-8-96
Signature Date

Brantley Buerger

Print or Type Name

R. M. Poirier
for B. C. Buerger 12/2/96
Signature Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 104

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
20	10	0VSAH0014	AIR HANDLING UNIT O.14	TB	850'+0"	C-41	850'	No	N/A	N/A	N/A	No	No	Yes	No	2
20	10	0VSAH0015	AIR HANDLING UNIT O.15	TB	850'+0"	C-55	850'	No	N/A	N/A	N/A	No	No	Yes	No	2
20	06	1CCWPU0001	CCW PUMP 1A	IS	810'+6"	YD.ST	810'-6"	Yes	BS	GRS	Yes	No	No	Yes	No	
20	06	1CCWPU0002	CCW PUMP 1B	IS	810'+6"	YD.ST	810'-6"	Yes	BS	GRS	Yes	No	No	Yes	No	
20	06	1CCWPU0003	CCW PUMP 1C	IS	810'+6"	YD.ST	810'-6"	Yes	BS	GRS	Yes	No	No	Yes	No	
20	06	1CCWPU0004	CCW PUMP 1D	IS	810'+6"	YD.ST	810'-6"	Yes	BS	GRS	Yes	No	No	Yes	No	
20	08	1CCWVA0001	CCW EM DISCH ISOL	TB	796'+6"	D-18	810'-6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
20	08	1CCWVA0002	CCW EM DISCH ISOL	TB	796'+6"	D-18	810'-6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
20	08	1CCWVA0003	CCW EM DISCH ISOL	TB	796'+6"	D-20	810'-6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
20	08	1CCWVA0004	CCW EM DISCH ISOL	TB	796'+6"	D-20	810'-6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
20	08	1CCWVA0005	CCW EM DISCH ISOL	TB	796'+6"	D-22	810'-6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
20	08	1CCWVA0006	CCW EM DISCH ISOL	TB	796'+6"	D-22	810'-6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
20	08	1CCWVA0008	EM DISCHARGE VALVE	YD	730'+0"		730'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
20	08	1CCWVA0010	DISCH ISOL VALVE	YD	796'+6"	YD	801'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
20	08	1CCWVA0011	DISCH ISOL VALVE	YD	796'+6"	YD	801'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
20	08	1CCWVA0012	DISCH ISOL VALVE	YD	796'+6"	YD	801'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
20	08	1CCWVA0013	DISCH ISOL VALVE	YD	796'+6"	YD	801'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
20	06	1CPU0010	HOTWELL PUMP 1A	TB	775'+0"	F-24	768'	Yes	ABS	RRS	Yes	No	No	Yes	No	

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 105

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
20	06	1CPU0011	HOTWELL PUMP 1B	TB	775'+0"	F-24	768'	Yes	ABS	RRS	Yes	No	No	Yes	No	
20	06	1CPU0012	HOTWELL PUMP 1C	TB	775'+0"	H-24	768'	Yes	ABS	RRS	Yes	No	No	Yes	No	
20	07	1MSVA0102	TURBINE STOP VALVE	TB	796'+6"	F-15	822'+0"	Yes	BS	GRS	Yes	No	N/A	Yes	No	
20	07	1MSVA0103	TURBINE STOP VALVE	TB	796'+6"	F-15	822'+0"	Yes	BS	GRS	Yes	No	N/A	Yes	No	
20	07	1MSVA0104	TURBINE STOP VALVE	TB	796'+6"	F-15	822'+0"	Yes	BS	GRS	Yes	No	N/A	Yes	No	
20	07	1MSVA0105	TURBINE STOP VALVE	TB	796'+6"	F-15	822'+0"	Yes	BS	GRS	Yes	No	N/A	Yes	No	
20	07	1MSVA0106	MAIN STEAM CONTROL VALVE	TB	796'+6"		822'+0"	Yes	BS	GRS	Yes	No	N/A	Yes	No	
20	07	1MSVA0107	MAIN STEAM CONTROL VALVE	TB	796'+6"	F-15	822'+0"	Yes	BS	GRS	Yes	No	N/A	Yes	No	
20	07	1MSVA0108	MAIN STEAM CONTROL VALVE	TB	796'+6"	F-15	822'+0"	Yes	BS	GRS	Yes	No	N/A	Yes	No	
20	07	1MSVA0109	MAIN STEAM CONTROL VALVE	TB	796'+6"	F-15	822'+0"	Yes	BS	GRS	Yes	No	N/A	Yes	No	
20	07	1TOVA0059	EFW PUMP TURBINE OIL PR VALVE	TB	775'+0"	C-19	775'	Yes	ABS	RRS	Yes	Yes	N/A	Yes	Yes	1
20	00	1VAE0001	EM STEAM AIR EJECTOR (SAE)	TB	775'+0"	E-17	775'+0"	N/A	N/A	N/A	Yes	N/A	Yes	Yes	No	5
20	08	1VVA0186	COND VACUUM BREAKER	TB	796'+6"	D-22	802'-6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	1
20	06	2CCWPU0001	CCW PUMP 2A	IS	810'+6"	STA.29	810'-6"	Yes	BS	GRS	Yes	No	No	Yes	No	
20	06	2CCWPU0002	CCW PUMP 2B	IS	810'+6"		810'-6"	Yes	BS	GRS	Yes	No	No	Yes	No	
20	06	2CCWPU0003	CCW PUMP 2C	IS	810'+6"	STA.29	810'-6"	Yes	BS	GRS	Yes	No	No	Yes	No	
20	06	2CCWPU0004	CCW PUMP 2D	IS	810'+6"	STA.29	810'-6"	Yes	BS	GRS	Yes	No	No	Yes	No	
20	08	2CCWVA0010	DISCH ISOL VALVE	YD	796'+6"	STA.29	801'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 106

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
20	08	2CCWVA0011	DISCH ISOL VALVE	YD	796'+6"	STA.29	801'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
20	08	2CCWVA0012	DISCH ISOL VALVE	YD	796'+6"	STA.29	801'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
20	08	2CCWVA0013	DISCH ISOL VALVE	YD	796'+6"	STA.29	801'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
20	06	2CPU0010	HOTWELL PUMP 2A	TB	775'+0"	Fa-31	768'	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
20	06	2CPU0011	HOTWELL PUMP 2B	TB	775'+0"	G-31	768'	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
20	06	2CPU0012	HOTWELL PUMP 2C	TB	775'+0"	H-31	768'	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
20	07	2MSVA0102	TURBINE STOP VALVE	TB	796'+6"	E-41	822'+0"	Yes	BS	GRS	Yes	No	N/A	Yes	No	
20	07	2MSVA0103	TURBINE STOP VALVE	TB	796'+6"	E-41	822'+0"	Yes	BS	GRS	Yes	No	N/A	Yes	No	
20	07	2MSVA0104	TURBINE STOP VALVE	TB	796'+6"	F-41	822'+0"	Yes	BS	GRS	Yes	No	N/A	Yes	No	
20	07	2MSVA0105	TURBINE STOP VALVE	TB	796'+6"	F-41	822'+0"	Yes	BS	GRS	Yes	No	N/A	Yes	No	
20	07	2MSVA0106	MAIN STEAM CONTROL VALVE	TB	796'+6"	E-40	822'+0"	Yes	BS	GRS	Yes	No	N/A	Yes	No	
20	07	2MSVA0107	MAIN STEAM CONTROL VALVE	TB	796'+6"	F-40	822'+0"	Yes	BS	GRS	Yes	No	N/A	Yes	No	
20	07	2MSVA0108	MAIN STEAM CONTROL VALVE	TB	796'+6"	E-40	822'+0"	Yes	BS	GRS	Yes	No	N/A	Yes	No	
20	07	2MSVA0109	MAIN STEAM CONTROL VALVE	TB	796'+6"	F-40	822'+0"	Yes	BS	GRS	Yes	No	N/A	Yes	No	
20	07	2TOVA0059	EFW PUMP TURB OIL PR VALVE	TB	775'+0"		775'	Yes	ABS	RRS	Yes	Yes	N/A	Yes	Yes	1
20	00	2VAE0001	EM STEAM AIR EJECTOR (SAE)	TB	775'+0"	C37	775'+0"	N/A	N/A	N/A	Yes	N/A	Yes	Yes	No	5
20	08	2VVA0186	COND VACUUM BREAKER	TB	796'+6"	Dd-33	802'-6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	1
20	06	3CCWPU0001	CCW PUMP 3A	IS	810'+6"		810'-6"	Yes	BS	GRS	Yes	No	No	Yes	No	

