

**DONALD C. COOK NUCLEAR PLANT  
SAFE SHUTDOWN  
EQUIPMENT LIST REPORT**

**ATTACHMENT NO. 1 TO AEP:NRC:1040C**

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

**BY  
AEPSC TASK GROUP  
DECEMBER 1995**

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**DONALD C. COOK NUCLEAR PLANT**

**SSEL REPORT**

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**SEISMIC QUALIFICATION UTILITY GROUP (SQUG)  
SAFE SHUTDOWN EQUIPMENT LIST REPORT**

**BY  
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## ABSTRACT

In December 1980, the Nuclear Regulatory Commission (NRC) Staff initiated an 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. After substantial technical research by both the Seismic Qualification Utility Group (SQUG) and the NRC regarding this issue, the Staff published, on February 19, 1987, a detailed approach for resolving USI A-46, in Generic Letter 87-02 "Verification of Seismic Adequacy of Mechanical and Electrical Equipment in Operating Reactors, Unresolved Safety Issue USI A-46." (Reference 1, 10).

To implement the requirements of the NRC Generic Letter 87-02, SQUG developed the "Generic Implementation Procedure (GIP) for Seismic Verification of Nuclear Plant Equipment" (Reference 7). The GIP provides the detailed technical approach, generic procedures and documentation guidance which can be used to verify the seismic adequacy of the mechanical and electrical equipment required for safe shutdown.

The GIP Revision No. 2 (GIP-2) dated February 14, 1992, and the corresponding NRC safety evaluation report, Supplement No. 2 (SSER 2) dated May 22, 1992 (References 7,8), together constitute an acceptable procedure for implementing the resolution of USI A-46 at Donald C. Cook Nuclear Plant.

Indiana Michigan Power Company, Donald C. Cook Nuclear Plant has elected to utilize the SQUG (GIP) methodology and to fully implement the provisions of the GIP-2 and NRC SSER 2 to satisfy the requirement of the NRC Generic Letter 87-02. This report summarizes the general criteria and governing assumptions for identifying and selecting the preferred safe shutdown paths and the individual items of safe shutdown equipment required to satisfy the four safe shutdown functions defined in the Generic Letter.

It is concluded that the safe shutdown paths and the corresponding equipment selected for the safe shutdown equipment list (SSEL) provide the capability to bring the plant to a safe shutdown during and after a Design Basis Earthquake (DBE); also referred to as safe shutdown earthquake (SSE).

## LIST OF ACRONYMS AND ABBREVIATIONS

|        |   |
|--------|---|
| AEPSC  | American Electric Power Service Corporation       |
| AFWP   | Auxiliary Feedwater Pump                          |
| AFWS   | Auxiliary Feedwater System                        |
| AOP    | Abnormal Operating Procedure                      |
| BAST   | Boric Acid Storage Tank                           |
| BATP   | Boric Acid Transfer Pump                          |
| CCP    | Centrifugal Charging Pump                         |
| CCW    | Component Cooling Water                           |
| CNP    | Cook Nuclear Plant                                |
| CTS    | Containment Spray                                 |
| CVCS   | Chemical & Volume Control System                  |
| DBE    | Design Basis Earthquake                           |
| DCCNP  | Donald C. Cook Nuclear Plant                      |
| ECCS   | Emergency Core Cooling System                     |
| EDG    | Emergency Diesel Generator                        |
| EOP    | Emergency Operating Procedure                     |
| EPRI   | Electric Power Research Institute                 |
| ESF    | Engineered Safety Feature                         |
| ESFAS  | Engineered Safety Feature Actuation System        |
| ESW    | Essential Service Water                           |
| GIP    | Generic Implementation Procedure                  |
| GL     | Generic Letter                                    |
| HELB   | High Energy Line Break                            |
| HFP    | Hot Full Power                                    |
| HVAC   | Heating, Ventilating, and Air Conditioning        |
| HZP    | Hot Zero Power                                    |
| IEEE   | Institute of Electrical and Electronics Engineers |
| LOCA   | Loss of Coolant Accident                          |
| LOOP   | Loss of Offsite Power                             |
| MDAFWP | Motor Driven Auxiliary Feedwater Pump             |
| MWt    | Megawatts Thermal                                 |
| NESW   | Non-Essential Service Water                       |
| NIS    | Nuclear Instrumentation System                    |
| NRC    | Nuclear Regulatory Commission                     |
| NSSS   | Nuclear Steam Supply System                       |
| OBE    | Operating Basis Earthquake                        |

|                  |   |
|------------------|---|
| PORV             | Power Operated Relief Valve             |
| PWR              | Pressurized Water Reactor               |
| PZR              | Pressurizer                             |
|                  |   |
| RCCA             | Rod Cluster Control Assembly            |
| RCP              | Reactor Coolant Pump                    |
| RCS              | Reactor Coolant System                  |
| RG               | Regulatory Guide                        |
| RHR              | Residual Heat Removal                   |
| RTD              | Resistance Temperature Detector         |
| RTP              | Rated Thermal Power                     |
| RWST             | Refueling Water Storage Tank            |
|                  |   |
| SEWS             | Seismic Evaluation Work Sheet           |
| SG               | Steam Generator                         |
| SIS              | Safety Injection System or Signal       |
| SQUG             | Seismic Qualification Utility Group     |
| SRM              | Source Range Monitor                    |
| SSE              | Safe Shutdown Earthquake                |
| SSEL             | Safe Shutdown Equipment Lists           |
| SSF              | Safe Shutdown Function                  |
| SSFP             | Safe Shutdown Function Path             |
| SV               | Safety Valve                            |
| SVDS             | Seismic Verification Data Sheets        |
|                  |   |
| T <sub>Ave</sub> | Reactor Coolant Average Temperature     |
| T <sub>C</sub>   | RCS Cold Leg Temperature                |
| T <sub>H</sub>   | RCS Hot Leg Temperature                 |
| TDAFWP           | Turbine Driven Auxiliary Feedwater Pump |
| T/S              | Technical Specifications                |
|                  |   |
| UFSAR            | Updated Final Safety Analysis Report    |
| USI              | Unresolved Safety Issue                 |
|                  |   |
| <u>W</u>         | Westinghouse Electric Corporation       |

## SECTION 1

### INTRODUCTION

#### 1.1 DONALD C. COOK NUCLEAR PLANT

Donald C. Cook Nuclear Plant (DCCNP) Units 1 and 2 employ pressurized water reactor (PWR) nuclear steam supply system (NSSS) furnished by Westinghouse Electric Corporation (W). The reactor coolant system (RCS) for each unit consists of four loops. The reactor containment is an ice condenser containment. The current licensed rated thermal power (RTP) for Unit 1 is 3250 MWt, and for Unit 2 is 3411 MWt (Reference 1). The site is located along the eastern shore of Lake Michigan in Lake Township, Berrien County, Michigan, about 11 miles south-southwest of Benton Harbor, Michigan.

#### 1.2 ENGINEERING SEISMOLOGY OF THE COOK NUCLEAR PLANT

Historically the plant site is a low seismicity region. The plant is conservatively designed for an Operating Basis Earthquake (OBE) loading of 0.10g horizontal ground acceleration and two-thirds of these values acting vertically (Reference 3). Seismic Class I structures, systems and components are designed to withstand the loads due to a Design Basis Earthquake (DBE) of 0.20 g horizontal ground acceleration and two-thirds of these values acting vertically. Seismic Class II structures, systems and components are designed to withstand the loads due to an OBE.

All structures, systems and components (SSCs) at DCCNP are classified as Seismic Class I, Class II, or Class III as recommended in Reference 4 and 5.

Those SSCs including instruments and controls whose failure might cause or increase the severity of a loss-of-coolant accident (LOCA) or result in an uncontrolled release of excessive amounts of radioactivity are classified Seismic Class I. Also, those SSCs vital to safe shutdown and isolation of the reactor coolant pressure boundary are classified as Seismic Class I.

Those SSCs important to reactor operation but not essential to safe shutdown and isolation of the reactor and whose failure could not result in the release of substantial amounts of radioactivity are classified Seismic Class II. SSCs not Seismic Class I or II are classified as Seismic Class III.

The original equipment seismic qualification at DCCNP was performed to the requirements of Specification DCC-NE-101-QCN, dated May 7, 1970 which is similar to the IEEE Std-344-1971 standard (Reference 6). Subsequently, some replacement components or new components have been installed in accordance with the requirements of the IEEE Std 344-1975 standard, with DCCNP damping as per the UFSAR.

### 1.3 AEPSC SQUG TASK GROUP

An AEPSC SQUG task group was formed early on to implement the requirements of GL87-02 at Cook Nuclear Plant. The principal responsibility of the task group was to:

- Select the safe shutdown paths;
- Develop the safe shutdown equipment lists;
- Coordinate and participate in the plant walkdown with the consultant, Stevenson & Associates;
- Coordinate with plant operators in the development of the seismic safe shutdown procedure;
- Provide complete administrative and technical guidance for the project.

The team consisted of engineers from various departments both at the corporate office and from the plant. The members of the task group consisted of the following individuals and disciplines:

|                     |   |
|---------------------|---|
| T. R. Satyan Sharma | SQUG Project Manager/Equipment Seismic Qualification Engineer/Nuclear Engineering |
| G. P. Arent         | Plant Operations Department - Procedures Supervisor (SRO)                         |
| M. J. Baskerville   | Electrical Design   |
| I. C. Huang         | Structural Engineering  |
| T. Jeyasekaran      | Site Design   |
| P. R. Krugh         | Structural Engineering, Equipment Qualification                                   |
| R. P. Leonard       | Plant Systems Engineer  |
| K. Mahajan          | Electrical Engineering  |
| J. M. Nieto         | Nuclear Engineering/Safety & Licensing  |
| J. V. Ruparel       | Electrical and Instrumentation/Control Engineering                                |
| R. Steele           | Electrical Engineering; Lead Relay Engineer                                       |
| B. A. Svensson      | Executive Staff Assistant; Former Assistant Plant Manager, Operations (SRO)       |
| H. W. Young         | Mechanical Engineering  |

Resumes of the above personnel are included in attachment #2.

The selection of the safe shutdown paths and equipment was accomplished by the task group, reviewed and approved and documented on the flow diagrams.

The equipment seismic evaluation and walkdowns were performed jointly by the task group and the consultant, Stevenson & Associates (S&A). The S&A efforts were lead by Dr. J. D. Stevenson and their project manager, Mr. G. G. Thomas, et. al. The peer review was performed by Dr. R. P. Kennedy of Structural Mechanics Consultants.

## SECTION 2

### GENERIC IMPLEMENTATION PROCEDURE (GIP) REQUIREMENTS

#### 2.1 INTRODUCTION

On February 19, 1987, the NRC issued Generic Letter (GL) 87-02, (Reference 1) "Verification of Seismic Adequacy of Mechanical and Electrical Equipment in Operating Reactors, Unresolved Safety Issue (USI) A-46". The requirements of the GL are applicable to those plants in which the mechanical and electrical equipment were seismically qualified prior to the issuance of IEEE 344-1975 Standard (Reference 8). For DCCNP, the qualification for a substantial portion of the electrical/mechanical equipment was based on specification DCC-NE-101 QCN dated May 7, 1970, which was based on draft IEEE-344-1971 and later on the IEEE 344-1971 Standard (Reference 6). The GL provides guidance for resolution of USI A-46 and requests that owners of operating nuclear power plants which are not qualified to the IEEE 344-1975 Standard are to verify the seismic adequacy of mechanical and electrical equipment needed to bring their plants to a safe shutdown condition following a safe shutdown earthquake (SSE) (called the Design Basis Earthquake or DBE at DCCNP). The safe shutdown/design basis earthquake is hereafter referred to as "the seismic event."

The Seismic Qualification Utility Group (SQUG) has developed a Generic Implementation Procedure, commonly referred to as the GIP (Reference 7), that provides an experience data base, technical approach, generic procedures, and documentation requirements which can be used by owners of currently operating nuclear power plants to address the requirements of GL 87-02. SQUG has worked closely with the Electric Power Research Institute (EPRI) since 1982 to provide information to the NRC staff to assist in the resolution of USI A-46. Reference 7 is the SQUG's response to GL 87-02. The NRC has reviewed GIP Revision No. 2 (GIP-2), dated February 14, 1992, and has issued a safety evaluation report, Supplement No. 2, dated May 22, 1992. These two documents constitute an acceptable procedure for implementing the resolution of USI A-46.

#### 2.2 GIP REQUIREMENTS & IMPLEMENTATION

The GIP provides guidance for identifying the various methods or "safe shutdown paths" to be used in accomplishing the following "safe shutdown functions" specified in the Generic Letter subsequent to a seismic event:

- 1) Reactor Reactivity Control
- 2) Reactor Coolant Pressure Control
- 3) Reactor Coolant Inventory Control
- 4) Decay Heat Removal

To accomplish the above four safe shutdown functions safe shutdown paths were selected, and corresponding systems, subsystems and equipment were identified.