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 107

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
20	06	3CCWPU0002	CCW PUMP 3B	IS	810'+6"		810'-6"	Yes	BS	GRS	Yes	No	No	Yes	No	
20	06	3CCWPU0003	CCW PUMP 3C	IS	810'+6"		810'-6"	Yes	BS	GRS	Yes	No	No	Yes	No	
20	06	3CCWPU0004	CCW PUMP 3D	IS	810'+6"		810'-6"	Yes	BS	GRS	Yes	No	No	Yes	No	
20	08	3CCWVA0010	DISCH ISOL VALVE	YD	796'+6"		801'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
20	08	3CCWVA0011	DISCH ISOL VALVE	YD	796'+6"		801'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
20	08	3CCWVA0012	DISCH ISOL VALVE	YD	796'+6"		801'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
20	08	3CCWVA0013	DISCH ISOL VALVE	YD	796'+6"		801'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
20	08	3CCWVA0093	EM DISCHARGE VALVE	TB	775'+0"	B-52	790'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
20	06	3CPU0010	HOTWELL PUMP 3A	TB	775'+0"	Fa-45	768'	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
20	06	3CPU0011	HOTWELL PUMP 3B	TB	775'+0"	G-45	768'	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
20	06	3CPU0012	HOTWELL PUMP 3C	TB	775'+0"	H-45	768'	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
20	07	3MSVA0102	TURBINE STOP VALVE	TB	796'+6"	F-55	822'+0"	Yes	BS	GRS	Yes	No	N/A	Yes	No	
20	07	3MSVA0103	TURBINE STOP VALVE	TB	796'+6"	E-55	822'+0"	Yes	BS	GRS	Yes	No	N/A	Yes	No	
20	07	3MSVA0104	TURBINE STOP VALVE	TB	796'+6"	F-55	822'+0"	Yes	BS	GRS	Yes	No	N/A	Yes	No	
20	07	3MSVA0105	TURBINE STOP VALVE	TB	796'+6"	F-55	822'+0"	Yes	BS	GRS	Yes	No	N/A	Yes	No	
20	07	3MSVA0106	MAIN STEAM CONTROL VALVE	TB	796'+6"	F-55	822'+0"	Yes	BS	GRS	Yes	No	N/A	Yes	No	
20	07	3MSVA0107	MAIN STEAM CONTROL VALVE	TB	796'+6"	F-55	822'+0"	Yes	BS	GRS	Yes	No	N/A	Yes	No	
20	07	3MSVA0108	MAIN STEAM CONTROL VALVE	TB	796'+6"	F-55	822'+0"	Yes	BS	GRS	Yes	No	N/A	Yes	No	

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 108

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
20	07	3MSVA0109	MAIN STEAM CONTROL VALVE	TB	796'+6"	F-55	822'+0"	Yes	BS	GRS	Yes	No	N/A	Yes	No	
20	07	3TOVA0059	EFW PUMP TURBINE OIL PR VALVE	TB	775'+0"	C-49	775'	Yes	ABS	RRS	Yes	Yes	N/A	Yes	Yes	1
20	10	3VSAH0017	BATTERY RM AIR CONDITIONER	TB	822'+0"	L-45	822'	Yes	ABS	RRS	Yes	No	No	No	No	
20	10	3VSAH0029	ALTERREX CAB COOLING COIL	TB	822'+0"	F-43	822'	Yes	ABS	RRS	Yes	No	No	Yes	No	
20	08	3VVA0186	COND VACUUM BREAKER	TB	796'+6"	De-47	802'-6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	1

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 109

All signatures on this page apply to items identified as SVDS Signature Group 20 and contained on printout dated 11/14/96

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

Carl Nelman

Print or Type Name

FR Big for
C. R. Nelman
Signature

12/2/96
Date

J R Disser

Print or Type Name

R. M. Disser for
J. R. Disser
Signature

12/2/96
Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 110

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
21	08	1CVA0391	HOTWELL SUPPLY ISOL TO TDEFW	TB	775'+0"	C-20	775'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
21	00	1HPIFL000A	RCP SEAL SUPPLY FILTER	AB	783'+0"	R-70	783'+0"	N/A	N/A	N/A	Yes	N/A	Yes	Yes	No	5
21	00	1HPIFL000B	RCP SEAL SUPPLY FILTER	AB	783'+0"	R-70	783'+0"	N/A	N/A	N/A	Yes	N/A	Yes	Yes	No	5
21	08	1LPSVA0137	TDEFW ISOLATION VALVE	TB	775'+0"	C-20	797'-0	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
21	07	1LPSVA0251	LPI COOLER 1A CONTROL VALVE	TB	775'+0"	M-20	796'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
21	07	1LPSVA0252	LPI COOLER 1B CONTROL VALVE	TB	775'+0"	L-23	796'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
21	07	1LPSVA0516	EFW PUMP 1A ISOLATION VALVE	TB	775'+0"	F-24	797'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
21	07	1LPSVA0525	EFW PUMP 1B ISOLATION VALVE	TB	775'+0"	Fa	796'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
21	08	1MSVA0036	FWPT ISOLATION	TB	796'+6"	E-13	815'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
21	08	1MSVA0040	FWPT STOP VALVE	TB	775'+0"	D-24	775'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
21	08	1MSVA0043	FWPT STOP VALVE	TB	775'+0"	D-26	775'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
21	08	1MSVA0047	MS TO CSAE	TB	796'+6"	B-25	815'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
21	08	1MSVA0077	MS TO 2ND STAGE RHTR ISOL	TB	796'+6"	C-13	815'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
21	08	1MSVA0078	MS TO 2ND STAGE RHTR ISOL	TB	796'+6"	C-13	815'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
21	07	1MSVA0093	TDEFW MS ISOLATION VALVE	TB	775'+0"	C-19	775'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 111

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
21	07	1MSVA0112	MS TO 2ND STAGE RHTR ISOL	TB	796'+6"	C-13	815'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
21	07	1MSVA0173	MS TO 2ND STAGE RHTR ISOL	TB	796'+6"	H-13	815'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
21	00	2HPIFL000A	RCP SEAL SUPPLY FILTER	AB	783'+0"	R-76	783'+0"	N/A	N/A	N/A	Yes	N/A	Yes	Yes	No	5
21	00	2HPIFL000B	RCP SEAL SUPPLY FILTER	AB	783'+0"	R-76	783'+0"	N/A	N/A	N/A	Yes	N/A	Yes	Yes	No	5
21	18	2HPIFT0075	RCP SEAL INJ FLOW TRANSMITTER	AB	783'+0"	R-77	786'	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
21	00	3HPIFL000A	RCP SEAL SUPPLY FILTER	AB	783'+0"		783'+0"	N/A	N/A	N/A	Yes	N/A	Yes	Yes	No	5
21	00	3HPIFL000B	RCP SEAL SUPPLY FILTER	AB	783'+0"		783'+0"	N/A	N/A	N/A	Yes	N/A	Yes	Yes	No	5
21	18	3HPIFT0075	RCP SEAL INJ FLOW TRANSMITTER	AB	783'+0"	R-91	786'	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
21	08	3LPSVA0137	TDEFW ISOLATION VALVE	TB	775'+0"	C-50	775'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
21	07	3LPSVA0404	LPI COOLER 3B CONTROL VALVE	TB	775'+0"	M-47	796'+6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
21	07	3LPSVA0405	LPI COOLER 3A CONTROL VALVE	TB	775'+0"	M-51	775'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
21	07	3LPSVA0516	EFW PUMP 3A ISOLATION VALVE	TB	775'+0"	De-45	796'+6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
21	07	3LPSVA0525	EFW PUMP 3B ISOLATION VALVE	TB	775'+0"	Fa-45	796'+6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
21	08	3MSVA0017	TURBINE BYPASS ISOLATION	TB	796'+6"	M-51	815'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
21	08	3MSVA0035	FWPT ISOLATION	TB	796'+6"	F-55	815'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 112

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
21	08	3MSVA0036	FWPT ISOLATION	TB	796'+6"	E-56	815'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
21	08	3MSVA0047	MS TO CSAE	TB	796'+6"	F-43	815'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
21	08	3MSVA0076	MS RH ISOLATION	TB	796'+6"	F-56	815'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
21	08	3MSVA0081	MS TO 2ND STAGE RHTR ISOL	TB	796'+6"	C-56	815'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
21	07	3MSVA0087	TDEFW MS ISOLATION VALVE	TB	796'+6"	C-52	815'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
21	07	3MSVA0093	TDEFW MS ISOLATION VALVE	TB	775'+0"	C-49	775'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
21	07	3MSVA0112	MS TO 2ND STAGE RHTR ISOL	TB	796'+6"	H-56	815'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
21	07	3MSVA0173	MS TO 2ND STAGE RHTR ISOL	TB	796'+6"	C-56	815'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 113

All signatures on this page apply to items identified as SVDS Signature Group 21 and contained on printout dated 11/14/96

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

G L Green

Print or Type Name

G L Green, PE
Signature

11/20/96
Date

R V Hester

Print or Type Name

R V Hester, PE
Signature

11/14/96
Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 114

SVDS GROUP	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
22	08	3CVA0391	HOTWELL SUPPLY ISO. TO TD EFDW	TB	775'+0"	K-50	775+0	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	

All signatures on this page apply to items identified as SVDS Signature Group 22 and contained on printout dated 11/14/96

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

G L Green

Print or Type Name

G L Green, P.E.
Signature

11/20/96
Date

R L McCoy

Print or Type Name

R L McCoy, P.E.
Signature

11/14/96
Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

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SVDS GROUP	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
24	08	1FDWVA0107	SG 1B SAMPLE ISOLATION	RB	808'+0"		>817'+6"	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
24	08	1HPVA0020	RCP SEAL RETURN ISOLATION	RB	808'+3		812'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
24	08	1LPSVA0565	RB Aux Coolers Supply Valve	RB	797'+6"		>817'+6"	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
24	19	1RCRD0043A	PRZ RTD	RB	797'+6"		>817'+6"	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
24	19	1RCRD0043B	PRZ RTD	RB	797'+6"		>817'+6"	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 118

All signatures on this page apply to items identified as SVDS Signature Group 24 and contained on printout dated 11/14/96