The generic criteria and the governing assumptions used to develop the safe shutdown paths are described in Section 3. The systems, subsystems and equipment required to accomplish the four safe shutdown functions are described in Section 4. The plant procedure used for shutting the plant down which incorporates the use of the USI A-46 safe shutdown equipment is described in Section 5.

## SECTION 3

### CRITERIA AND GOVERNING ASSUMPTIONS

The general criteria and governing assumptions described in the GIP, along with assumptions made for development of the safe shutdown paths are listed below. The plant specific assumptions are broken down into a "General" group and specific groups for each safe shutdown functional path.

#### 3.1 GENERAL

##### 3.1.1 Safe Shutdown Following the DBE (Reference 7, Part II, 3.2.1)

The plant must be capable of being brought from normal operating conditions to a safe shutdown condition following a seismic event with or without offsite power. A loss of offsite power (LOOP) is assumed to occur either concurrent with or following the seismic event.

##### 3.1.2 Normal Operating Conditions Defined (Reference 7, Part II, 3.2.2)

Normal operating conditions of the plant are defined as the RCS being at or near normal operating pressure and temperature and the plant is operating at rated thermal power.

##### 3.1.3 Safe Shutdown Defined (Reference 7, Part II, 3.2.3)

Safe shutdown condition is defined as bringing the plant to Hot Shutdown (Mode 4) condition, as a minimum, and maintaining these conditions for the remainder of the 72-hour period following the initiating seismic event.

For the DCCNP, Hot Shutdown, is defined in the Technical Specifications as the reactor coolant average temperature less than 350°F and greater than 200°F, k-effective less than 0.99, and zero percent of rated thermal power (excluding decay heat).

The 72-hour period clock starts at the time of the occurrence of the seismic event. There is no specific requirement as to when Mode 4 has to be reached within the 72-hour period. However, it is required to bring the plant to a safe shutdown condition within 72 hours.

Technically, it would be permissible to go from Mode 1 to Mode 4 in exactly 72 hours. In practice, Mode 4 will be reached as soon as practicable, within the constraints of the T/S. These constraints include, among others, cooldown rate, and shutdown margin requirements.

3.1.4 Loss of Off-Site Power (LOOP) (Reference 7, Part II, 3.2.4)

The safe shutdown capability shall remain intact without offsite power. LOOP is assumed to occur either concurrent with or following the seismic event. LOOP is not assumed to occur if loss of off-site power did not result in a worse condition.

LOOP is defined as a loss of off site power with at least one emergency diesel generator (EDG) per unit starting and being capable of carrying its design loads. The DCCNP UFSAR refers to a LOOP as a "station blackout". This is not the currently accepted meaning of station blackout. (Ref. DCCNP UFSAR Chapter 14). Station blackout is not part of SQUG.

3.1.5 No Other Accidents (Reference 7, Part II, 3.2.5)

No other extraordinary events or accidents (e.g. LOCA, steam line break and other high energy line breaks (HELB), fires, floods, tornados and other extreme winds, sabotage, etc.) are postulated to occur other than the earthquake itself and LOOP.

3.1.6 Single Equipment Failure (Reference 7, Part II, 3.2.6)

Systems and components selected will not be dependant upon a single item of equipment whose failure, either due to seismic loads or random failure, would preclude safe shutdown. Structural integrity failure is not assumed, just failure of the active functional capability. For instance, a valve that is supposed to open to accomplish a safe shutdown function is not assumed to fail structurally; however, it may fail to open for some other reason. If an item is out of service for maintenance when the seismic event occurs, that is considered to be the single equipment failure.

3.1.7 Operator Action Permitted (Reference 7, Part II, 3.2.7)

Reliance on timely operator action is permitted as a means for achieving and maintaining a safe shutdown condition provided sufficient manpower, time, procedures, access, and indications are available, and operators are trained in their use. When taking credit for operator action general guidelines used were (a) 10 minutes to perform the action if it could be accomplished in the unit control room and (b) 20 minutes or greater if operator action is required outside of the control room. 20 minutes is used as a general guideline unless the time for the required action has been specifically evaluated. Actual operator actions, particularly inside the control room, will not be procedurally prohibited prior to the assumed time periods. The 10-minute and 20-minute delays are guidelines.

- 3.1.8 To establish the boundary isolation components for the safe shutdown flowpaths only one passive component is considered such as one check valve or one motor operated valve that does not have to move to the closed position. In some cases, such a boundary may extend into seismic Class II and III systems and components. In these cases, the seismic Class II or III component is included in the SSEL.
- 3.1.9 Passive boundary isolation components are included in the composite SSEL but are not part of the seismic review SSEL. For power operated active boundary isolation components, relay evaluation was performed.
- 3.1.10 As per the guidelines provided in the GIP and NRC SSER No. 2, primary system components (NSSS) are excluded from the SQUG scope. However, the pressurizer safety valves and power operated relief valves are included in the seismic review SSEL.
- 3.1.11 Safety valves are considered to be passive components if it can be shown that they will not actuate or have not actuated during normal operating transients including reactor trip transients. Safety valves have been included in Equipment Class 7 for seismic review. The NRC's SSER 2 requires that safety valves be included in the SQUG effort.
- 3.1.12 Assumption on check valves are as follows:
- a. As per GIP guidelines, all self-actuated check valves are considered rugged.
  - b. Self-actuated check valves do not need a seismic evaluation. However, they are included in the SSEL if credited as an active boundary for one of the functional paths.
  - c. Check valves that do not need to be operated and already are in the proper position to accomplish their safe shutdown function are considered to be passive components.
  - d. Check valves that may be open and which may need to close to perform a boundary isolation function are considered passive components if the valves can be shown to be reliable based on the ISI program operability tests.
  - e. HVAC backdraft dampers are treated in the same manner as check valves.
  - f. Self-actuated, self-regulated in-line valves are treated in the same manner as check valves and are classified as rugged.
- 3.1.13 The normal position assumed for a valve is as established by the plant's normal operating procedures.

- 3.1.14 Test instrument connection valves, vent valves and drain valves are considered rugged and passive. These valves are normally capped or plugged and are therefore not listed as fluid system boundary valves. Manual valves are considered as passive components. These components were included in the SSEL as rugged components and are included in the composite SSEL, but were not included in the seismic evaluation.
- 3.1.15 Components that can not be classified into any one of the twenty-one classes are classified as Class 0. Rugged equipment are also included in Class 0. All Class 0 components are not outliers.
- 3.1.16 Assumptions for inactive motor operated valves (MOVs) and fluid operated valves (AOVs) are as follows:
- a. Boundary Valve
    - i. A valve is considered to be passive if relay circuit analysis shows that with relay chatter or malfunction the valve will remain in the closed position.
    - ii. Only one passive valve is required as a boundary valve.
  - b. In-Line Valve

A valve is considered to be passive if relay circuit analysis shows that with relay chatter or malfunction the valve will remain in the open position.
  - c. All power operated valves (MOVs and AOVs) active and passive are included in the SSEL to account for the relay circuit analysis.
- 3.1.17 During the walkdown, the seismic review teams evaluated the mounting of solenoid valves in the air supply to the operator of air-operated valves. Whenever the solenoid valve is mounted on the associated valve, the SEWS and SVDS will be annotated to include the solenoid valve using the "rule of the box". If the solenoid valve is mounted away from the valve, separate SEWS will be filled out and attached to the air operated valve listed in the SSEL. It is not necessary to trace back from the solenoid valve and include all components in the electrical and pneumatic path from the source to the solenoid valve.
- 3.1.18 Drain lines on the primary system piping are part of the reactor coolant pressure boundary (RCPB) and as such, are included in the NSSS scope. Therefore these are not included in the SQUG scope.

- 3.1.19 Heat exchangers and tanks are considered passive components for the purposes of SQUG. Therefore no alternative path around them is required to be identified since passive failures are not postulated.
- 3.1.20 Technical specifications (Reference 2) exist or administrative procedures will be developed to establish out of service time limits to notify operators of SQUG-SSEL equipment which may be out of service in any one of the safe shutdown paths.
- 3.1.21 The potential for relay chatter causing spurious actuation of ESFAS signals which could cause undesirable operation of SSEL components has been evaluated. The evaluation demonstrated that ESFAS actuation signals would not be generated due to relay chatter during a DBE. This evaluation included the initiation circuitry for safety injection, containment spray and containment isolation Phase A and Phase B.

### 3.2 REACTIVITY CONTROL

- 3.2.1 The safe shutdown margin analysis includes failure of one control rod to fully insert which is one of the single active failures postulated for the SQUG project.
- 3.2.2 Reactivity control is monitored by monitoring the neutron flux utilizing the "Gammametrics" source range detectors (N-21 and N-23). These instruments provide reactor power indication from source range to above 100% full power and also the rate of power change.
- 3.2.3 The BASTs will provide adequate inventory of borated water to bring the plant to a safe shutdown condition assuming as a minimum the inventory specified in the technical specifications is maintained.
- 3.2.4 The boration from the BASTs will commence following initiation of reactor shutdown with the RCS in Mode 3 and will be completed prior to initiating the RCS cooldown from the existing no-load temperature conditions to hot shutdown conditions. All boration activities will be procedurally accomplished within 3-4 hours after the occurrence of the seismic event. The boration lines are not expected to go solid in that time period and, therefore, heat tracing for the BASTs and piping from the tanks to the CVCS charging pumps suction is not required.

### 3.3 REACTOR COOLANT PRESSURE CONTROL

- 3.3.1 The RCS pressure and temperature limits are established in Technical Specification 3.4.9 (Reference 2) The pressurizer

heaters are not required for a safe shutdown following a seismic event. Existing plant procedures provide guidance for saturated recovery (No credit is taken for pressurizer heaters).

- 3.3.2 Pressurizer level, pressurizer pressure and RCS temperature are the required process variables to establish and maintain RC pressure control and to assure that the pressurizer heaters are covered by water.

### 3.4 REACTOR COOLANT INVENTORY CONTROL

- 3.4.1 The minimum water inventory in the RWST required by the technical specifications is sufficient to provide the necessary coolant makeup needs assuming the reactor coolant leakage is within the technical specification limits.
- 3.4.2 The source of borated water for reactor coolant inventory make up will be from the RWST and the BAST. These water sources are sufficient for both RC pump seal cooling and RCS inventory control.

### 3.5 DECAY HEAT REMOVAL

- 3.5.1 Auxiliary feedwater (AFW) from the condensate storage tank is the main source of water for cooldown and maintaining safe shutdown temperature conditions of the RCS.

Lake Michigan water via the essential service water system (ultimate heat sink) is the emergency source of water to maintain the plant in the safe shutdown (hot shutdown) condition.

- 3.5.2 The one steam generator stop valve (SGSV) installed in each main steam line meets the seismic safe shutdown single equipment failure requirement for the following reasons:

- There are no external power requirements to close the valves.
- The actuation signal is train oriented and single failure proof.
- Each train actuates an air operated dump valve. There are two dump valves per SGSV. One dump valve opening is sufficient to vent the one side of the cylinder to cause a rapid closure.
- Failure of a single actuation train will not prevent a SGSV from closing.

The SGSV design incorporates a cylinder with a piston which is attached to the SGSV valve stem. The steam pressure above and below the piston is normally at the steam line pressure. The cylinder volume above the piston is piped into two redundant air operated dump valves. Upon receipt of a signal to close the SGSV, the dump valves open and vent the steam from the cylinder volume above the piston. The steam pressure in the valve body and the volume below the piston forces the piston to move rapidly and close the SGSV.

### 3.6 SUPPORTING SYSTEMS (AUXILIARY)

#### 3.6.1 Emergency Diesel Generators (EDG)

- 3.6.1.1 The two EDGs constitute the required preferred primary and backup emergency power supply.
- 3.6.1.2 The EDG auto start circuit and relay under voltage circuit loop have been evaluated as part of the relay evaluation.
- 3.6.1.3 The EDG underground fuel oil storage tanks contain a minimum volume of 46,000 gallons of fuel oil per technical specification requirements. This is sufficient to operate all four diesel generators for a minimum of 84 hours at full power. Therefore, the level indicators for the EDG fuel oil storage tanks are not included in the SSEL. If these indicators are not available after a DBE, manual verification will be done utilizing a "dip stick".

#### 3.6.2 Electrical Systems

- 3.6.2.1 Loss of heating to the battery room is not a concern for the following reason: for the SQUG project, at least one diesel is assumed to be operable and, therefore, at least one train of battery chargers will be available. This will provide the necessary DC control voltage. The capacity of the battery is not a concern for SQUG. The batteries do serve as a ballast for the charger in the scenario, and this function is not expected to be affected by loss of battery room heating.
- 3.6.2.2 All circuit breakers associated with safety related buses were included on the SSEL. This includes circuit breakers which are required to supply power to SSEL components and circuit breakers which are required to open for load shedding purposes during a loss of off site power (LOOP) event.



### 3.6.3 Essential Service Water System

- 3.6.3.1 The traveling water screens are not included in the SQUG SSEL. If off site power is not available, the travelling screens do not need to operate to clear debris for the duration of the event due to the low water flow requirements during shutdown conditions and LOOP.

### 3.6.4 Component Cooling Water System

- 3.6.4.1 The Chemical and Volume Control System (CVCS) provides cooling to the reactor coolant pump seals. In the event RCS injection from CVCS is not available, CCW will provide cooling to the RC pump seal water via the thermal barrier heat exchangers.
- 3.6.4.2 The source of makeup water to the CCW surge tank is from the demineralized water system which is not in the SQUG scope. It is assumed that the CCW normal leak rate is sufficiently low that refilling the CCW surge tank will not be required.
- 3.6.4.3 The CCW system miscellaneous header piping is seismic Class II. The anchorage of all components supplied by the miscellaneous header up to the first rigid pipe support is included in the SQUG scope for verification of adequate anchorage.

### 3.6.5 Control Air System

- 3.6.5.1 The Control Air System is assumed to be not available following the SSE and, therefore, control air system components are not include in SSEL. However, control air accumulators and solenoid operators for certain valves are included in the SSEL. The failure position of air operated valves within the various systems have been considered for the safe shutdown paths and are so reflected in the "Required State" field on the SSEL.

### 3.6.6 Heating, Ventilation and Air Conditioning

- 3.6.6.1 a. HVAC duct system is considered a passive system and is not included in the SSEL.
- b. HVAC powered dampers are included in the SSEL.

- c. During a seismic event shutdown, a roving tour of the plant will be conducted to verify the operation of the essential HVAC systems, i.e. the HVAC equipment included in the SSEL.

3.6.6.2 The containment ventilation systems are assumed not to be available. The normal containment cooling system is not safety-related. The safety-related air recirculation/hydrogen skimmer system is available but is not required for a seismic safe shutdown.

Loss of containment cooling analysis has shown that containment pressure may increase to the point of safety injection actuation. Should this occur, the seismic shutdown procedure will direct the operator to respond to this situation.

3.6.6.3 The approach taken for safety-related HVAC systems serving safe shutdown equipment was to perform the walkdown, and if there was an outlier, then perform necessary evaluations or include necessary actions in operating procedures. Many of the fans had loss of HVAC evaluations available. Due to successful completion of the walkdowns, we did not have to take credit for any of these evaluations.

3.6.6.4 Ventilation systems serving the following equipment have been evaluated and their seismic capability verified:

- Residual heat removal pumps
- Centrifugal charging pumps
- Component cooling water pumps
- Turbine and motor-driven auxiliary feed pumps
- "A", "B", and "N" train batteries
- 4KV Switchgear
- CRID inverters
- 600 volt transformers and MCCs

3.6.6.5 The control room cleanup/pressurization system is not required to operate for a shutdown where an accident has not taken place. Therefore, that subsystem of the control room HVAC system has not been evaluated. The normal control room HVAC system has been evaluated. The seismic capability of all equipment has been verified, with the exception of the base isolation system provided for the liquid chillers. These chillers were not purchased to seismic requirements, and procedures

are in place to switch to direct cooling using the ESW system following a seismic event. When the outlier with the chillers's base isolation system is resolved, then the chiller's seismic capability will have been verified.

A series of manual valves have been provided in the original plant design to account for a chiller failure. These valves allow the chiller to be bypassed and ESW water, which normally is supplied to the chiller condensers, is diverted directly to the air handler coils. Existing plant procedures provide direction for the switchover. Following the switchover, safe shutdowns can be accomplished.

## SECTION 4

### SAFE SHUTDOWN PATHS DESCRIPTION

This section describes the development of the preferred Safe Shutdown Paths (SSPs) corresponding to each of the four safe shutdown functions (SSFs) identified in Section 2.2 and the development of the SSELs.

#### 4.1 GENERAL DESCRIPTION OF SAFE SHUTDOWN PATHS

The initiating event is the occurrence of a design basis earthquake (DBE). For the purpose of addressing the requirements of GL 87-02, a loss of off site power (LOOP) is assumed to occur either concurrent with or following the seismic event.

The safe shutdown paths (SSPs) and the safe shutdown equipment lists (SSEL) were developed in a two-step process.

First, using the guidance in the GIP, the systems and the safe shutdown paths required to accomplish the safe shutdown functions were identified and the path boundaries were established. In addition to the systems needed to directly perform the safe shutdown functions, those support systems that will be needed to conduct a safe shutdown were also identified. For each safe shutdown path, a "preferred primary" path and a "preferred backup" path were established to provide redundancy and to preclude single items of equipment whose failure would preclude the safe shutdown. For certain functions, an "alternate path" was also identified to provide increased operational flexibility.

The primary consideration in selecting the safe shutdown paths for each of the four functions was to allow plant operations as close as practical to normal plant cooldown and shutdown operations. Consideration was also given to the system and procedures previously defined and evaluated for such issues as the high energy line break, station blackout and 10CFR50, Appendix R fires.

The second step involved was to develop the Safe Shutdown Equipment Lists (SSEL) for each safe shutdown function by identifying the mechanical and electrical equipment within each path boundary.

In the sections that follow, Sections 4.2 through 4.5 provide a brief description of each of the four safe shutdown functions, the safe shutdown path selection and the process variable monitoring. Section 4.6 describes the required support system identification and Section 4.7 describes the development of the SSEL.

#### 4.2 SAFE SHUTDOWN FUNCTION NO. 1 - REACTOR REACTIVITY CONTROL

The reactor reactivity control function is initially accomplished by insertion of negative reactivity through manual control rod insertion or automatic control rod insertion following a reactor trip. Reactivity is then controlled by ensuring adequate shutdown margin. The design basis

safe shutdown for the plant is hot shutdown, however, plant procedures require that shutdown margin requirements for cold shutdown ( $T_{ave} \leq 200^{\circ}\text{F}$ ) be established while in Mode 3 prior to commencing RCS cooldown from the existing no-load operating temperature conditions (approx.  $547^{\circ}\text{F}$ ) to compensate for positive reactivity additions resulting from reactor coolant temperature reduction and from Xenon-135 decay.

The primary process variable that will be monitored to control reactivity is core neutron flux. The two "gammametrics" excore detectors (N21 and N23) which meet R. G. 1.97 Category 1 requirements will be used for this. An alternative to the monitoring of reactivity directly is to monitor other parameters which can be used to show that the core remains subcritical, i.e., verification that reactor coolant  $T_H$  is not increasing abnormally, or determination of the boron concentration in the RCS to verify required shutdown margin.

Table 4.1 provides a brief description of the safe shutdown path to accomplish the reactor reactivity control function.

TABLE NO. 4.1  
**REACTOR REACTIVITY CONTROL FUNCTION - SSF NO. 1**

Initiating Event: Seismic event with LOOP assumed to occur either during or following the seismic event.

| <u>Action</u>                           | <u>Methods for Accomplishing, Monitoring or Verifying</u>  |
|---|--|
| 1. Reactor Trip                         | Manual or Automatic (Note - Reactor trip will occur automatically if LOOP occurs)  |
| 2. Reactor Trip Verification            | <ul style="list-style-type: none"> <li>• Rod position indication, rod bottom light, if available</li> <li>• Reactor trip breakers open</li> <li>• Neutron flux decreasing</li> </ul>   |
| 3. Turbine/ Generator Trip Verification | <ul style="list-style-type: none"> <li>• All turbine stop valves and/ or control valves are closed if indication is available</li> <li>• Generator breakers are open if indication is available</li> <li>• Megawatt meter zero output, if available</li> <li>• If none of the above indications are available, close the steam generator stop valves</li> </ul>  |
| 4. Verify Power to AC Emergency Buses   | <ul style="list-style-type: none"> <li>• Power available from the off-site reserve power source or at least from one of the two emergency diesel generators</li> </ul>   |
| 5. Subcriticality Monitoring            | <ul style="list-style-type: none"> <li>• Preferred Primary and Backup-One of the two "Gammametrics" neutron flux monitoring channels N21 or N23 (installed for 10CFR50, App. R and Reg. Guide 1.97 requirements)</li> <li>• Alternate - Monitor RCS Hot Leg and Cold Leg wide range temperatures</li> </ul>  |
| 6. Boration                             | <p>The path used for boron injection will be the charging path established for RCS inventory control</p> <p>Boration sources:</p> <p>Preferred Primary Source - from the boric acid storage tanks (BAST) via the boric acid transfer pumps (BATPs) through the emergency boration path to the centrifugal charging pump (CCP) suction header</p> <p>Preferred Backup Source - from the BAST via the BATPs through the 1" alternate boration path to the CCP suction header</p> |
| 7. 72 Hours Monitoring                  | Continue monitoring making changes as required by plant conditions   |

\*Actions 1, 2, 3, and 4 are common to all four safe shutdown functions.

#### 4.3 SAFE SHUTDOWN FUNCTION NO. 2 - REACTOR COOLANT PRESSURE CONTROL FUNCTION

The reactor coolant pressure control functions has several operating parameters which must be controlled to ensure that the reactor coolant system (RCS) is operated within its design limits as follows:

##### RCS Overpressure Control

The RCS pressure is maintained below the maximum system design pressure (2735 psig) by ensuring that the pressurizer power operated relief valves (PORVs) and the pressurizer safety valves remain operable.

##### RCS Pressure Reduction

The RCS pressure must be reduced as the RCS temperature is reduced during the system cooldown. RCS pressure reduction is also required to permit placing the low pressure RHR system in service. The pressure reduction is accomplished through the controlled use of the pressurizer PORVs and as a result of the RCS cooldown.

##### RCS Overpressure Control with the RCS Connected to the Low Pressure RHR System

The RCS pressure is maintained within the limits of the technical specification heatup and cooldown curves to comply with the requirements of 10CRF50, Appendix G. This is accomplished by ensuring the operability of the pressurizer PORV's low temperature overpressure protection system. The pressurizer PORVs and the low pressure RHR system suction line safety valve provide the required protection from overpressure transients which could exceed the allowable limits.

##### RCS Subcooling Margin

Sufficient subcooling margin is ensured through the close coordination of the RCS inventory control, the RCS pressure control and the RCS temperature control functions during the RCS cooldown and depressurization operations.

##### Steam Generator Tube Sheet Differential Pressure Limit

Steam generator tube sheet differential pressure is maintained below the allowable value by controlling the steam generator secondary side pressure via RCS temperature control, and the primary side pressure via RCS pressure control.

Table 4.2 provides a brief description of the safe shutdown path to accomplish the reactor coolant pressure control function.

TABLE NO. 4.2  
 REACTOR COOLANT PRESSURE CONTROL FUNCTION - SSF NO. 2

Initiating Event: Seismic event with Loop assumed to occur either during or following the seismic event.

| <u>Action</u>                                      | <u>Methods for Accomplishing, Monitoring or Verifying:</u>  |
|--|---|
| 1, 2, 3, and 4                                     | Actions 1, 2, and 3 and 4 are common for all safe shutdown functions. Refer to Table 4.1  |
| 5. RCS Pressure Monitoring                         | Monitor RCS pressure using PRZ narrow range pressure indication channels (NPP-151, -152 and -153) or RCS wide range pressure from Loops 1 and 2 hot legs (NPS-121 and -122). The redundant narrow range and wide range channels provide Preferred Primary and Backup indications. |
| 6. RCS Temperature Monitoring                      | Monitor RCS temperatures using the wide range $T_{hot}$ and $T_{cold}$ loop temperature indicators (NTR-110, -120, -130 and -140 for $T_{hot}$ and NTR-210, -220, -230 and -240 for $T_{cold}$ ). Redundant channels provide Preferred Primary and Backup indications.            |
| 7. Steam Generator Secondary Side Pressure Monitor | Monitor steam generator secondary side pressure using the steam lead pressure indicators (MPP-210, -212, -220, -222, -230, -232, -240 and -242). Redundant channels provide Preferred Primary and Backup indications.   |



| <u>Action</u>  | <u>Methods for Accomplishing, Monitoring or Verifying:</u>   |
|--|--|
| 8. RCS Pressure Control  | <p>a. RCS Pressure High Condition with RHR system isolated from RCS (requiring decrease of the RCS pressure): Preferred Primary and Backup methods for controlling an increasing RCS pressure condition are provided by utilizing either of the two low temperature overpressure protection PRZ PORVs.</p> <p>Alternate method for overpressure protection is provided by the pressurizer safety valves.</p> <p>b. RCS Pressure High Condition with RHR system connected to the RCS: Preferred and backup methods for controlling an increasing RCS pressure condition are provided by utilizing either of the two low temperature overpressure protection PORVs.</p> <p>Alternate methods for overpressure protection is provided by the RHR suction header safety valve.</p> <p>c. RCS Pressure Low Condition (requiring increase of RCS Pressure): RCS low pressure conditions are controlled by reducing RCS cooldown rate or stabilizing RCS temperatures and maintaining PRZ level by increasing charging flow to the RCS.</p> |
| 9. RCS Temperature Control   | Control RCS temperature as described in Table 4.4, Decay Heat Removal Function, Action Step 8.   |
| 10. RCS Subcooling   | <p>a. To increase RCS pressure refer to Action Step 8.c above.</p> <p>b. To decrease RCS temperature refer to Table 4.4, Decay Heat Removal Function, Action Step 8.</p>   |
| 11. Steam Generator Tubes and Tube Sheet Differential Pressure Control | <p>a. Steam generator primary side (RCS) pressure is controlled as described in Action Step 8 above.</p> <p>b. Steam generator secondary side pressure is controlled by controlling RCS temperature as described in Table 4.4, Decay Heat Removal Function, Action Step 8.</p>   |

#### 4.4 SAFE SHUTDOWN FUNCTION #3 - REACTOR COOLANT INVENTORY CONTROL

The reactor coolant inventory control function ensures that the reactor core remains covered so that decay heat can be removed. Inventory control has two elements which must be accomplished:

- Limiting loss of reactor coolant from the RCS - loss of reactor coolant is minimized and controlled by monitoring pressurizer level and charging flow rate and assuring that RCS boundary valves remain in their closed position.
- Providing sufficient make-up capacity - makeup is provided from the RWST to compensate for losses due to normal leakage from the RCS, such as RCP seal returns, and for coolant shrinkage due to the cooldown of the reactor coolant system. The RWST contains sufficient volume of water to maintain the RCS inventory if cooldown to cold shutdown conditions (Tave < 200°F) is desired.