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

R L McCoy

Print or Type Name

R. L. McCoy, P.E.
Signature

11/14/96
Date

R W Hough

Print or Type Name

R. W. Hough, P.E.
Signature

11/20/96
Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

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SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
26	21	1HPITK0001	LETDOWN STORAGE TANK	AB	771'+0"		771'+0"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	4
26	18	1RCPS0364	RC PRESS SWITCH	RB	825'+0"	270	828'+0"	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
26	18	1RCPT0017P	RCS LOOP A PRESS TRANS	RB	825'+0"		825+	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
26	18	1RCPT0022P	RC PRESS XMTR (ES CH B)	RB	825'+0"		825+	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
26	18	1RCPT0023P	RC PRESS XMTR (ES CH C)	RB	825'+0"		825+	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
26	18	1RCPT0166P	RCS LOOP B PRESS TRANS	RB	825'+0"		825+	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 120

All signatures on this page apply to items identified as SVDS Signature Group 26 and contained on printout dated 11/14/96

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

R V Hester

Print or Type Name

Signature

Date

11/14/96

R L McCoy

Print or Type Name

Signature

Date

11/14/96

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 121

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
27	07	1MSVA0001	MAIN STEAM SAFETY RELIEF	YD	813'+6"	N-64	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	1MSVA0002	MAIN STEAM SAFETY RELIEF	YD	813'+6"	Q-64	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	1MSVA0003	MAIN STEAM SAFETY RELIEF	YD	813'+6"	N-64	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	1MSVA0004	MAIN STEAM SAFETY RELIEF	YD	813'+6"	P-64	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	1MSVA0005	MAIN STEAM SAFETY RELIEF	YD	813'+6"	N-64	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	1MSVA0006	MAIN STEAM SAFETY RELIEF	YD	813'+6"	P-64	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	1MSVA0007	MAIN STEAM SAFETY RELIEF	YD	813'+6"	P-64	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	1MSVA0008	MAIN STEAM SAFETY RELIEF	YD	813'+6"	P-64	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	1MSVA0009	MAIN STEAM SAFETY RELIEF	YD	813'+6"	N-63	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	1MSVA0010	MAIN STEAM SAFETY RELIEF	YD	813'+6"	Q-63	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	1MSVA0011	MAIN STEAM SAFETY RELIEF	YD	813'+6"	P-63	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	1MSVA0012	MAIN STEAM SAFETY RELIEF	YD	813'+6"	P-63	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	1MSVA0013	MAIN STEAM SAFETY RELIEF	YD	813'+6"	N-63	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	1MSVA0014	MAIN STEAM SAFETY RELIEF	YD	813'+6"	P-63	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	1MSVA0015	MAIN STEAM SAFETY RELIEF	YD	813'+6"	P-63	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	1MSVA0016	MAIN STEAM SAFETY RELIEF	YD	813'+6"	P-63	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	03	1TC	4KV SWGR 1TC	TB	796'+6"		796'+6"	Yes	GERS	RRS	Yes	Yes	Yes	No	No	
27	03	1TD	4KV SWGR 1TD	TB	796'+6"		796'+6"	Yes	GERS	RRS	Yes	Yes	Yes	No	No	

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 122

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
27	03	1TE	4KV SWGR 1TE	TB	796'+6"		796'+6"	Yes	GERS	RRS	Yes	Yes	Yes	No	No	
27	07	2MSVA0001	MAIN STEAM SAFETY RELIEF	YD	813'+6"	N-83	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	2MSVA0002	MAIN STEAM SAFETY RELIEF	YD	813'+6"	Q-83	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	2MSVA0003	MAIN STEAM SAFETY RELIEF	YD	813'+6"	N-83	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	2MSVA0004	MAIN STEAM SAFETY RELIEF	YD	813'+6"	P-83	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	2MSVA0005	MAIN STEAM SAFETY RELIEF	YD	813'+6"	N-83	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	2MSVA0006	MAIN STEAM SAFETY RELIEF	YD	813'+6"	P-83	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	2MSVA0007	MAIN STEAM SAFETY RELIEF	YD	813'+6"	P-83	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	2MSVA0008	MAIN STEAM SAFETY RELIEF	YD	813'+6"	P-83	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	2MSVA0009	MAIN STEAM SAFETY RELIEF	YD	813'+6"	N-83	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	2MSVA0010	MAIN STEAM SAFETY RELIEF	YD	813'+6"	Q-83	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	2MSVA0011	MAIN STEAM SAFETY RELIEF	YD	813'+6"	N-83	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	2MSVA0012	MAIN STEAM SAFETY RELIEF	YD	813'+6"	P-83	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	2MSVA0013	MAIN STEAM SAFETY RELIEF	YD	813'+6"	N-83	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	2MSVA0014	MAIN STEAM SAFETY RELIEF	YD	813'+6"	P-83	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	2MSVA0015	MAIN STEAM SAFETY RELIEF	YD	813'+6"	P-83	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	2MSVA0016	MAIN STEAM SAFETY RELIEF	YD	813'+6"	P-83	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	03	2TC	4KV SWGR 2TC	TB	796'+6"	L-29	796'+6"	Yes	GERS	RRS	Yes	Yes	Yes	No	No	

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 123

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
27	03	2TD	4KV SWGR 2TD	TB	796'+6"	L-30	796'+6"	Yes	GERS	RRS	Yes	Yes	Yes	No	No	
27	03	2TE	4KV SWGR 2TE	TB	796'+6"	L-31	796'+6"	Yes	GERS	RRS	Yes	Yes	Yes	No	No	
27	14	3KI	120V PPB 3KI	AB	809'+0"	Q-88	809'+0"	Yes	BS	GRS	Yes	Yes	No	Yes	No	3
27	14	3KU	120V PPB 3KU	AB	809'+0"	R-88	809'+0"	Yes	BS	GRS	Yes	Yes	No	Yes	No	3
27	07	3MSVA0001	MAIN STEAM SAFETY RELIEF	YD	813'+6"	N-98	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	3MSVA0002	MAIN STEAM SAFETY RELIEF	YD	813'+6"	Q-98	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	3MSVA0003	MAIN STEAM SAFETY RELIEF	YD	813'+6"	N-98	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	3MSVA0004	MAIN STEAM SAFETY RELIEF	YD	813'+6"	Q-98	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	3MSVA0005	MAIN STEAM SAFETY RELIEF	YD	813'+6"	N-98	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	3MSVA0006	MAIN STEAM SAFETY RELIEF	YD	813'+6"	P-98	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	3MSVA0007	MAIN STEAM SAFETY RELIEF	YD	813'+6"	N-98	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	3MSVA0008	MAIN STEAM SAFETY RELIEF	YD	813'+6"	P-98	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	3MSVA0009	MAIN STEAM SAFETY RELIEF	YD	813'+6"	N-98	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	3MSVA0010	MAIN STEAM SAFETY RELIEF	YD	813'+6"	Q-98	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	3MSVA0011	MAIN STEAM SAFETY RELIEF	YD	813'+6"	N-98	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	3MSVA0012	MAIN STEAM SAFETY RELIEF	YD	813'+6"	P-98	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	3MSVA0013	MAIN STEAM SAFETY RELIEF	YD	813'+6"	N-98	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	3MSVA0014	MAIN STEAM SAFETY RELIEF	YD	813'+6"	N-98	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 124

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
27	07	3MSVA0015	MAIN STEAM SAFETY RELIEF	YD	813'+6"	P-98	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	07	3MSVA0016	MAIN STEAM SAFETY RELIEF	YD	813'+6"	P-98	827'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
27	03	3TC	4KV SWGR 3TC	TB	796'+6"	L-43	796'+6"	Yes	GERS	RRS	Yes	Yes	Yes	No	No	
27	03	3TD	4KV SWGR 3TD	TB	796'+6"	L-44	796'+6"	Yes	GERS	RRS	Yes	Yes	Yes	No	No	
27	03	3TE	4KV SWGR 3TE	TB	796'+6"	L-45	796'+6"	Yes	GERS	RRS	Yes	Yes	Yes	No	No	

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 125

All signatures on this page apply to items identified as SVDS Signature Group 27 and contained on printout dated 11/14/96

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

R P Childs

Print or Type Name

R. P. Childs P.E.

Signature

11/14/96

Date

R L McCoy

Print or Type Name

R. L. McCoy, P.E.

Signature

11/14/96

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 130

SVDS GROUP	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
31	20	1AT8	AREA TERMINATION CABINET 8	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
31	20	3AT4	AREA TERMINATION CABINET 3AT4	AB	809'+0"	N-88	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
31	08	3HPVA0026	HPI LOOP 3A INJECTION	AB	809'+0"	Qa-93	<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
31	08	3HPVA0027	HPI LOOP 3B INJECTION	AB	809'+0"	X-93a	<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
31	08	3HPVA0409	HPI CROSSOVER ISOLATION	AB	809'+0"	X-93a	<838'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
31	08	3LPVA0019	RB EMERG SUMP SUCTION	AB	758'+0"	U-90	758'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
31	08	3LPVA0020	RB EMERG SUMP SUCTION	AB	758'+0"	U-89	758'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
31	01	3XS3	MCC 3XS3	AB	796'+0"	Q-89	796'+6"	Yes	DOC	RRS	No	No	No	Yes	No	

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 131

All signatures on this page apply to items identified as SVDS Signature Group 31 and contained on printout dated 11/14/96