Table 4.3 provides a brief description of the safe shutdown path to accomplish the reactor coolant inventory control function.

TABLE NO. 4.3

## REACTOR COOLANT INVENTORY CONTROL FUNCTION - SSF NO. 3

Initiating Event: Seismic event with LOOP assumed to occur either during or following the seismic event.

| <u>Action</u>   | <u>Methods for Accomplishing, Monitoring or Verifying:</u>   |
|---|--|
| 1, 2, 3, and 4  | Action 1, 2, 3, and 4 are common for all four safe shutdown functions. Refer to Table 4.1  |
| 5. Check pressurizer (PRZ) level control                                | Monitor PRZ level using PRZ level indication channels (NLP-151, -152, -153, and NLI-151) or recorder. Redundant PRZ level indicating channels provide preferred primary and backup indications.  |
| 6. Verify or establish charging flow to maintain PRZ level              | <p>Continue using the normal charging flow path if available. If control air is lost, control valve QRV-200 will fail closed and local opening of manual bypass valve CS-319 will be required to maintain the normal charging flow path in service.</p> <p>Preferred Primary and backup Charging flow Path - from the RWST to the charging pump suction header using either of the two centrifugal charging pumps (CCP) discharging through the boron injection tank and the ECCS injection piping to the RCS cold legs.</p> <p>Alternate Charging Flow Path - from the RWST to the charging pump suction header using either CCP discharging through the RCP seal injection piping via all four RCP No. 1 seals to the RCS.</p>                     |
| 7. Verify or establish letdown flow for control of increasing PRZ level | <p>Use normal letdown path if available.</p> <p>Preferred Primary Letdown Path with control air available - using the excess letdown path through the excess letdown heater exchanger, the RCP seal water return filter and the seal water heat exchanger to the CCP suction header.</p> <p>Preferred Primary Letdown Path without control air available - leakoff from the RCP-No. 1 seal through the seal water return piping, the RPC seal water return filter and the seal water heat exchanger to the CCP suction header in conjunction with a controlled RCS cooldown.</p> <p>Preferred backup letdown path - using the RCP No. 1 seal leakoff paths through seal water return header safety valve, SV-50, to the pressurizer relief tank.</p> |
| Monitor PRZ level   | Control charging and letdown to maintain PRZ level.  |

#### 4.5 SAFE SHUTDOWN FUNCTION #4 - DECAY HEAT REMOVAL

The decay heat removal safe shutdown function is accomplished by removing decay heat from the reactor core at a rate such that overall reactor coolant temperatures are maintained and controlled within acceptable limits. This is accomplished by dumping steam from the steam generators utilizing the atmospheric power operated relief valves and supplying feedwater to the steam generators utilizing the auxiliary feedwater system. The cooldown of the RCS to the safe shutdown conditions (hot shutdown) will be accomplished utilizing the same systems.

The steam dump valves to the main condensers were not considered for the SQUG project since control air may not be available for the steam dump valves and power would not be available to the circulating water pumps on loss of off site power.

When the RCS temperature has been reduced to below 350°F, the residual heat removal system (RHR) can be placed in service for temperature control in the hot shutdown mode or, if desired, cooldown to cold shutdown conditions ( $T_{avg} < 200^{\circ}\text{F}$ ).

If the RHR system is not placed in service and the condensate storage tank water supply to AFW system is depleted, continued decay heat removal is accomplished by switching the AFW system water supply to the Lake Michigan water via the essential service water system (ultimate heat sink).

Table 4.4 provides a brief description of the safe shutdown path to accomplish the decay heat removal function.

TABLE NO. 4.4  
DECAY HEAT REMOVAL FUNCTION - SSF NO. 4

Initiating Event: Seismic event with LOOP assumed to occur either during or following the seismic event.

| <u>Action</u>   | <u>Methods for Accomplishing, Monitoring or Verifying</u>  |
|---|--|
| 1, 2, 3, and 4  | Actions 1, 2, 3, and 4 are common for all four safe shutdown functions. Refer to Table 4.1   |
| 5. RCS Temperature Monitoring                         | Monitor RCS temperature using the wide range $T_{hot}$ and $T_{cold}$ loop temperature indicators (NTR-110, -120, -130 and -140 for $T_{hot}$ and NTR-210, -220, -230 and -240 for $T_{cold}$ ). Redundant channels provide Preferred Primary and Backup indications.              |
| 6. RCS Pressure Monitoring                            | Monitor RCS pressure using the narrow range pressure indicating channels (NPP-151, -152 and -153) or RCS wide range pressure indicators from Loops 1 and 2 hot legs (NPS-121 and -122). Redundant narrow and wide range channels provide Preferred Primary and Backup Indications. |
| 7. Steam Generator Secondary Side Pressure Monitoring | Monitor steam generator secondary side pressure using the main steam lead pressure indicators (MPP-210, -212, -220, -222, -230, -232, -240 and -242). Redundant channels provide Preferred Primary and Backup indications.   |

| <u>Action</u>   | <u>Methods for Accomplishing, Monitoring or Verifying</u>  |
|---|--|
| <p>8. RCS Temperature Control (Applies to forced and natural reactor coolant circulation)</p> | <p>a. RCS Temperature Control with RHR System Isolated from RCS:</p> <p>Preferred Primary and Backup methods are provided by discharging steam from any combination of the four steam generators via the atmospheric PORVs.</p> <p>Preferred Primary and Backup Methods for supplying makeup feedwater to the steam generators are provided by utilizing either or both of the motor driven auxiliary feedwater pumps.</p> <p>Alternate method for supplying makeup feedwater to all four steam generators is provided by utilizing the turbine driven auxiliary feedwater pump.</p> <p>b. RCS Temperature Control with RHR System connected to the RCS:</p> <p>RCS temperature is controlled by regulating the RHR return flow temperature. This is accomplished by adjusting the bypass flow around the RHR heat exchangers using the air operated bypass valve, if available, or the manual valve. Heat is transferred from the RHR system to the closed loop component cooling water (CCW) system and from the CCW system to the essential service water (ESW) system to the ultimate heat sink.</p> |

#### 4.6 SUPPORTING SYSTEMS

To support the frontline systems and components selected to accomplish the four safe shutdown functions additional supporting systems and components were identified as noted below:

- Electrical Power Sources; AC and DC
- Emergency Diesel Generators and their auxiliary systems (in case of a LOOP)
- Essential Service Water System
- Component Cooling Water System
- Control Air/Nitrogen to Power Operated Valves with Backup Air Systems
- Ventilation Systems Serving Safe Shutdown Equipment and the Control Room
- Nitrogen Supply to the RCS Accumulators

For the supporting systems active components preferred primary and preferred backup components were identified.

#### 4.7 DEVELOPMENT OF THE SAFE SHUTDOWN EQUIPMENT LISTS

The purpose of this section is to provide a brief description of (a) the development of the Safe Shutdown Equipment Lists (SSELs), (b) the development of the Relay Review SSEL, (c) the scope of the cable and conduit reviews and (d) a description of the computer software for data management purposes, as follows:

(a) Safe Shutdown Equipment Lists

Following the development of the four Safe Shutdown Paths (SSPs) as described in Section 4.1, the flow paths (including boundaries) were documented on the plant system flow diagrams. The preferred primary paths, the preferred backup paths, common paths and any optional paths were identified using the following color scheme:

Yellow: All lines highlighted in yellow are part of the preferred primary path for the safe shutdown function.

Green: All lines highlighted green are part of the preferred backup path for the safe shutdown function.

Purple: All lines highlighted purple are common for both the primary and backup paths for the safe shutdown function (e.g. the common portion of the suction line from the refueling water storage tank to the centrifugal charging pumps).

Brown: All lines highlighted brown are optional paths for the safe shutdown function.

The above color scheme was also used to document the supporting systems required by the frontline systems to accomplish the safe shutdown functions.

The SSELS were then developed by tracing the fluid path from its source to its ultimate destination identifying all mechanical and electrical components including all required instrumentation. The scope of the component identification extended up to and included the boundary isolation valves, components in the main flow path and all branch lines. A data base management system was used to enter all the individual components for each of the four safe shutdown function equipment lists.

The equipment identified in the supporting systems was entered on a separate "supporting system" SSEL since these systems support several different items of equipment. It should be noted that some of the equipment in the supporting systems in turn requires support by other supporting systems.

Since many components perform functions in more than one of the safe shutdown functions the four safe shutdown equipment lists and the support systems equipment list were consolidated into one composite SSEL. For each component in the composite SSEL a data field entitled "FUNCTION" and a data field entitled "FLOW PATH" are included. The fields contained in the SSEL database are indicated in Table 4.5.

The FUNCTION data field will identify the safe shutdown function or functions for which the component is required ("D"-decay heat removal, "R"-reactor reactivity control, "I"-reactor coolant inventory, and "P"-reactor coolant pressure control).

The FLOW PATH data field will identify whether the component has a preferred path function, designator "P," a support system function, designator "S," or is an electrical component, designator "E."

The composite SSEL and Seismic Review SSEL are attached to this report as Appendix A and Appendix B respectively.

(b) Relay Evaluation

Components on the SSEL which could be affected by relay malfunction are required to be included in the relay evaluation to determine if relay chatter in the components' control circuitry could adversely affect the function of the component. This includes active, electrically powered or controlled components which could inadvertently start, stop or change



state due to relay chatter, and thereby, prevent a safe shutdown function from being accomplished. Also, passive, electrically powered or controlled components which would be in the proper state, and upon loss of power would remain in the proper state, but due to relay chatter could change state and prevent proper operation of the safe shutdown system, are required to be included in the relay evaluation. A listing of the components which were included in the relay evaluation, known as the SSEL-R, is included in Appendix A of the Relay Evaluation Report.

Before performing the circuit analysis the functional requirements of each of the components on the SSEL-R were determined (i.e. what state or position is required of the component for it to perform its safe shutdown function). This position is known as the desired position. Also, in some cases, it is important to know the state of the equipment at the onset of the earthquake (given the GIP assumption that the reactor coolant system will be at or near normal operating temperature and pressure). This is referred to as the normal state. If normal state of equipment cannot be determined with certainty or if the desired state is dependant on other variable factors, such as Loss of Offsite Power (LOOP), in such cases all possible operating states were considered. The information regarding the normal and desired states of the equipment for relay review was supplied to the Lead Relay Reviewer by the System Engineers involved in the development of the SSEL. The relay review SSEL is attached to this report as Appendix C.

The relay evaluation report contains a list of all essential relays and their capacity v/s demand to show that the relays have adequate seismic ruggedness to prevent contact chatter during a DBE. The details of the relay evaluation are found in Attachment No. 3.

(c) Cable and Conduits Evaluation

The review, walkdown and evaluation of cable and conduit raceways were performed as specified in Section 8 of the GIP, Revision 2, dated February 14, 1992. Raceway systems were walked down, checked against the inclusion rules and other seismic performance concerns as specified in Section 8.2 of the GIP and examined for seismic spatial interactions with adjacent equipment and structures. Representative worst case raceway supports were selected and a limited analytical review was performed per Section 8.3 of the GIP.