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

R P Childs

Print or Type Name

R.P. Childs P.E.
Signature

11/14/96
Date

L B Elrod

Print or Type Name

LB Elrod, P.E.
Signature

11/14/96
Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

R W McAuley

Print or Type Name

R.W. McAuley, P.E.
Signature

11/18/96
Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 132

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
32	14	1C	600V PPB 1C (FOR PRESSURIZER HEATERS GROUP C BANK 2)	RB	818'+0"	C-11	825'-818'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
32	14	1D	600V PPB 1D (FOR PRESSURIZER HEATERS GROUP D BANK 2)	RB	818'+0"	C-11	825'-818'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	1
32	14	1K	600V PPB 1K (FOR PRESSURIZER HEATERS GROUP K BANK 2)	RB	818'+0"	C-11	825'-818'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 133

All signatures on this page apply to items identified as SVDS Signature Group 32 and contained on printout dated 11/14/96

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

R V Hester

Print or Type Name

R V Hester, PE
Signature

11/14/96
Date

R P Childs

Print or Type Name

R. P. Childs P.E.
Signature

11/14/96
Date

Print or Type Name

Signature

Date

R W Hough

Print or Type Name

R. W. Hough, P.E.
Signature

11-20-96
Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 134

SVDS GROUP	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
33	14	2C	PPB 2C	RB	818'+0"	C-11	818' / 825'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
33	14	2D	PPB 2D	RB	818'+0"	C-11	818' / 825'	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	

All signatures on this page apply to items identified as SVDS Signature Group 33 and contained on printout dated 11/14/96

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

R V Hester

Print or Type Name


Signature

11/14/96
Date

R P Childs

Print or Type Name


Signature

11/14/96
Date

L B Elrod

Print or Type Name


Signature

11/14/96
Date

R W Hough

Print or Type Name


Signature

11/20/96
Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 135

SVDS GROUP	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
34	21	1CTK000A	UPPER SURGE TANK 1A	TB	838'+0"	M-25	838'+0"	N/A	N/A	N/A	N/A	N/A	No	N/A	No	
34	21	3CTK000A	UPPER SURGE TANK 3A	TB	838'+0"	M-50	838'+0"	N/A	N/A	N/A	N/A	N/A	No	N/A	No	
34	21	3CTK000B	UPPER SURGE TANK 3B	TB	838'+0"	M-47	838'+0"	N/A	N/A	N/A	N/A	N/A	No	N/A	No	

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 136

All signatures on this page apply to items identified as SVDS Signature Group 34 and contained on printout dated 11/14/96

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

Brantley Buerger

Print or Type Name

FR Buerger for BC Buerger
Signature

12/2/96
Date

J R Disser

Print or Type Name

R.M. Pincha for JR Disser
Signature

12/2/96
Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

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Date

Print or Type Name

Signature

Date

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 137

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
35	01	1DCA	125V DC 1DCA	AB	796'+0"		796'+6"	Yes	DOC	RRS	No	No	No	Yes	No	
35	01	1DCB	125V DC 1DCB	AB	796'+0"		796'+6"	Yes	DOC	RRS	No	No	Yes	Yes	No	
35	01	1DP	125/250V DC 1DP	TB	796'+6"	L-25	796'+6"	Yes	ABS	RRS	No	Yes	Yes	Yes	No	1
35	08	1FDWVA0105	SG 1A SAMPLE ISOLATION	RB	797'+6"		>817'+6"	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	1
35	08	1HPVA0001	LETDOWN INLET ISOLATION	RB	777'+6"		777'+6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
35	08	1HPVA0002	LETDOWN INLET ISOLATION	RB	777'+6"		777'+6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
35	08	1HPVA0003	LETDOWN ISOLATION	RB	777'+6"		777'+6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
35	08	1HPVA0004	LETDOWN ISOLATION	RB	777'+6"		777'+6"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
35	01	1MVC2	250V MCC 1MVC2	TB	775'+0"		775'+0"	Yes	DOC	RRS	No	No	Yes	No	No	
35	01	1MVC3	250V MCC 1MVC3	TB	775'+0"	B-44	775'+0"	Yes	DOC	RRS	No	No	Yes	Yes	No	
35	01	1XGA	1XGA	TB	796'+6"		796'+6"	Yes	ABS	RRS	No	No	No	Yes	No	1
35	01	1XGB	MCC 1XGB	TB	796'+6"		796'+6"	Yes	ABS	RRS	No	No	No	No	No	1
35	01	1XO	MCC 1XO	AB	796'+0"		796'+6"	Yes	ABS	RRS	Yes	No	No	Yes	No	1
35	01	1XP	MCC 1XP	AB	796'+0"		796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	No	No	1
35	01	1XS1	MCC 1XS1	AB	796'+0"		796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	No	No	1
35	01	1XS2	MCC 1XS2	AB	796'+0"		796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	1
35	01	1XS3	MCC 1XS3	AB	796'+0"		796'+6"	Yes	DOC	RRS	No	No	Yes	Yes	No	
35	01	2DCA	125V DC 2DCA	AB	796'+0"	N74	796'+6"	Yes	DOC	RRS	No	No	Yes	Yes	No	

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 138

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
35	01	2DCB	125V DC 2DCB	AB	796'+0"	N74	796'+6"	Yes	DOC	RRS	No	No	Yes	Yes	No	
35	01	2DP	125/250V DC 2DP	TB	796'+6"	L-30	796'+6"	Yes	ABS	RRS	No	Yes	Yes	Yes	No	1
35	14	2KRA	120V PPB 2KRA	AB	809'+0"	Q72	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
35	01	2XGA	2XGA	TB	796'+6"	K34	796'+6"	Yes	ABS	RRS	No	No	No	Yes	No	1
35	01	2XGB	MCC 2XGB	TB	796'+6"	M39	796'+6"	Yes	ABS	RRS	No	No	No	No	No	1
35	01	2XO	MCC 2XO	AB	796'+0"	P73	796'+6"	Yes	ABS	RRS	Yes	No	No	Yes	No	1
35	01	2XP	MCC 2XP	AB	796'+0"	Q73	796'+6"	Yes	ABS	RRS	Yes	No	No	Yes	No	1
35	01	2XS1	MCC 2XS1	AB	796'+0"	P75	796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	1
35	01	2XS3	MCC 2XS3	AB	796'+0"	Q74	796'+6"	Yes	DOC	RRS	No	No	Yes	Yes	No	
35	01	3DCA	125V DC 3DCA	AB	796'+0"	P-88	796'+6"	Yes	DOC	RRS	No	No	Yes	Yes	No	
35	01	3DCB	125V DC 3DCB	AB	796'+0"	Q-88	796'+6"	Yes	DOC	RRS	No	No	Yes	Yes	No	
35	19	3RCRD0007B	RCS COLD LEG RTD	RB	797'+6"		805'-0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
35	01	3XGA	MCC 3XGA	TB	796'+6"	K-48	796'+6"	Yes	ABS	RRS	No	No	No	No	No	1
35	01	3XGB	MCC 3XGB	TB	796'+6"	M-52	796'+6"	Yes	ABS	RRS	No	No	No	No	No	1
35	01	3XO	MCC 3XO	AB	796'+0"	QA-90	796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	No	No	1
35	01	3XP	MCC 3XP	AB	796'+0"	QA-90	796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	1

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 139

All signatures on this page apply to items identified as SVDS Signature Group 35 and contained on printout dated 11/14/96

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

R P Childs

Print or Type Name

R.P. Childs P.E.
Signature

11/14/96
Date

L B Elrod

Print or Type Name

LB Elrod PE
Signature

11/14/96
Date

R V Hester

Print or Type Name

RV Hester, PE
Signature

11/14/96
Date

R W McAuley

Print or Type Name

R.W. McAuley, P.E.
Signature

11/18/96
Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 140

SVDS GROUP	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
36	14	1DIA/PPB	PPB 1DIA	AB	809'+0"	P-72	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
36	14	1DIB/PPB	PPB 1DIB	AB	809'+0"	Q-72	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
36	14	1DIC/PPB	PPB 1DIC	AB	809'+0"	Q-72	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
36	14	1DID/PPB	PPB 1DID	AB	809'+0"	R-72	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
36	14	1KRB	PPB 1KRB	AB	809'+0"	Qa-72	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
36	14	1KVIA	PPB 1KVIA	AB	809'+0"	P-72	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
36	14	1KVIB	PPB 1KVIB	AB	809'+0"	Q-72	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
36	14	1KVIC	PPB 1KVIC	AB	809'+0"	Q-72	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
36	14	1KVID	PPB 1KVID	AB	809'+0"	R-72	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
36	14	1KX	PPB 1KX	AB	809'+0"	QA-72	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
36	14	3DIA/PPB	PPB 3DIA	AB	809'+0"	P-88	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
36	14	3DIB/PPB	PPB 3DIB	AB	809'+0"	Q-88	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
36	14	3DIC/PPB	PPB 3DIC	AB	809'+0"	R-88	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
36	14	3DID/PPB	PPB 3DID	AB	809'+0"	R-88	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
36	14	3KRB	PPB 3KRB	AB	809'+0"	Q-88	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
36	14	3KVIA	PPB 3KVIA	AB	809'+0"	Q-88	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
36	14	3KVIB	PPB 3KVIB	AB	809'+0"	Q-88	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
36	14	3KVIC	PPB 3KVIC	AB	809'+0"	R-88	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 141

SVDS GROUP	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
36	14	3KVID	PPB 3KVID	AB	809'+0"	R-88	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
36	14	3KX	PPB 3KX	AB	809'+0"	R-88	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	

All signatures on this page apply to items identified as SVDS Signature Group 36 and contained on printout dated 11/14/96

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

L B Elrod

Print or Type Name

L B Elrod, PE
Signature

11/14/96
Date

R P Childs

Print or Type Name

R. P. Childs, P.E.
Signature

11/14/96
Date

R L McCoy

Print or Type Name

R. L. McCoy, P.E.
Signature

11/14/96
Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 145

SVDS GROUP	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
39	18	1PDWPS0382	MAIN FWP CONTROL OIL PRESSURE SWITCH	TB	775'+0"	B/C-2	775	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	

All signatures on this page apply to items identified as SVDS Signature Group 39 and contained on printout dated 11/14/96

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

L B Elrod

Print or Type Name

LB Elrod, PE
Signature

11/14/96
Date

R V Hester

Print or Type Name

RV Hester, PE
Signature

11/14/96
Date

Print or Type Name

Signature

Date

R P Childs

Print or Type Name

R.P. Childs, P.E.
Signature

11/14/96
Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 146

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
40	07	1FDWVA0086	PRESS REG TD PUMP SEALS	TB	775'+0"	C-20	775'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	1
40	07	1FDWVA0087	PRESS REG TD PUMP SEALS	TB	775'+0"	C-20	775'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	1
40	07	1FDWVA0129	PRESS REG TD PUMP SEALS	TB	775'+0"	C-20	775'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	1
40	07	1FDWVA0218	PRESS REG TD PUMP SEALS	TB	775'+0"	C-20	775'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	1
40	08	1MSVA0079	MS RH ISOLATION	TB	796'+6"	G-13	815'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
40	07	3FDWVA0086	PRESS REG TD PUMP SEALS	TB	775'+0"	C-49	775'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	1
40	07	3FDWVA0087	PRESS REG TD PUMP SEALS	TB	775'+0"	C-49	775'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	1
40	07	3FDWVA0129	PRESS REG TD PUMP SEALS	TB	775'+0"	C-49	775'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	1
40	07	3FDWVA0218	PRESS REG TD PUMP SEALS	TB	775'+0"	C-49	775'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	1
40	07	3MSVA0019	TURBINE BYPASS VALVE	TB	796'+6"	M-50	815'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
40	07	3MSVA0022	TURBINE BYPASS VALVE	TB	796'+6"	M-51	815'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
40	07	3MSVA0028	TURBINE BYPASS VALVE	TB	796'+6"	M-50	815'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
40	07	3MSVA0031	TURBINE BYPASS VALVE	TB	796'+6"	M-49	815'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
40	08	3MSVA0079	MS RH ISOLATION	TB	796'+6"	G-56	815'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
40	08	3MSVA0080	MS TO 2ND STAGE RHTR ISOL	TB	796'+6"	C-56	815'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 147

All signatures on this page apply to items identified as SVDS Signature Group 40 and contained on printout dated 11/14/96

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

L B Elrod

Print or Type Name

L B Elrod, PE
Signature

11/14/96
Date

R P Childs

Print or Type Name

R.P. Childs P.E.
Signature

11/14/96
Date

G L Green

Print or Type Name

G.L. Green, P.E.
Signature

11/20/96
Date

R V Hester

Print or Type Name

R.V. Hester, PE
Signature

11/14/96
Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 149

SVDS GROUP	Eq. CL.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
42	21	3LPIHX000A	LPI COOLER 3A	AB	771'+0"	Q-96	771'+0"	N/A	N/A	N/A	N/A	N/A	Yes	N/A	Yes	
42	21	3LPIHX000B	LPI COOLER 3B	AB	771'+0"	Q-92	771'+0"	N/A	N/A	N/A	N/A	N/A	Yes	N/A	Yes	

All signatures on this page apply to items identified as SVDS Signature Group 42 and contained on printout dated 11/14/96

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

R W McAuley

Print or Type Name

R.W. McAuley, P.E. 11/18/96
Signature Date

R V Hester

Print or Type Name

R.V. Hester, P.E. 11/14/96
Signature Date

Print or Type Name

Signature

Date

R P Childs

Print or Type Name

R.P. Childs, P.E. 11/14/96
Signature Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 150

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
44	07	1LPSVA0175	LPSW PUMP A SEAL FLOW REG	TB	775'+0"	F-25	775'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	1
44	07	1LPSVA0182	LPSW PUMP B SEAL FLOW REG	TB	775'+0"	G-25	775'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	1
44	07	1LPSVA0189	LPSW PUMP C SEAL FLOW REG	TB	775'+0"	F-30	775'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	1
44	08	1LPSVA0290	CONT VAC PRIMING ISOL VALVE	TB	775'+0"	C-19	777+0	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
44	08	1MSVA0026	TURBINE BYPASS ISOLATION	TB	796'+6"	M-17	815'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
44	08	1MSVA0035	FWPT ISOLATION	TB	796'+6"	F-13	815'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 151

All signatures on this page apply to items identified as SVDS Signature Group 44 and contained on printout dated 11/14/96

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

L B Elrod

Print or Type Name

LB Elrod, PE
Signature

11/14/96
Date

R V Hester

Print or Type Name

RV Hester, PE
Signature

11/14/96
Date

G L Green

Print or Type Name

GL Green, PE
Signature

11/20/96
Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 152

SVDS GROUP	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
45	19	3RCRD0084B	HOT LEG 3A RTD	RB	844'+6"	N/A	846.0'	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	

All signatures on this page apply to items identified as SVDS Signature Group 45 and contained on printout dated 11/14/96

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

R P Childs

Print or Type Name

R. P. Childs, P.E.

Signature

11/14/96

Date

L B Elrod

Print or Type Name

LB Elrod, PE

Signature

11/14/96

Date

R W Hough

Print or Type Name

R. W. Hough, P.E.

Signature

11/20/96

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 153

SVDS GROUP	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact Equip. OK?	Equip. OK?	Notes
46	08	1RCVA0160	RV VENT ISOLATION	RB	844'+6"	W	850+10	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	

All signatures on this page apply to items identified as SVDS Signature Group 46 and contained on printout dated 11/14/96

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

R P Childs

Print or Type Name

R. P. Childs P.E.

Signature

11/14/96
Date

R L McCoy

Print or Type Name

R. L. McCoy, P.E.

Signature

11/14/96
Date

Print or Type Name

Signature

Date

R W Hough

Print or Type Name

R. W. Hough, P.E.

Signature

11/20/96
Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 157

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
50	08	1MSVA0076	MS RH ISOLATION	TB	796'+6"	E-13	815'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	

All signatures on this page apply to items identified as SVDS Signature Group

50 and contained on printout dated 11/14/96

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

R P Childs

Print or Type Name

R.P. Childs 11/14/96
Signature Date

R V Hester

Print or Type Name

R.V. Hester 11/14/96
Signature Date

G L Green

Print or Type Name

G.L. Green 11/20/96
Signature Date

Print or Type Name

Signature Date

Print or Type Name

Signature Date

Print or Type Name

Signature Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 158

SVDS GROUP	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
51	10	1VSAH0011	AHU-11	AB	838		838	No	ABS	RRS	No	N/A	No	No	No	
51	10	1VSAH0012	AHU-12	AB	838		838	No	ABS	RRS	No	N/A	No	No	No	
51	09	1VSAH0026	OUTSIDE AIR BOOSTER FAN "A" (F-22)	AB	838		838	No	ABS	RRS	Yes	No	No	No	No	
51	09	1VSAH0027	OUTSIDE AIR BOOSTER FAN "B" (F-23)	AB	838		838	No	ABS	RRS	Yes	No	No	No	No	
51	20	1VSMN0001	Unit 1 Chlorine Monitor Panel CD-1	AB	838		838	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
51	10	3VSAH0013	AHU-3-13	AB	838		838	No	ABS	RRS	Yes	Yes	No	No	No	
51	10	3VSAH0014	AHU-3-14	AB	838		838	No	ABS	RRS	Yes	No	No	No	No	
51	09	3VSAH0026	OUTSIDE AIR BOOSTER FAN "A" (F3-9)	AB	838		838	No	ABS	RRS	Yes	No	No	No	No	
51	09	3VSAH0027	OUTSIDE AIR BOOSTER FAN "B" (F3-8)	AB	838		838	No	ABS	RRS	Yes	No	No	No	No	
51	20	3VSMN0001	Unit 3 Chlorine Monitor Panel CD-1	AB	838		838	No	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
51	08	CD-05A	AHU 11 DISCHARGE DAMPER	AB	838		838		ABS	RRS	Yes	Yes	N/A	Yes	Yes	
51	08	CD-05B	AHU 12 DISCHARGE DAMPER	AB	838		838	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
51	08	CD-06A	AHU 11 INLET DAMPER	AB	838		838	No	ABS	RRS	Yes	No	N/A	No	No	
51	08	CD-06B	AHU 12 INLET DAMPER	AB	838		838	No	ABS	RRS	Yes	No	N/A	No	No	
51	08	CD-07A	AHU 3-13 DISCHARGE DAMPER	AB	838		838	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
51	08	CD-07B	AHU 3-14 DISCHARGE DAMPER	AB	838		838	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 159