The review includes all cable and conduit raceway systems in the plant which could support power, control and instrumentation wiring for the equipment on the safe shutdown equipment list. This scope consists of all raceway systems in both containments, all areas in the Auxiliary Building, and the safety related areas of the screen house.

In our previous submittal AEP:NRC:1040A dated September 21, 1992, we noted that it may not be possible to inspect all supports in a given area due to inaccessibility and/or obstructions. We would like to inform you that the exception noted above was not used and all applicable cable trays and conduits were walked down and reviewed in all areas.

The cable tray/conduit raceway summary report is enclosed in Attachment No. 2, Section No. 6.

(d) GIPPER Software

The GIPPER software package is an expert system developed by Stevenson and Associates Consultants for the implementation of GIP methodology and long-term maintenance of the plant-specific equipment verification data. The GIPPER expert system primarily offers the advantage of consistency and thoroughness. This is an important consideration when one considers that a plant will use this methodology many times in the future. An equally important consideration is the quality and maintenance of the seismic verification data. Equipment and systems will be added and deleted, but probably most frequently will be modified. This equipment database is easily queried, data is retrievable and well documented, and future additions and modifications can be logically entered and documented. The expert system is called the GIPPER.

The GIPPER develops the GIP rules and database to address the twenty (20) classes of SQUG equipment. This expert system includes appropriate screening rules, caveat compliance, spacial interaction rules, relay (in-cabinet) verification and anchorage verification methodology.

Auto-execute interfaces are incorporated for ANCHOR 4.0 (anchorage verification) and GENRS 2.0 (in-cabinet demand response spectrum, ICRS).

Photographs are stored electronically (digitally) for high resolution viewing and printing. A response spectra (RS) database manager, SPECTRUM, is used for storing ground and floor response spectra for RS comparisons. Finally, a word processor interface with Microsoft Word and WordPerfect is provided for efficient reporting.

The GIPPER has two main features: (1) the electronic (Expert System portion) GIP, and (2) the electronic plant-specific A-46 database.



TABLE NO. 4.5  
SAMPLE S.S.E.L. DATA SHEET

|            |   |
|------------|---|
| TRAIN      | 2   |
| CLASS      | 5   |
| ID         | 1-PP-46-1   |
| SYSTEM     | CVCS  |
| DESCRIPT   | BORIC ACID STORAGE TANKS TRANSFER PUMP 1  |
| DRAWINGNO  | 12-5131   |
| BUILDING   | AUXILIARY   |
| NORMSTATE  | NR  |
| DESIRSTATE | R   |
| POWERREQD  | Y   |
| ALIASNO    |   |
| POWERTRAIN | A   |
| COMPSERVED | BORIC ACID STORAGE TANK   |
| MANUFACTUR | GOULDS PUMPS INC  |
| MODEL      | 3196 75 GPM   |
| PANEL      | 1-BA 1-HSD1   |
| ELEMDWG    | 1-98272   |
| WIRINGDWG  | 1-94226   |
| PWRSOURCE  | 1-AB-D-1D   |
| QUALIF     | NUCLEAR SR  |
| WALKDOWN   | F   |
| PFDOPT     | MIN   |
| SUPPSYSDWG | 1-12030 1-98282   |
| REQSUPP    | 1-AB-D-1D   |
| EVAL_TYPE  | SEISMIC AND RELAY   |
| NOTES      |   |
| FUNCTION   | RI  |
| ELEVATION  | 587.00  |
| LOCATION   | BORIC ACID STOR TANK  |
| RELAY      | Y   |
| COMP_TYPE  | PUMP  |
| ISO-DWGS   |   |
| DETAIL_LOC | IN MIDDLE EAST REGION OF ROOM, 5' EAST OF MIDDLE BORIC ACID<br>STORAGE TANK 12-TK-12M, NEAR FLOOR |
| FLOW_PATH  | P   |
| REV        | 0   |
| REV_LOCK   | N   |
| LOCK DATE  | / /   |
| SHOW_INDEX | Y   |
| TAG        | N   |
| SIGNATURES |   |
| REV_NOTES  |   |

## SECTION 5

### SAFE SHUTDOWN GUIDANCE - SUMMARY

This section provides a summary of the main steps in the plant operating procedures used to bring the plant to a safe shutdown condition, following a seismic event.

#### 5.1 GUIDANCE PHILOSOPHY AND DEVELOPMENT

The philosophy used as the bases for the safe shutdown guidance following a seismic event was two fold. First, safe shutdown guidance was developed using the Westinghouse Owners Group (WOG) emergency operating procedures (EOPs) two column format as a template. This provides the operators with a familiar format, allows the use of all available equipment/instrumentation, and provides a "response not obtained" option which includes the SSEL components. Second, operator actions are limited to those which have been proceduralized and the operators have been trained to perform. As a result of the procedure development philosophy described above, the operators will be provided with consistent effective guidance to ensure the successful safe shutdown of the facility.

#### PROCEDURE DEVELOPMENT

Cook Nuclear Plant Operations Department is currently developing the safe shutdown procedure as an abnormal operating procedure in the same two column format as the Westinghouse Owners Group Emergency operating procedures. The procedure will be unique to a plant shutdown following a seismic event. It will provide necessary instructions for placing the units(s) in a safe shutdown condition (hot shutdown) and if desired in cold shutdown.

Prior to finalizing the procedure and the safe shutdown equipment list (SSEL), a draft version of the procedure was used to perform the shutdown on the plant simulator utilizing only the equipment in the safe shutdown paths. Lessons learned from this exercise are being incorporated in the procedure and the SSEL.

#### OPERATOR ACTION

Operator action has been allowed as a means of providing redundancy for a component provided there is sufficient manpower and time to perform the required action. General guideline used for this determination was to allow 10 minutes to perform the action if it could be accomplished in the unit control room and 20 minutes or greater (also see Section 3.1.7) if it required action outside of the control room. Implicit in the assumption of operator action is that the required instructions are in the procedure, that the operator is capable of performing the assigned task (i.e., operator training) and reasonable access to the component location is available.

During the development of the safe shutdown procedure, operator actions were minimized to the extent possible. Examples of the anticipated additional (beyond normal actions) operator actions follows:

1. A loss of control air will require operator action to isolate a backup nitrogen source to the steam generator power operated relief valves (PORVs) (i.e. SQUG portion of the nitrogen header from non-SQUG portion) to support reactor coolant system cooldown. The isolation of the required portion of the nitrogen supply headers will require closing a control air isolation valve to nitrogen header pressure regulating valve, 12-GRV-300, which will result in the full closure of the regulating valve.

The operators will have adequate time to perform this action since the steam generator code safety valves, if required, will provide steam relieving capability for initial decay heat removal. The steam generator PORVs are not mandatory until RCS cooldown is to commence. Operator access is not a concern since the nitrogen pressure regulating valve and the control air shutoff valve are located close together at the tank nitrogen banks in the yard just outside the auxiliary building.

2. Verification that switchgear room cooling remains operational. During a seismic event it is possible that the vent fans may be tripped and locked out. The safe shutdown procedure will require that the operators verify that these fans have not been locked out. The operators have adequate time to perform this action because the heat-up of the switchgear room would be gradual if the fans tripped. Operator access is not a concern since the controls are located in the switchgear room which is easily accessible. Also, an indicating light is available at the fan controls in the switchgear room which indicates when the fans have been locked out. If the fans have been locked out, the operator will be instructed to verify that there is not a fire at the outdoor transformers, and then to reset the fans.
3. Verification that plant process computer room intake dampers have not been closed. Loss of HVAC to the plant process computer is not a concern, however, closure of these dampers would also interrupt the HVAC to the control room air conditioning equipment room. The safe shutdown procedure will require that the operators verify that PPC room dampers have not been closed. The operators have adequate time to perform this action because the heat-up of the control room air conditioning equipment room would be gradual if the dampers are closed. Operator access is not a concern since the dampers are located directly above the control room in the control room air conditioning equipment rooms and in the plant process computer rooms. If any of the dampers are closed, the operator will be instructed to verify that there is not a fire in the PPC room, and then to open the dampers.

## PROCEDURE ASSUMPTIONS

Section 5.2 contains the high level actions steps to be performed/verified in response to a seismic event. As discussed previously, the procedural guidance is patterned after the WOG emergency operating procedures. The procedure was based on the following assumptions:

- a. The initiating event is a seismic occurrence.
- b. A loss of offsite power (LOOP) is assumed to occur either concurrent with or following the seismic event.
- c. A reactor trip will occur automatically if offsite power is lost.
- d. In the event a reactor trip does not occur as a direct result of the seismic event, guidance is provided to determine the severity of the event. Based on the resultant findings, action will be taken to: 1) continue operating, 2) perform a controlled shutdown or 3) trip the reactor and initiate a reactor coolant system cooldown.

## 5.2 SYNOPSIS OF OPERATOR RESPONSE

TABLE 5-1 provides a synopsis of the operator's actions and the methods used, assuming that only the equipment whose seismic adequacy has been verified using the USI A-46/GIP methodology is available.

Please note that items identified in the "normal verification method" column are standard EOP components/instruments. Some of these items will not have been included in the SSEL. However, as described previously, the safe shutdown procedure was developed with the philosophy that the operators could utilize all available components and instrumentation. In the event the normal component/instrument is unavailable, the equipment identified in the "alternate verification method" is to be utilized.

TABLE 5-1

| <u>Required Action</u>  | <u>Normal Verification Method</u>   | <u>Alternate Verification Method</u>   |
|---|---|--|
| Verify Reactor Trip   | Rod Position Indicators less than 25 steps, rod bottom lights lit and reactor trip breakers open. | Verify reactor subcriticality by utilizing N-21 and N-23 Gammametrics neutron flux monitors.   |
| Verify Turbine Trip   | Main turbine stop and control valves closed, generator circuit breakers open.                     | The main turbine stop and control valves will not be included in the SSEL. However, in the event the turbine cannot be tripped from the control room, a local manual trip is also provided at the turbine. |
| Verify AC emergency busses energized (minimum one diesel generator) | Guidance is provided to restore at least one emergency bus.                                       | Guidance is provided to restore at least one emergency diesel generator and associated emergency bus.  |



Required Action

Normal Verification Method

Alternate Verification Method

Verify Safety Injection Not Required

Review plant conditions, if Safety Injection has occurred, continue with actions to address Safety Injection. If no safety injection actuation, prepare the plant for cooldown.

It is assumed that the seismic event does not result in a LOCA, a steam line break (SLB) or a high energy line break (HELB). In addition, no other pipe breaks including non-seismic Class II and III piping, are assumed to occur.

However, a safety injection actuation may occur if the seismic event results in a loss of containment ventilation cooling. Pressure could reach the safety injection actuation setpoint (1.1 psig) due to containment heating. Analysis performed indicates that this may occur 360 minutes after loss of containment cooling. In the event this scenario occurred and RCS conditions did not warrant a Safety Injection, the actuation would be reset/ blocked, when containment pressure conditions have stabilized.

Verify RCS temperature is stable at no-load conditions

Stop the cooldown by reducing steaming rates and minimizing auxiliary feedwater flowrates.

Isolate the main steam generator stop valves because they are single failure proof.

In the event RCS temperature is increasing, control can be achieved by utilizing the steam generator PORVs supported by air or qualified nitrogen supply.



### Required Action

Verify plant status prior to commencing cooldown, including: auxiliary feedwater flow, RCS temperature and pressure control and shutdown margin.

Commence RCS Cooldown

### Normal Verification Method

Verify continued operation of auxiliary feedwater. If CST level is decreasing abnormally prepare for transfer to alternate.

RCS temperature control can be achieved via the secondary heat sink. Pressure control should be maintained by the use of pressurizer heaters and sprays.

Shutdown margin is achieved through normal or emergency boration via the normal charging flowpath.

Perform cooldown utilizing steam dump system and auxiliary feedwater. Cooldown rate not to exceed 100°F per hour.

### Alternate Verification Method

Auxiliary feedwater flow will be maintained as previously discussed.

RCS temperature control will be achieved by natural circulation and secondary heat sink maintenance. Primary pressure control will be a function of temperature. No credit is taken for pressurizer heaters and the reactor is assumed to be shutdown.

Shutdown margin will be achieved by boration through either the high head emergency core cooling system injection lines or via the reactor coolant pump seals.

Cooldown is achieved by utilizing steam generator PORVs and auxiliary feedwater. Cooldown rate is not to exceed 25°F per hour when on natural circulation (to reduce voiding).

Required Action

Normal Verification Method

Alternate Verification Method

Maintain Stable RCS Conditions

Stabilize temperature at 350°F and prepare for operation of the residual heat removal (RHR) system.