SVDS GROUP	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
51	08	CD-08A	AHU 3-13 INLET DAMPER	AB	838		838	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
51	08	CD-08B	AHU 3-14 INLET DAMPER	AB	838		838	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
51	08	CD-10A	BOOSTER FAN "A" INLET DAMPER (UNIT 1&2)	AB	838		838	No	ABS	RRS		Yes	N/A	Yes	Yes	
51	08	CD-10B	BOOSTER FAN "B" INLET DAMPER (UNIT 1&2)	AB	838		838	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
51	08	CD-11A	BOOSTER FAN "A" INLET DAMPER (UNIT 3)	AB	838		838	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
51	08	CD-11B	BOOSTER FAN "B" INLET DAMPER (UNIT 3)	AB	838		838	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	

Appendix D.1

Date: 11/14/96

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 160

All signatures on this page apply to items identified as SVDS Signature Group 51 and contained on printout dated 11/14/96

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

John Dizon

Print or Type Name

John O. Dizon
Signature

12/2/96
Date

Farzin Beigi

Print or Type Name

Farzin Beigi
Signature

12/2/96
Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Appendix D.1

Date: 10/16/97

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 161

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
52	20	1&2POWDEXPANE L	1&2 POWDEX PANEL	TB	775'+0"		775'	Yes	ABS	RRS	Yes	Yes	Yes	No	No	
52	18	1ASPT0117P	AUX STEAM PRESSURE TRANSMITTER (MS-126 & MS-129)	TB	796'+6"		796'	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
52	20	1AT3	AREA TERMINATION CABINET 3	AB	809'+0"		809'	Yes	ABS	RRS	Yes	No	Yes	Yes	No	
52	18	1CLT0015A	UST 1B LEVEL	TB	838'+0"	M-23	838	No	ABS	RRS	No	Yes	Yes	Yes	No	
52	18	1CLT0036	UST 1A LEVEL	TB	838'+0"	M-23	838	No	ABS	RRS	No	Yes	Yes	Yes	No	
52	18	1CPS0015	UST MAKEUP LEVEL CONTROL (PS-15)	TB	838'+0"	N-71	838'	No	ABS	RRS	No	Yes	Yes	Yes	No	
52	18	1CPS0036	UST MAKEUP LEVEL CONTROL (PS-36)	TB	838'+0"	N-71	838'	No	ABS	RRS	No	Yes	Yes	Yes	No	
52	07	1CVA0176	UST TO COND ISOL VALVE	TB	775'+0"	K-25	775	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
52	07	1CVA0187	UST TO COND ISOL VALVE	TB	771'+0"	E-24	775	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
52	07	1CVA0192	UST TO COND ISOL VALVE	TB	775'+0"	F-24	775	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
52	18	1FDWFT0129	1A EFW HEADER FLOW	AB	775'+0"		775	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
52	18	1FDWFT0130	1B EFW HEADER FLOW	AB	796'+0"		775	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
52	18	1FDWFT0153	1A EFW HEADER FLOW	AB	783'+0"	Q-67	775	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
52	18	1FDWFT0154	1B EFW HEADER FLOW	AB	783'+0"	Q70	775	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
52	18	1HPILT0033P1	LDST Level #1	AB	771'+0"		771	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
52	18	1HPILT0033P2	LDST Level #2	AB	771'+0"		771	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	

Appendix D.1

Date: 10/16/97

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 162

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
52	18	1HPIPS0357	LETDOWN FLOW TEMP HIGH INTERLOCK	AB	783		790	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
52	07	1HPVA0005	LETDOWN ISOLATION	AB	809'+0"		809	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
52	14	1KA	PPB 1KA	TB	775'+0"	H-27	781'	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
52	08	1LPVA0001	LPI DROPLINE ISOL FROM RCS	RB	797	C-22	797	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
52	08	1LPVA0002	LPI DROPLINE ISOL FROM RCS	RB	797	C-22	797	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
52	08	1LPVA0021	BWST SUCTION ISOLATION	AB	771'+0"	T-71	771'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
52	08	1LPVA0022	BWST SUCTION ISOLATION	AB	771'+0"	T-72	771'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
52	07	1LPVA0061	BWST VACUUM BREAKER	YD	796'+0"		796'	Yes	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
52	07	1MSVA0126	MS TO AS CONTROL VALVE	TB	796'+6"	L-15	815'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
52	07	1MSVA0129	MS TO AS CONTROL VALVE	TB	796'+6"	M-15	803'	Yes	BS	GRS	Yes	No	N/A	Yes	No	
52	18	1PAMLT0090	REACTOR BUILDING CONTAINMENT (WATER) LEVEL (TRAIN A)	RB	777'+0"		777'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
52	18	1PAMLT0091	REACTOR BUILDING CONTAINMENT (WATER) LEVEL (TRAIN B)	RB	777'+0"		777'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
52	18	1RCLT0123	1A RCS HOT LEG LVL (ICCM A)	AB	809'+0"	Q-70/71	817'	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
52	18	1RCLT0124	1B RCS HOT LEG LVL (ICCM B)	AB	809'+0"	Q-70/71	817'	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
52	18	1RCLT0125	RV HEAD LEVEL (ICCM A)	AB	809'+0"	Q-70/71	817'	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	

Appendix D.1

Date: 10/16/97

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 163

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
52	18	1RCLT0126	RV HEAD LEVEL (ICCM B)	AB	809'+0"	Q-70/71	817'	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
52	18	1RCPT0244	WR RCS PRESS TRAIN A	AB	809'+0"		817'	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
52	18	1RCPT0245	WR RCS PRESS TRAIN B	AB	809'+0"		817'	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
52	08	1RCVA0005	PRZ STEAM SAMPLE ISOLATION	RB	797'+6"	304	810	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	1
52	08	1RCVA0006	PRZ WATER SAMPLE ISOLATION	RB	797'+6"	304	810	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	1
52	07	1RCVA0007	PRZ WATER SAMPLE ISOLATION	AB	809'+0"		811'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	1
52	18	2ASPT0117P	AUX STEAM PRESSURE TRANSMITTER (MS-126 & MS-129)	TB	796'+6"		796'	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
52	20	2AT3	AREA TERMINATION CABINET 3	AB	809'+0"		809'	Yes	ABS	RRS	Yes	Yes	Yes	No	No	
52	18	2CLT0015A	UST 2B LEVEL	TB	838'+0"	M-33	838	No	ABS	RRS	No	Yes	Yes	Yes	No	
52	18	2CLT0036	UST 2A LEVEL	TB	838'+0"	M-49	838	No	ABS	RRS	No	Yes	Yes	Yes	No	
52	18	2CPS0015	UST MAKEUP LEVEL CONTROL (PS-15)	TB	838'+0"	M-33	838'	No	ABS	RRS	No	Yes	Yes	Yes	No	
52	18	2CPS0036	UST MAKEUP LEVEL CONTROL (PS-36)	TB	838'+0"	M-33	838'	No	ABS	RRS	No	Yes	Yes	Yes	No	
52	07	2CVA0176	UST TO COND ISOL VALVE	TB	775'+0"	DD-31	775	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
52	07	2CVA0187	UST TO COND ISOL VALVE	TB	775'+0"	DD-31	775	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
52	07	2CVA0192	UST TO COND ISOL VALVE	TB	775'+0"	E-31	775	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	

Appendix D.1

Date: 10/16/97

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 164

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
52	18	2FDWFT0129	2A EFW HEADER FLOW	AB	775'+0"		775	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
52	18	2FDWFT0130	2B EFW HEADER FLOW	AB	775'+0"		775	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
52	18	2FDWFT0153	2A EFW HEADER FLOW	AB	783'+0"	P-83	775	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
52	18	2FDWFT0154	2B EFW HEADER FLOW	AB	783'+0"	Q-75	775	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
52	18	2HPILT0033P1	LDST Level #1	AB	771'+0"		771	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
52	18	2HPILT0033P2	LDST Level #2	AB	771'+0"		771	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
52	18	2HPIPS0357	LETDOWN FLOW TEMP HIGH INTERLOCK	AB	783		790	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
52	07	2HPVA0005	LETDOWN ISOLATION	RB	809'+0"		809	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
52	14	2KA	PPB 2KA	TB	775'+0"	J-34	781'	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
52	14	2KC	PPB 2KC	AB	796'+0"	Q74	801	Yes	BS	GRS	Yes	Yes	No	Yes	No	
52	08	2LPVA0021	BWST SUCTION ISOLATION	AB	771'+0"	T-74	771'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
52	08	2LPVA0022	BWST SUCTION ISOLATION	AB	771'+0"	T-74	771'+0"	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
52	07	2LPVA0061	BWST VACUUM BREAKER	YD	796'+0"		796'	Yes	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
52	07	2MSVA0126	MS TO AS CONTROL VALVE	TB	796'+6"	L-40	803'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
52	07	2MSVA0129	MS TO AS CONTROL VALVE	TB	796'+6"	M-40	803'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
52	18	2RCLT0123	2A RCS HOT LEG LVL (ICCM A)	AB	809'+0"	Q-75/76	817'	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
52	18	2RCLT0124	2B RCS HOT LEG LVL (ICCM B)	AB	809'+0"	Q-75/76	817'	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	