Stabilize RCS temperature below 350°F utilizing the steam generator PORVs. If condensate supply becomes insufficient or if cooldown to cold shutdown is desired place RHR system inservice and continue cooldown to less than 200°F.

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## SECTION 6

### RESULTS INCLUDING ANY PROGRAMMATIC DEVIATIONS

The plant walkdowns, the seismic evaluations and the relay evaluations have been completed in both units of Donald C. Cook Nuclear Plant as per the requirement of the NRC GL 87-02.

The implementation of the program was in accordance with Part I, Section 1.3 of the Generic Implementation Procedure (GIP) Revision No. 2 (corrected February 14, 1992) and as supplemented by the NRC Safety Evaluation Report (SSER) No. 2 dated May 22, 1992. This includes complying with the requirements of Section No. 8 of the GIP for cable tray and conduit evaluation. Indiana Michigan Power confirms that no significant or programmatic deviations from the GIP guidance were made during the USI A-46 resolution process.

The seismic evaluation results are summarized in Attachment No. 2 and the relay evaluation is summarized in Attachment No. 3.

## SECTION 7

### REFERENCES

1. NRC Generic Letter (GL) 87-02 "Verification of Seismic Adequacy of Mechanical and Electrical Equipment in Operating Reactors, Unresolved Safety issue (USE) A-46", February 19, 1987.
2. Donald C. Cook Nuclear Plant Technical Specifications, Units 1 and 2.
3. Donald C. Cook Nuclear Plant UFSAR, Section 2.9, Plant Design Criteria for Structures and Equipment.
4. TID-7024, "Nuclear Reactors and Earthquakes" August, 1963.
5. G. W. Housner, "Design of Nuclear Power Reactors Against Earthquakes", Proceedings of the Second World Conference on Earthquake Engineering, Vol. I, Japan 1960, pp. 133, 134, and 135.
6. ANSI/IEEE Std. 344-1971, IEEE Guide for Seismic Qualification of Class I Electric Equipment for Nuclear Power Generating Stations, Approved September 16, 1971.
7. Generic Implementation Procedure (GIP) for Seismic Verification of Nuclear Plant Equipment, Rev. 2, February, 1992.
8. NRC Letter "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.
9. ANSI/IEEE Std. 344-1975, IEEE Recommended Practices for Seismic Qualification of Class 1E Equipment for Nuclear Power Generating Stations, Approved November 17, 1977.
10. NUREG-1030, "Seismic Qualification of Equipment in Operating Nuclear Power Plants," Unresolved Safety Issue A-46, August, 1985.
11. Letter, N. P. Smith, SQUG chairman, to Dr. T. E. Murley, Director, Office of NRR, USNRC, October 9, 1987.
12. GIPPER software.

**APPENDIX B**


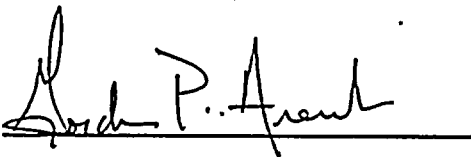



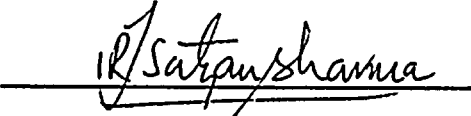
**DONALD C. COOK NUCLEAR PLANT - UNIT 1**

**SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC REVIEW**

## Donald C. Cook Nuclear Plant - Unit 1

### SSEL Certification:

The information identifying the equipment required to bring the plant to a safe shutdown condition on this safe shutdown equipment list is, to be the best of our knowledge and belief, correct and accurate.

| <u>Name</u>                            | <u>Signature</u>   | <u>Date</u>        |
|--|--|--------------------|
| B. A. Svensson<br>Operations           |    | <u>1/21/96</u>     |
| G. P. Arent<br>Operations              |    | <u>12-15-95</u>    |
| J. V. Ruparel<br>Systems               |  | <u>Dec 15, 95.</u> |
| H. W. Young<br>Systems                 |  | <u>12/15/95</u>    |
| R. C. Steele<br>Electrical             |  | <u>12-15-95</u>    |
| T. R. Satyan Sharma<br>Project Manager |  | <u>12/15/95</u>    |





**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description   | Building    | Floor Elev | Room or Row Col                    |
|-------------|-------|--------------|--------|--|-------------|------------|------------------------------------|
| 0           | 2     | 1-MRV-210    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 STOP VALVE  | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL               |
| 0           | 1     | 1-MRV-220    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2 STOP VALVE  | AUXILIARY   | 633.00     | W MAIN STM STOP ENCL               |
| 0           | 1     | 1-MRV-230    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3 STOP VALVE  | AUXILIARY   | 633.00     | W MAIN STM STOP ENCL               |
| 0           | 2     | 1-MRV-240    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 STOP VALVE  | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL               |
| 0           | 2     | 1-OME-34E    | 0      | ESW / EAST ESW PUMP PP-7E DISCHARGE STRAINER   | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR PMP RM           |
| 0           | 1     | 1-OME-34W    | 0      | ESW / WEST ESW PUMP PP-7W DISCHARGE STRAINER   | SCREENHOUSE | 591.00     | W ESSNTL SERV WTR PMP RM           |
| 0           | 12    | 1-OME-39     | 0      | MAIN STEAM / AUXILIARY FEED PUMP TURBINE AND GOVERNOR VALVE                            | AUX         | 591.00     | TB DRIVEN AUX FDWTR PMP            |
| 0           | 1     | 1-POV-1-AB   | 0      | STARTING AIR SYST / PILOT OPERATED 4 WAY VALVE FOR AIR START XRV'S FOR DIESEL ENGINE   | AUXILIARY   | 587.00     | AB EMER DSL GEN RM                 |
| 0           | 2     | 1-POV-1-CD   | 0      | STARTING AIR SYST / PILOT OPERATED 4 WAY VALVE FOR AIR START XRV'S FOR DIESEL ENGINE   | AUXILIARY   | 587.00     | CD EMER DSL GEN RM                 |
| 0           | 1     | 1-POV-2-AB   | 0      | STARTING AIR SYSTEM / PILOT OPERATED 4-WAY VALVE FOR AIR START XRV'S FOR DIESEL ENGINE | AUXILIARY   | 587.00     | AB DIESEL GENERATOR ROOM           |
| 0           | 2     | 1-POV-2-CD   | 0      | STARTING AIR SYSTEM / PILOT OPERATED 4-WAY VALVE FOR START XRV'S FOR DIESEL ENGINE     | AUXILIARY   | 587.00     | CD EMERGENCY DIESEL GENERATOR ROOM |
| 0           | 12    | 1-QC-12      | 0      | BORON MAKEUP (CVCS) / NORTH BORIC ACID FILTER  | AUXILIARY   | 587.00     | BORIC ACID STOR TANK               |
| 0           | 1     | 1-QT-100-AB  | 0      | DIESEL COMBUSTION AIR / AB EMERG DIESEL AIR INTAKE FILTER                              | GROUND      | 609.00     | INNER PLANT GROUND                 |
| 0           | 2     | 1-QT-100-CD  | 0      | DIESEL COMBUSTION AIR / CD EMERG DIESEL AIR INTAKE FILTER                              | GROUND      | 609.00     | INNER PLANT GROUND                 |
| 0           | 1     | 1-QT-101-AB  | 0      | DIESEL COMBUSTION AIR / AB EMERG DIESEL AIR INTAKE SILENCER                            | AUXILIARY   | 587.00     | AB EMER DSL GEN RM                 |
| 0           | 2     | 1-QT-101-CD  | 0      | DIESEL COMBUSTION AIR / CD EMERG DIESEL AIR INTAKE SILENCER                            | AUXILIARY   | 587.00     | CD EMER DSL GEN RM                 |
| 0           | 1     | 1-QT-104-AB  | 0      | DIESEL COMBUSTION AIR / AB EMERG DIESEL EXHAUST SILENCER                               | GROUND      | 609.00     | INNER PLANT GROUND                 |
| 0           | 2     | 1-QT-104-CD  | 0      | DIESEL COMBUSTION AIR / CD EMERG DIESEL EXHAUST SILENCER                               | GROUND      | 609.00     | INNER PLANT GROUND                 |
| 0           | 1     | 1-QT-112-AB  | 0      | DIESEL LUBE OIL / AB EMERG DIESEL FULL FLOW LUBE OIL FILTER                            | AUXILIARY   | 579.00     | AB EMER DSL LUBE OIL PIT           |
| 0           | 2     | 1-QT-112-CD  | 0      | DIESEL LUBE OIL / CD EMERG DIESEL FULL FLOW LUBE OIL FILTER                            | AUXILIARY   | 579.00     | CD EMER DSL LUBE OIL PIT           |
| 0           | 1     | 1-QT-113-AB1 | 0      | DIESEL LUBE OIL / AB EMERG DIESEL FULL FLOW LUBE OIL STRAINER 1                        | AUXILIARY   | 579.00     | AB EMER DSL LUBE OIL PIT           |
| 0           | 1     | 1-QT-113-AB2 | 0      | DIESEL LUBE OIL / AB EMERG DIESEL FULL FLOW LUBE OIL STRAINER 2                        | AUXILIARY   | 579.00     | AB EMER DSL LUBE OIL PIT           |
| 0           | 2     | 1-QT-113-CD1 | 0      | DIESEL LUBE OIL / CD EMERG DIESEL LUBE OIL FULL FLOW STRAINER 1                        | AUXILIARY   | 579.00     | CD EMERGENCY DIESEL LUBE OIL PIT   |
| 0           | 2     | 1-QT-113-CD2 | 0      | DIESEL LUBE OIL / CD EMERG DIESEL FULL FLOW LUBE OIL STRAINER 2                        | AUXILIARY   | 579.00     | CD EMER DSL LUBE OIL PIT           |
| 0           | 1     | 1-QT-116-AB  | 0      | DIESEL LUBE OIL / AB EMERG DIESEL LUBE OIL HEATER (TANK)                               | AUXILIARY   | 579.00     | AB EMER DSL LUBE OIL PIT           |
| 0           | 2     | 1-QT-116-CD  | 0      | DIESEL LUBE OIL / CD EMERG DIESEL LUBE OIL HEATER (TANK)                               | AUXILIARY   | 579.00     | CD EMER DSL LUBE OIL PIT           |
| 0           | 1     | 1-QT-118-AB  | 0      | DIESEL LUBE OIL / AB EMERG DIESEL BYPASS LUBE OIL FILTER                               | AUXILIARY   | 579.00     | AB EMER DSL LUBE OIL PIT           |
| 0           | 2     | 1-QT-118-CD  | 0      | DIESEL LUBE OIL / CD EMERG DIESEL BYPASS LUBE OIL FILTER                               | AUXILIARY   | 579.00     | CD EMER DSL LUBE OIL PIT           |
| 0           | 1     | 1-QT-143-AB1 | 0      | DIESEL STARTING AIR / AB EMERG DIESEL CONTROL AIR DRYER 1                              | AUXILIARY   | 587.00     | AB EMER DSL GEN RM                 |
| 0           | 1     | 1-QT-143-AB2 | 0      | DIESEL STARTING AIR / AB EMERG DIESEL CONTROL AIR DRYER 2                              | AUXILIARY   | 587.00     | AB EMER DSL GEN RM                 |
| 0           | 2     | 1-QT-143-CD1 | 0      | DIESEL STARTING AIR / CD EMERG DIESEL CONTROL AIR DRYER 1                              | AUXILIARY   | 587.00     | CD EMER DSL GEN RM                 |
| 0           | 2     | 1-QT-143-CD2 | 0      | DIESEL STARTING AIR / CD EMERG DIESEL CONTROL AIR DRYER 2                              | AUXILIARY   | 587.00     | CD EMER DSL GEN RM                 |
| 0           | 1     | 1-QT-144-AB  | 0      | DIESEL FUEL OIL / AB EMERG DIESEL FUEL OIL TRANSFER FILTER                             | AUXILIARY   | 587.00     | AB EMER DSL GEN RM                 |
| 0           | 2     | 1-QT-144-CD  | 0      | DIESEL FUEL OIL / CD EMERG DIESEL FUEL OIL TRANSFER FILTER                             | AUXILIARY   | 587.00     | CD EMER DSL GEN RM                 |
| 0           | 12    | 1-TK-253-1   | 0      | CONTROL AIR / PRZ TR A B PRESS RELIEF VLV NRV-152 RESERVE CONTROL AIR BOTTLE RACK      | CONTAINMENT | 612.00     | LOWER CONT, QUAD4                  |
| 0           | 12    | 1-TK-253-2   | 0      | CONTROL AIR / PRZ TR A PRESSURE RELIEF VALVE NRV-153 RESERVE CONTROL AIR BOTTLE RACK   | CONTAINMENT | 612.00     | LOWER CONT, QUAD4                  |
| 0           | 12    | 1-TK-253-3   | 0      | CONTROL AIR / PRESSURIZER TR B PRESSURE RELIEF VALVE NRV-152 EMERG. AIR BOTTLE RACK    | CONTAINMENT | 650.00     | UPPER CONT, QUAD3                  |
| 0           | 12    | 1-TK-253-4   | 0      | CONTROL AIR / PRESSURIZER TR A PRESSURE RELIEF VALVE NRV-153 EMERG AIR BOTTLE RACK     | CONTAINMENT | 650.00     | UPPER CONT, QUAD4                  |
| 0           | 1     | 1-TT-DGAB    | 0      | STARTING AIR / 1 AB DIESEL GEN TUBE TRACK  | AUXILIARY   | 587.00     | AB EMER DSL GEN RM                 |
| 0           | 2     | 1-TT-DGCD    | 0      | STARTING AIR / 1 CD DIESEL GEN TUBE TRACK  | AUXILIARY   | 587.00     | CD EMER DSL GEN RM                 |
| 0           | 12    | 12-HE-19N    | 0      | CVCS (BORON RECOVERY) / NORTH BORIC ACID EVAPORATOR SKID                               | AUXILIARY   | 587.00     | N BORIC ACID EVAPORATOR RM         |