Appendix D.1

Date: 10/16/97

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 165

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
52	18	2RCLT0125	RV HEAD LEVEL (ICCM A)	AB	809'+0"	Q-75/76	817'	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
52	18	2RCLT0126	RV HEAD LEVEL (ICCM B)	AB	809'+0"	Q-75/76	817'	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
52	18	2RCPT0244	WR RCS PRESS TRAIN A	AB	809'+0"		817'	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
52	18	2RCPT0245	WR RCS PRESS TRAIN B	AB	809'+0"		817'	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
52	07	2RCVA0007	PRZ WATER SAMPLE ISOLATION	AB	809'+0"		822	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	1
52	18	3ASPT0117P	AUX STEAM PRESSURE TRANSMITTER (MS-126 & MS-129)	TB	801		796'	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
52	18	3CLT0015A	UST 3B LEVEL	TB	838'+0"	M-48	838	No	ABS	RRS	No	Yes	Yes	Yes	No	
52	18	3CLT0036	UST 3A LEVEL	TB	838'+0"	M-49	838	No	ABS	RRS	No	Yes	Yes	Yes	No	
52	18	3CPS0015	UST MAKEUP LEVEL CONTROL (PS-15)	TB	838'+0"	M-48	838'	No	ABS	RRS	No	Yes	Yes	Yes	No	
52	18	3CPS0036	UST MAKEUP LEVEL CONTROL (PS-36)	TB	838'+0"	M-48	838'	No	ABS	RRS	No	Yes	Yes	Yes	No	
52	07	3CVA0176	UST TO COND ISOL VALVE	TB	775'+0"	E-46	775	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
52	07	3CVA0187	UST TO COND ISOL VALVE	TB	775'+0"	D-45	775	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
52	07	3CVA0192	UST TO COND ISOL VALVE	TB	775'+0"	D-46	775	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
52	18	3FDWFT0140	SG 3A LEVEL INDICATOR	AB	783'+0"	QA-95	788	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
52	18	3FDWFT0141	SG 3B LEVEL INDICATOR	AB	783'+0"	P-89	788	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
52	18	3FDWFT0153	3A EFV HEADER FLOW IND	AB	775'+0"	QA-95	775	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	

Appendix D.1

Date: 10/16/97

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 166

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
52	18	3FDWFT0154	3B EFW HEADER FLOW IND	AB	775'+0"	P-89	775	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
52	18	3HPILT0033P1	LDST Level #1	AB	771'+0"		771	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
52	18	3HPILT0033P2	LDST Level #2	AB	771'+0"		771	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
52	18	3HPIPS0357	LETDOWN FLOW TEMP HIGH INTERLOCK	AB	783'+0"		790	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	
52	07	3HPVA0005	LETDOWN ISOLATION	RB	809'+0"		809	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
52	14	3KA	PPB 3KA	TB	775'+0"	H-46	775'	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	1
52	07	3LPVA0061	BWST VACUUM BREAKER	YD	796'+0"		796'	Yes	ABS	RRS	Yes	Yes	N/A	Yes	Yes	
52	07	3MSVA0126	MS TO AS CONTROL VALVE	TB	796'+6"		803'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
52	07	3MSVA0129	MS TO AS CONTROL VALVE	TB	796'+6"		803'	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
52	18	3PAMLT0090	REACTOR BUILDING CONTAINMENT (WATER) LEVEL (TRAIN A and B)	RB	777'+0"		777'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
52	18	3PAMLT0091	REACTOR BUILDING CONTAINMENT (WATER) LEVEL (TRAIN A & B)	RB	777'+0"		777'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
52	20	3POWDEXPANEL	3 POWDEX PANEL	TB	775'+0"		775'	Yes	ABS	RRS	Yes	Yes	Yes	No	No	
52	18	3RCLT0123	3A RCS HOT LEG LVL (ICCM A)	AB	809'+0"	R-90	817'	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
52	18	3RCLT0124	3B RCS HOT LEG LVL (ICCM B)	AB	809'+0"	R-90	817'	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
52	18	3RCLT0125	RV HEAD LEVEL (ICCM A)	AB	809'+0"	R-90	817'	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
52	18	3RCLT0126	RV HEAD LEVEL (ICCM B)	AB	809'+0"	R-90	817'	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	

Appendix D.1

Date: 10/16/97

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 167

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
52	18	3RCPT0244	WR RCS PRESS TRAIN A	AB	809'+0"		817'	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
52	18	3RCPT0245	WR RCS PRESS TRAIN B	AB	809'+0"		817'	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
52	8A	3RCVA0005	PRZ STEAM SAMPLE ISOL	RB	810	N/A	810	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
52	8A	3RCVA0006	PRZ WATER SAMPLE ISOL	RB	810	N/A	810	Yes	BS	GRS	Yes	Yes	N/A	Yes	Yes	
52	07	3RCVA0007	PRZ WATER SAMPLE ISOLATION	AB	809'+0"		822	No	ABS	RRS	Yes	Yes	N/A	Yes	Yes	1
52	00	N2_AOV_BOTTLES	N2 SUPPLY BOTTLES FOR FDW315,316,MS87,126 & 129	TB	796'+6"		796'+6"	N/A	N/A	N/A	Yes	N/A	Yes	Yes	No	5

Appendix D.1

Date: 10/16/97

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 168

All signatures on this page apply to items identified as SVDS Signature Group

52 and contained on printout dated 10/16/97

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

R P Childs

Print or Type Name

L B Elrod

Print or Type Name

Print or Type Name

Print or Type Name

Print or Type Name

Print or Type Name

R.P. Child P.E. 10/16/97
Signature Date

LB Elml, P.E. 11/10/97
Signature Date

Signature _____ Date _____

Signature **Date**

Signature

Date

Signature **Date**

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name	Signature	Date
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Print or Type Name	Signature	Date
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Print or Type Name Signature Date

Print or Type Name	Signature	Date
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Print or Type Name	Signature	Date
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Print or Type Name	Signature	Date
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Appendix D.1

Date: 10/16/97

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 169

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
53	20	1SGLC	STEAM GEN LOGIC CABINET	AB	809'+0"		809	Yes	ABS	RRS	Yes	No	No	Yes	No	
53	20	2SGLC	STEAM GEN LOGIC CABINET	AB	809'+0"		809	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
53	20	3SGLC	STEAM GEN LOGIC CABINET	AB	809'+0"		809	Yes	ABS	RRS	Yes	No	No	Yes	No	

Appendix D.1

Date: 10/16/97

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 170

All signatures on this page apply to items identified as SVDS Signature Group

53 and contained on printout dated 10/16/97

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

R P Childs
Print or Type Name Signature Date
10/16/97

L B Elrod
Print or Type Name Signature Date
11/10/97

R V Hester
Print or Type Name Signature Date
11/16/97

Print or Type Name Signature Date

Print or Type Name Signature Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name Signature Date

Print or Type Name Signature Date

Print or Type Name Signature Date

Print or Type Name Signature Date

Print or Type Name Signature Date

Print or Type Name Signature Date

Appendix D.1

Date: 10/30/97

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 171

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
57	20	RF06	WESTINGHOUSE SWITCHBOARD CABINET	Rela	770'+0"		770'	Yes	ABS	RRS	Yes	Yes	Yes	No	No	
57	20	SRB06	WESTINGHOUSE SWITCHBOARD CABINET	Rela	770'+0"		770'	Yes	ABS	RRS	Yes	No	Yes	No	No	
57	20	SRB09	WESTINGHOUSE SWITCHBOARD CABINET	Rela	770'+0"		770'	Yes	ABS	RRS	Yes	No	Yes	No	No	
57	20	SRB14	WESTINGHOUSE SWITCHBOARD CABINET	Rela	770'+0"		770'	Yes	ABS	RRS	Yes	No	Yes	No	No	
57	20	SRB15	WESTINGHOUSE SWITCHBOARD CABINET	Rela	770'+0"		770'	Yes	ABS	RRS	Yes	No	Yes	No	No	
57	20	SYTC01	SWYD TERMINAL CABINET 01	Rela	770'+0"		770'	Yes	ABS	RRS	Yes	Yes	Yes	No	No	
57	20	SYTC19	SWYD TERMINAL CABINET 19	Rela	770'+0"		770'	Yes	ABS	RRS	Yes	Yes	Yes	No	No	
57	14	TB-121	TERMINAL BOX 121 (WIRING ONLY)	Keo	683'+0"		683'	Yes	BS	GRS	Yes	Yes	No	Yes	No	1,3
57	14	TB-123	TERMINAL BOX 123 (WIRING ONLY)	Keo	683'+0"		683'	Yes	BS	GRS	Yes	Yes	No	Yes	No	1,3

Appendix D.1

Date: 10/30/97

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 172

All signatures on this page apply to items identified as SVDS Signature Group

57 and contained on printout dated 10/30/97

Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate.