**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description   | Building      | Floor Elev | Room or Row Col                       |
|-------------|-------|--------------|--------|--|---------------|------------|---------------------------------------|
| 0           | 12    | 12-QC-3      | 0      | SPENT FUEL PIT COOLING/CLEANUP /<br>SPENT FUEL PIT FILTER  | UW2 AUXILIARY | 609.00     | SPENT FUEL PIT<br>FILTER RM           |
| 0           | 02    | 12-TK-207    | 0      | NITROGEN (REACTOR PLANT SERVICE) /<br>REACTOR PLANT NITROGEN BULK<br>STORAGE TANKS #3, 4, 5, 6, 7, 8 (8 BOTTLES)                               | GROUNDS       | 609.00     | REACTOR GAS<br>BOTTLE STORAGE<br>AREA |
| 1           | 1     | 1-AB-A       | 0      | ELECTRICAL DISTRIBUTION 600VAC /<br>600VAC MCC AB-A  | AUXILIARY     | 587.00     | 587 HALLWAY                           |
| 1           | 2     | 1-AB-D       | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600<br>VAC MCC 1-AB-D   | AUXILIARY     | 587.00     | 587 HALLWAY                           |
| 1           | 12    | 1-AB-N       | 0      | 250 VDC CONTROL AND INSTRUMENTATION<br>/ CONTROL CENTER VALVE  | AUXILIARY     | 587.00     | 587 HALLWAY                           |
| 1           | 1     | 1-ABD-A      | 0      | ELECTRICAL DISTRIBUTION 600VAC /<br>600VAC MCC ABD-A   | AUXILIARY     | 587.00     | AB EMER DSL GEN<br>RM                 |
| 1           | 1     | 1-ABD-B      | 0      | ELECTRICAL DISTRIBUTION 600VAC /<br>600VAC MCC ABD-B   | AUXILIARY     | 587.00     | AB EMER DSL GEN<br>RM                 |
| 1           | 2     | 1-ABD-C      | 0      | ELECTRICAL DISTRIBUTION 600VAC /<br>600VAC MCC ABD-C   | AUXILIARY     | 587.00     | CD EMER DSL GEN<br>RM                 |
| 1           | 2     | 1-ABD-D      | 0      | ELECTRICAL DISTRIBUTION 600VAC /<br>600VAC MCC ABD-D   | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR                    |
| 1           | 1     | 1-ABV-A      | 0      | ELECTRICAL DISTRIBUTION 600VAC /<br>600VAC VCC ABV-A   | AUXILIARY     | 587.00     | 587 HALLWAY                           |
| 1           | 2     | 1-ABV-D      | 0      | 600V AC DISTR / MCC 1-ABV-D  | AUXILIARY     | 587.00     | 587 HALLWAY                           |
| 1           | 1     | 1-AM-A       | 0      | ELECTRICAL DISTRIBUTION 600VAC /<br>600VAC MCC AM-A  | AUXILIARY     | 633.00     | 633 HALLWAY                           |
| 1           | 2     | 1-AM-D       | 0      | ELECTRICAL DISTRIBUTION 600VAC /<br>600VAC MCC AM-D  | AUXILIARY     | 633.00     | 633 HALLWAY                           |
| 1           | 1     | 1-AZ-BC      | 0      | ELECTRICAL DISTRIBUTION 600VAC /<br>600VAC MCC AZ-BC   | AUXILIARY     | 609.00     | 609 HALLWAY                           |
| 1           | 1     | 1-AZV-A      | 0      | ELECTRICAL DISTRIBUTION 600VAC /<br>600VAC VCC AZV-A   | AUXILIARY     | 587.00     | 609 HALLWAY                           |
| 1           | 1     | 1-EZC-A      | 0      | ELECTRICAL DISTRIBUTION 600VAC /<br>600VAC MCC EZC-A   | AUXILIARY     | 613.00     | 4KV RM - MEZZANINE                    |
| 1           | 1     | 1-EZC-B      | 0      | ELECTRICAL DISTRIBUTION 600VAC /<br>600VAC MCC EZC-B   | AUXILIARY     | 613.00     | 4KV RM - MEZZANINE                    |
| 1           | 2     | 1-EZC-C      | 0      | ELECTRICAL DISTRIBUTION 600VAC /<br>600VAC MCC EZC-C   | AUXILIARY     | 613.00     | 4KV RM - MEZZANINE                    |
| 1           | 2     | 1-EZC-D      | 0      | ELECTRICAL DISTRIBUTION 600VAC /<br>600VAC MCC EZC-D   | AUXILIARY     | 613.00     | 4KV RM - MEZZANINE                    |
| 1           | 1     | 1-PS-A       | 0      | ELECTRICAL DISTRIBUTION, 600 VAC / 600<br>VAC MCC 1-PS-A   | SCREEN HOUSE  | 594.00     | TRAVELING SCRNM<br>MCC UPPER RM       |
| 1           | 2     | 1-PS-D       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600<br>VAC MCC 1-PS-D  | SCREENHOUSE   | 594.00     | TRAVELING SCRNM<br>MCC UPPER RM       |
| 2           |       | 1-11A        | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>600VAC BUS 11A SWITCHGEAR   | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR                    |
| 2           | 1     | 1-11A1       | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>REACTOR ROD CONTROL SOUTH MOTOR-<br>GENERATOR SET CRDMG-1S SUPPLY<br>BREAKER                              | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR                    |
| 2           | 1     | 1-11A10      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / WEST<br>TURBINE AUXILIARY COOLING WATER<br>PUMP PP-14W SUPPLY BREAKER  | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR                    |
| 2           |       | 1-11A11      | 0      | ELECTRICAL DISTRIBUTION 600VAC /<br>600VAC BUS 11A SUPPLY BREAKER  | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR                    |
| 2           | 1     | 1-11A12      | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>600VAC BUS 11A SPARE CIRCUIT BREAKER  | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR                    |
| 2           | 1     | 1-11A13      | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>600VAC MOTOR CONTROL CENTER AM-A1<br>SUPPLY BREAKER   | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR                    |
| 2           | 1     | 1-11A2       | 0      | ELECTRICAL DISTRIBUTION 600VAC /<br>600VAC MCC AM-A SUPPLY BREAKER   | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR                    |
| 2           | 1     | 1-11A3       | 0      | ELECTRICAL DISTRIBUTION 600VAC /<br>600VAC MCC EZC-A SUPPLY BREAKER  | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR                    |
| 2           | 1     | 1-11A4       | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>SOUTH PLANT LIGHTING TRANSFORMER TR-<br>LTG-9S SUPPLY BREAKER   | U-1 AUXILIARY | 609.00     | 4KV RM - 600V SWGR                    |
| 2           | 1     | 1-11A5       | 0      | ELECTRICAL DISTRIBUTION 600VAC /<br>600VAC MCC ABD-A SUPPLY BREAKER  | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR                    |
| 2           | 1     | 1-11A6       | 0      | ELECTRICAL DISTRIBUTION 600VAC /<br>600VAC MCCS AB-A, PS-A, TPP-A, AND<br>VCCS ABV-A, AZV-A SUPPLY BREAKER                                     | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR                    |
| 2           | 1     | 1-11A7       | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>SERVICE BUILDING LIGHTING<br>TRANSFORMER 12-TR-LTG-14 SUPPLY<br>BREAKER                                   | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR                    |
| 2           | 1     | 1-11A8       | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>600VAC BORIC ACID HEAT TRACE CONTROL<br>CENTER BHT-A SUPPLY BREAKER                                       | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR                    |
| 2           | 1     | 1-11A9       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / TSC<br>UNINTERRUPTABLE PWR SOURCE EMER<br>FEED CONSTANT VOLTAGE TRANSFORMER<br>12-TSC-UPS-CVT SUPPLY BREAKER | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR                    |
| 2           | 12    | 1-11AC       | 0      | ELECTRICAL DISTRIBUTION, 600 VAC / 600<br>VAC. BUS 11A TO 600VAC. BUS 11C TIE<br>BREAKER   | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR                    |
| 2           | 1     | 1-11B        | 0      | ELECTRICAL DISTRIBUTION, 600VAC /<br>600VAC BUS 11B SWITCHGEAR   | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR                    |
| 2           | 1     | 1-11B1       | 0      | ELECTRICAL DISTRIBUTION 600VAC /<br>600VAC MCC ABD-B SUPPLY BREAKER (1-<br>ELSC)   | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR                    |

**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description  | Building  | Floor Elev | Room or Row Col    |
|-------------|-------|--------------|--------|---|-----------|------------|--------------------|
| 2           | 1     | 1-11B10      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / PLANT AIR COMPRESSOR OME-41 SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 1     | 1-11B11      | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC BUS 11B SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 1     | 1-11B12      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / SOUTH NON-ESSENTIAL SERVICE WATER PUMP PP-8S SUPPLY BREAKER                           | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 1     | 1-11B13      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / TURBINE ROOM INDUCTION HEATING, STRESS RELIEF AND BOLT HEATERS SUPPLY BREAKER         | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 1     | 1-11B2       | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC EZC-8 SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 1     | 1-11B3       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / EAST AND WEST AUXILIARY BUILDING CRANES 12-QM-3E AND 12-QM-3W SUPPLY BREAKER          | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 1     | 1-11B4       | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC AZ-BC SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 1     | 1-11B5       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTERS TBG-BE AND TBP-BW SUPPLY BREAKER                         | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 1     | 1-11B6       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / EAST TURBINE AUXILIARY COOLING WATER PUMP PP-14E SUPPLY BREAKER                       | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 1     | 1-11B7       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / PLANT HEATING BOILER FORCED DRAFT FAN 12-OME-10-FAN SUPPLY BREAKER                    | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 1     | 1-11B8       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / MAKEUP PLANT VACUUM DEGASIFIER 2ND STAGE VACUUM PUMP 12-PP-44M SUPPLY BREAKER         | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 1     | 1-11B9       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC BUS 11B SPARE CIRCUIT BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 12    | 1-11BD       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / TIE CIRCUIT BREAKER BETWEEN BUS 11B AND 11D   | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11C        | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 11C SWITCHGEAR   | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11C1       | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC BUS 11C SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11C10      | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCCS ABD-C AND TSC-S SUPPLY BREAKER   | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11C11      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC BUS 11C SPARE CIRCUIT BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11C12      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / NORTH SPENT FUEL PIT PUMP 12-PP-31N SUPPLY BREAKER                                    | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11C13      | 0      | ELECTRICAL DISTRIBUTION 600 VAC / CIRCUIT BREAKER-800V FOR RECIPROCATING CHARGING PUMP 1-PP-49                          | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11C14      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC BUS 11C SPARE CIRCUIT BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11C15      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / TECHNICAL SUPPORT CENTER UNINTERRUPTABLE POWER SUPPLY NORMAL SUPPLY BREAKER           | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11C16      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTERS TBC-CS AND TBG-CW SUPPLY BREAKER                         | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11C17      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / NORTH NON-ESSENTIAL SERVICE WATER PUMP PP-8N SUPPLY BREAKER                           | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11C18      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / TURBINE BUILDING 240/50 TON OVERHEAD CRANE 12-QM-1 SUPPLY BREAKER                     | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11C2       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / CONTAINMENT POLAR CRANE QM-4 SUPPLY BREAKER   | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11C3       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER AM-C1 SUPPLY BREAKER                                      | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11C4       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / CIRCULATING WATER TRAVELING SCREENS NORTH WASH PUMP 12-PP-15N SUPPLY BREAKER          | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11C5       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / MAKEUP PLANT VACUUM DEGASIFIER STANDBY VACUUM PUMP 12-PP-44W SUPPLY BREAKER           | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11C6       | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC EZC-C SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11C7       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC BUS 11C SPARE CIRCUIT BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |
| 2           | 2     | 1-11C8       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / SERVICE BUILDING AND CONTAINMENT STANDBY LIGHTING TRANSFORMER TR-LTG-8 SUPPLY BREAKER | AUXILIARY | 609.00     | 4KV RM - 600V SWGR |