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

R P Childs

Print or Type Name

R.P. Childs PE
Signature

11/10/97
Date

L B Elrod

Print or Type Name

L.B. Elrod, PE
Signature

11/10/97
Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Appendix D.1

Date: 10/30/97

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 173

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
58	20	1ESFAS	UNIT 1 ESFAS CABINETS	AB	822'+0"		822'+0"	Yes	ABS	RRS	Yes	No	No	Yes	No	
58	20	11CS CABS	INTEGRATED CONTROL SYSTEM CABINETS	AB	822'+0"	S-73	822'+0"	Yes	ABS	RRS	Yes	No	No	Yes	No	
58	20	1RPS	UNIT 1 RPS CABINETS	AB	822'+0"	Qa-88	822'+0"	Yes	ABS	RRS	Yes	No	No	Yes	No	
58	20	2ESFAS	UNIT 2 ESFAS CABINETS	AB	822'+0"		822'+0"	Yes	ABS	RRS	Yes	No	No	Yes	No	
58	20	21CS CABS	INTEGRATED CONTROL SYSTEM CABINETS	AB	822'+0"	S-73	822'+0"	Yes	ABS	RRS	Yes	No	No	Yes	No	
58	20	3ESFAS	UNIT 3 ESFAS CABINETS	AB	822'+0"	D-14	822'+0"	Yes	ABS	RRS	Yes	No	No	Yes	No	
58	20	31CS CABS	INTEGRATED CONTROL SYSTEM CABINETS	AB	822'+0"		822'+0"	Yes	ABS	RRS	Yes	No	No	Yes	No	
58	20	3RPS	UNIT 3 RPS CABINETS	AB	822'+0"	Qa-88	822'+0"	Yes	ABS	RRS	Yes	No	No	Yes	No	

Appendix D.1

Date: 10/30/97

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 174

All signatures on this page apply to items identified as SVDS Signature Group

58 and contained on printout dated 10/30/97

Certification:

All the information contained on this Screening Verification Data Sheet (SVDS) is, to the best of our knowledge and belief, correct and accurate.

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

R P CHILDS

Print or Type Name

Signature

Date

L B Elrod

Print or Type Name

Signature

Date

John M. Richards

Print or Type Name

Signature

Date

Darryl A. Kelley

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

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Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Appendix D.1

Date: 10/30/97

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 175

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
59	20	1AB3	CONTROL BOARD 1AB3	AB	822'+0"	Q-73	822'+0"	Yes	DOC	RRS	Yes	Yes	Yes	Yes	Yes	
59	20	1EB1-8,EF1-8	ELECTRICAL BOARDS 1EB1-8,EF1-8	AB	822'+0"	Qa-73	822'+0"	Yes	DOC	RRS	Yes	No	Yes	No	No	
59	20	1UB1,2; 1AB1,2	CONTROL BOARDS 1UB1,2,AB1,2	AB	822'+0"	N/P-73	822'+0"	Yes	DOC	RRS	Yes	Yes	Yes	No	No	
59	20	1VB1,2,3	CONTROL BOARDS 1VB1,2,3	AB	822'+0"	P-72	822'+0"	Yes	DOC	RRS	Yes	Yes	Yes	Yes	Yes	
59	20	2AB3	CONTROL BOARD 2AB3	AB	822'+0"	Q-73	822'+0"	Yes	DOC	RRS	Yes	Yes	Yes	Yes	Yes	
59	20	2EB1-8,EF1-8	ELECTRICAL BOARDS 2EB1-8,EF1-8	AB	822'+0"	Qa-73	822'+0"	Yes	DOC	RRS	Yes	No	Yes	No	No	
59	20	2RPS	UNIT 2 RPS CABINETS	AB	822'+0"	R-73	822'+0"	Yes	ABS	RRS	Yes	No	No	Yes	No	
59	20	2UB1,2; 2AB1,2	CONTROL BOARDS 2UB1,2,AB1,2	AB	822'+0"	N/P-73	822'+0"	Yes	DOC	RRS	Yes	Yes	Yes	No	No	
59	20	2VB1,2,3	CONTROL BOARDS 2VB1,2,3	AB	822'+0"	P-74	822'+0"	Yes	DOC	RRS	Yes	Yes	Yes	Yes	Yes	
59	20	3UB1,2,3AB1,2,2A,3,3A,EB1-8	CONTROL BOARDS 3UB1,2,3AB1,2,2A,3,3A,3EB1-8	AB	822'+0"	N/P-89	822'+0"	Yes	DOC	RRS	Yes	No	Yes	No	No	
59	20	3VB1,2,3	CONTROL BOARDS 3VB1,2,3	AB	822'+0"	N/P-89/	822'+0"	Yes	DOC	RRS	Yes	Yes	Yes	Yes	Yes	

Appendix D.1

Date: 10/30/97

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 176

All signatures on this page apply to items identified as SVDS Signature Group

59 and contained on printout dated 10/30/97

Certification:

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John M. Richards

Print or Type Name

Signature

Date

Darryl A. Kelley

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Appendix D.1

Date: 10/30/97

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 177

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Appendix D.1

Date: 10/30/97

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 178

All signatures on this page apply to items identified as SVDS Signature Group

60 and contained on printout dated 10/30/97

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R P Childs

Print or Type Name

Signature

Date

L B Elrod

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

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Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Appendix D.1

Date: 12/01/97

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 179

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
62	20	3ADA	ISOL DIODE ASSEMBLY 3ADA	AB	796'+6"	P-88	796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
62	20	3ADB	ISOL DIODE ASSEMBLY 3ADB	AB	796'+6"	Q-89	796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
62	20	3ADC	ISOL DIODE ASSEMBLY 3ADC	AB	796'+6"	Qa-88	796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
62	20	3ADD	ISOL DIODE ASSEMBLY 3ADD	AB	796'+6"	Qa-89	796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
62	16	3CB/BC	CONTROL BATT CHGR 3CB	AB	796'+6"	Q-89	796'+6"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
62	20	3EHTC1	EHC TERM CAB 3EHTC1	AB	809'+0"	P-87	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
62	14	3KE	120V PPB 3KE	AB	796'+6"	Q-90	796'+0"	Yes	BS	GRS	Yes	Yes	Yes	Yes	Yes	

Appendix D.1

Date: 12/01/97

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 180

All signatures on this page apply to items identified as SVDS Signature Group

63 and contained on printout dated 12/01/97

Certification:

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L B Elrod
Print or Type Name Signature Date 12/3/97

D V Ramsey
Print or Type Name Signature Date 12/3/97

Print or Type Name Signature Date

Print or Type Name Signature Date

Print or Type Name Signature Date

Print or Type Name Signature Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name Signature Date

Print or Type Name Signature Date

Print or Type Name Signature Date

Print or Type Name Signature Date

Print or Type Name Signature Date

Print or Type Name Signature Date

Appendix D.1

Date: 12/01/97

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 181

SVDS Group	Eq. Cl.	Equip. ID No.	System/Equipment Description	Bldg.	Floor Elev.	Room or Row/Col	Base Elev.	<40'?	Cap. Spec.	Dem. Spec.	Cap.> Dem.	Caveats OK?	Anchor OK?	Interact OK?	Equip. OK?	Notes
63	20	1ESTC2A	ESFAS AUX RLY CAB 1ESTC2A	AB	809'+0"	R/S-71	809'+0"	Yes	BS	CRS	Yes	Yes	Yes	Yes	Yes	
63	18	1PIR	UNIT 1 PNEUMATIC INSTR RACK	AB	809'+0"	P-72/73	809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
63	14	1SKJ	120V PPB 1SKJ	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	
63	14	1SKK	120V PPB 1SKK	AB	809'+0"		809'+0"	Yes	ABS	RRS	Yes	Yes	Yes	Yes	Yes	

Appendix D.1

Date: 12/01/97

SCREENING VERIFICATION DATA SHEET (SVDS), GIP CATEGORIES 0 - 21

Page No. 182

All signatures on this page apply to items identified as SVDS Signature Group

62 and contained on printout dated 12/01/97

Certification:

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R V Hester

Print or Type Name

Signature

Date

12/3/97

D V Ramsey

Print or Type Name

Signature

Date

12/3/97

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Certification:

The information provided to the Seismic Capability Engineers regarding system and operations of the equipment contained on this SVDS is, to the best of our knowledge and belief, correct and accurate

Approved: One signature of System or Operations Engineer is required if the Seismic Capability Engineers deem it necessary.

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Print or Type Name

Signature

Date

Appendix E

Third Party Audit Close-Out Letter

November 10, 1997

R: L. McCoy

Re: Oconee Nuclear Station, Units 1,2, and 3
USI A-46, SQUG
Peer Review
File Nos.: OS-190, OS-203

This letter is to formally close the work of the Peer Review Team for A-46 Resolution at Oconee Nuclear Station. Your letter of October 23, 1997, provided the responses of the ONS SQUG Project Team to all of the outstanding issues that the Peer Review Team had raised. Members of the Peer Review Team have reviewed those responses and found them to be satisfactory.

The efforts for the peer review included: (1) An assessment of a sampling of the documentation of the project including calculations, walkdown documentation forms (SEWS forms), calculations, and draft reports; (2) A sample walkdown done by the Peer Review Team to review typical judgments and get a flavor for the scope of the work; (3) A review of the Safe Shutdown Equipment Lists; (4) Discussions with the ONS Project Team to clarify issues and get answers to questions; (5) Written documentation by letter of a number of issues and subsequent resolution to those issues both in discussion and in written responses. The two separate meetings (each lasting two days) at Oconee Nuclear Station provided the opportunity to accomplish much of the work of the Peer Review Team. The consensus of the Peer Review Team is that the work of the Oconee Nuclear Station Project Team for USI A-46 resolution at Oconee meets the requirements of the *Generic Implementation Procedure (GIP) for Seismic Verification of Nuclear Plant Equipment*, Revision 2, corrected February 14, 1992.

If there are any questions, please contact the undersigned by phone at 803-831-4054.

W. B. Shoemaker

W. B. Shoemaker
Chairman, Peer Review Team for
A-46 and IPEEE at Oconee Nuclear Station

cc: Peer Review Team Members
R. W. McAuley

OCONEE NUCLEAR STATION

USI A-46 SEISMIC EVALUATION REPORT

Volume 1 of 2



A Duke Energy Company

December 1997

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