**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description  | Building  | Floor Elev | Room or Row Col      |
|-------------|-------|--------------|--------|---|-----------|------------|----------------------|
| 2           | 2     | 1-11C9       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / MAIN AND SPARE TRANSFORMER AUXILIARIES NORMAL DISTRIBUTION CABINET TCSN SUPPLY BREAKER    | AUXILIARY | 609.00     | 4KV RM - 600V SWGR   |
| 2           | 2     | 1-11D        | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC BUS 11D SWITCHGEAR   | AUXILIARY | 609.00     | 4KV RM - 600V SWGR   |
| 2           | 2     | 1-11D1       | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC BUS 11D SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR   |
| 2           | 2     | 1-11D10      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / NORTH PLANT LIGHTING TRANSFORMER TR-LTG-9N SUPPLY BREAKER                                 | AUXILIARY | 609.00     | 4KV RM - 600V SWGR   |
| 2           | 2     | 1-11D11      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC BORIC ACID HEAT TRACE CONTROL CENTER BHT-D SUPPLY BREAKER                          | AUXILIARY | 609.00     | 4KV RM - 600V SWGR   |
| 2           | 2     | 1-11D13      | 0      | ELECTRICAL DISTRIBUTION, 600VAC / REACTOR ROD CONTROL NORTH MOTOR-GENERATOR SET CRDMG-1N SUPPLY BREAKER                     | AUXILIARY | 609.00     | 4KV RM - 600V SWGR   |
| 2           | 2     | 1-11D14      | 0      | 600V AC DISTR / 600VAC MCC 1-AB-D, VCC 1-ABV-D, MCC 1-PS-D SUPPLY BREAKER   | AUXILIARY | 609.00     | 4KV RM - 600V SWGR   |
| 2           | 2     | 1-11D3       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / CONTAINMENT LIGHTING TRANSFORMER TR-LTG-10 SUPPLY BREAKER                                 | AUXILIARY | 609.00     | 4KV RM - 600V SWGR   |
| 2           | 2     | 1-11D4       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC BUS 11D SPARE CIRCUIT BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR   |
| 2           | 2     | 1-11D5       | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC ABD-D SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR   |
| 2           | 2     | 1-11D6       | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC EZC-D SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR   |
| 2           | 2     | 1-11D8       | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC A-M-D SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR   |
| 2           | 2     | 1-11D9       | 0      | ELECTRICAL DISTRIBUTION, 600VAC / MAIN AND SPARE TRANSFORMER AUXILIARIES EMERGENCY DISTRIBUTION CABINET TCSE SUPPLY BREAKER | AUXILIARY | 609.00     | 4KV RM - 600V SWGR   |
| 2           | 2     | 1-52-BYA     | 0      | REACTOR TRIP BREAKER / REACTOR ROD CONTROL TRIN 'A' REACTOR TRIP BYPASS CIRCUIT BREAKER                                     | AUXILIARY | 609.00     | CRD EQUIP RM         |
| 2           | 1     | 1-52-BYB     | 0      | ROD CONTROL AND INSTRUMENTATION / REACTOR ROD CONTROL TRIN 'B' REACTOR TRIP BYPASS CIRCUIT BREAKER                          | AUXILIARY | 609.00     | CRD EQUIP RM         |
| 2           | 2     | 1-52-RTA     | 0      | ROD CONTROL AND INSTRUMENTATION / REACTOR ROD CONTROL TRIN 'A' REACTOR TRIP CIRCUIT BREAKER                                 | AUXILIARY | 609.00     | CRD EQUIP RM         |
| 2           | 1     | 1-52-RTB     | 0      | ROD CONTROL AND INSTRUMENTATION / REACTOR ROD CONTROL TRIN 'B' REACTOR TRIP CIRCUIT BREAKER                                 | AUXILIARY | 609.00     | CRD EQUIP RM         |
| 3           | 1     | 1-T11A       | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 4KV BUS T11A SWITCHGEAR  | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR |
| 3           | 1     | 1-T11A1      | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC / SOUTH SAFETY INJECTION PUMP PP-26S SUPPLY BREAKER                                       | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR |
| 3           | 1     | 1-T11A10     | 0      | ELECTRICAL DISTRIBUTION 4160VAC / 600V BUS 11A SUPPLY TRANSFORMER TR11A SUPPLY BREAKER                                      | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR |
| 3           | 1     | 1-T11A11     | 0      | ELECTRICAL DISTRIBUTION 4160VAC / AB EMERG DIESEL GENERATOR TO 4KV BUS T11A SUPPLY BREAKER                                  | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR |
| 3           | 1     | 1-T11A12     | 0      | ELECTRICAL DISTRIBUTION 4160 VAC / CIRCUIT BREAKER FROM 69kV TO BUS T11A  | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR |
| 3           | 1     | 1-T11A2      | 0      | ELECTRICAL DISTRIBUTION 4160 VAC / WEST MOTOR DRIV AUX FEEDWATER PUMP PP-3V SUPPLY BREAKER                                  | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR |
| 3           | 1     | 1-T11A3      | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC / WEST CONTAINMENT SPRAY PUMP PP-9W SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR |
| 3           | 1     | 1-T11A4      | 0      | ELECTRICAL DISTRIBUTION 4160 VAC / WEST RHR PUMP PP-35W SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR |
| 3           | 1     | 1-T11A5      | 0      | ELECTRICAL DISTRIBUTION 4160VAC / WEST ESW PUMP PP-7W SUPPLY BREAKER  | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR |
| 3           | 1     | 1-T11A6      | 0      | ELECTRICAL DISTRIBUTION , 4160 VAC / 4KV BUS T11A TO 480V PRESSURIZER HEATER BUS SUPPLY XFMR TR11A PHA SUPPLY BRKR          | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR |
| 3           | 1     | 1-T11A7      | 0      | ELECTRICAL DISTRIBUTION 4160VAC / WEST CCW PUMP PP-10W SUPPLY BREAKER   | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR |
| 3           | 1     | 1-T11A8      | 0      | ELECTRICAL DISTRIBUTION 4160VAC / WEST CENTRIFUGAL CHARGING PUMP PP-50W SUPPLY BREAKER                                      | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR |
| 3           | 1     | 1-T11A9      | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 4KV BUS 1A TO 4KV BUS T11A TIE BREAKER   | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR |
| 3           | 1     | 1-T11B       | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 4KV BUS T11B SWITCHGEAR  | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR |
| 3           | 1     | 1-T11B1      | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 4KV BUS 1B TO 4KV BUS T11B TIE BREAKER   | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR |



**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID   | Rev No | System / Equipment Description  | Building  | Floor Elev | Room or Row Col      |
|-------------|-------|----------------|--------|---|-----------|------------|----------------------|
| 3           | 1     | 1-T11B2        | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / CIRCUIT BREAKER FROM 69KV BUS TO BUS T11B  | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR |
| 3           | 1     | 1-T11B4        | 0      | ELECTRICAL DISTRIBUTION 4160VAC / AB EMERG DIESEL GENERATOR TO 4KV BUS T11 SUPPLY BREAKER                           | AUXILIARY | 609.00     | 4KV RM - AB 4KV SWGR |
| 3           | 2     | 1-T11C         | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 4KV BUS T11C SWITCHGEAR  | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR |
| 3           | 2     | 1-T11C1        | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 4KV BUS 1C TO 4KV BUS T11C TIE BREAKER   | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR |
| 3           | 2     | 1-T11C2        | 0      | ELECTRICAL DISTRIBUTION 4160 VOLTS / CIRCUIT BREAKER-4KV FROM 69KV TO BUS T11C                                      | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR |
| 3           | 2     | 1-T11C3        | 0      | ELECTRICAL DISTRIBUTION 4160VAC / CD EMERG DIESEL GENERATOR TO 4KV BUS T11C SUPPLY BREAKER                          | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR |
| 3           | 2     | 1-T11D         | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 4KV BUS T11D SWITCHGEAR  | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR |
| 3           | 2     | 1-T11D1        | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC. / CIRCUIT BREAKER 4KV FROM 69KV FEED TO BUS T11D                                 | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR |
| 3           | 2     | 1-T11D10       | 0      | ELECTRICAL DISTRIBUTION 4160 VAC / EAST ESS SERVICE WATER PUMP 1-PP-7E SUPPLY BREAKER                               | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR |
| 3           | 2     | 1-T11D11       | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC. / EAST MOTOR DRIVEN AUXILIARY FEED WATER PUMP PP-3E SUPPLY BREAKER               | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR |
| 3           | 2     | 1-T11D12       | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 4KV BUS 1D TO 4KV BUS T11D TIE BREAKER   | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR |
| 3           | 2     | 1-T11D2        | 0      | ELECTRICAL DISTRIBUTION 4160VAC / 600V BUS 11D SUPPLY TRANSFORMER TR11D SUPPLY BREAKER                              | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR |
| 3           | 2     | 1-T11D3        | 0      | ELECTRICAL DISTRIBUTION 4160 VAC / CIRCUIT BREAKER-4KV EAST CCW PUMP-1E SUPPLY BREAKER                              | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR |
| 3           | 2     | 1-T11D4        | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC / EAST CONTAINMENT SPRAY PUMP PP-9E SUPPLY BREAKER                                | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR |
| 3           | 2     | 1-T11D5        | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC / NORTH SAFETY INJECTION PUMP PP-26N SUPPLY BREAKER                               | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR |
| 3           | 2     | 1-T11D6        | 0      | ELECTRICAL DISTRIBUTION 4160 VAC / EAST RHR PUMP PP-35E SUPPLY BRKR   | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR |
| 3           | 2     | 1-T11D7        | 0      | ELECTRICAL DISTRIBUTION 4160 VAC / EAST CENTRIFUGAL CHARGING PUMP 1-PP-50E SUPPLY BREAKER                           | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR |
| 3           | 2     | 1-T11D8        | 0      | ELECTRICAL DISTRIBUTION 4160VAC / CD EMERG DIESEL GENERATOR TO 4KV BUS T11D SUPPLY BREAKER                          | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR |
| 3           | 2     | 1-T11D9        | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC / 4KV BUS T11D TO 480V PRESSURIZER HEATER BUS SUPPLY XFMR TR11PHC SUPPLY BRKR     | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR |
| 4           | 2     | 1-CRID-CVT     | 0      | 120V CTRL RM INSTRUMENTATION DISTR / 10KVA TRANSFORMER-CONSTANT VOLTAGE   | AUXILIARY | 609.00     | 4KV RM - 600V SWGR   |
| 4           | 2     | 1-CRID-II-CVT  | 0      | 120VAC DISTRIBUTION / 120V AC CR INST DISTR CH-II ISOL. CONT. VOLT TRANSF   | AUXILIARY | 609.00     | 4KV RM - 600V SWGR   |
| 4           | 1     | 1-CRID-III-CVT | 0      | 120V CTRL RM INSTRUMENTATION DISTR / 10KVA ISOLIMETER -CONSTANT VOLTAGE - TRANSFORMER                               | AUXILIARY | 609.00     | 4KV RM - 600V SWGR   |
| 4           | 1     | 1-CRID-IV-CVT  | 0      | 120V CTRL RM INSTRUMENTATION DISTR / 10KVA ISOLIMETER- CONSTANT VOLTAGE- TRANSFORMER                                | AUXILIARY | 609.00     | 4KV RM - 600V SWGR   |
| 4           | 1     | 1-OGAB-FFCKT   | 0      | DIESEL GENERATION, CONTROL AND INSTRUMEN / AB EMERGENCY DIESEL GENERATOR OME-150-AB FIELD FLASH CIRCUIT TRANSFORMER | AUXILIARY | 587.00     | AB EMER DSL GEN RM   |
| 4           | 2     | 1-OGCD-FFCKT   | 0      | DIESEL GENERATION, CONTROL AND INSTRUMEN / CD EMERGENCY DIESEL GENERATOR OME-150-CD FIELD FLASH CKT TRANSFORMER     | AUXILIARY | 587.00     | CD EMER DSL GEN RM   |
| 4           | 2     | 1-TR-AFW       | 0      | 120/220V CONTROL AND INSTRUMENTATION / AUXILIARY FEEDWATER 120/208VAC DIST PHIL AFW SUPPLY TRANSFORMER              | AUXILIARY | 587.00     | CD EMER DSL GEN RM   |
| 4           | 1     | 1-TR-ELSC      | 0      | 120V/220 CONTROL AND INSTRUMENTATION / 120/208 VAC EMERGENCY LOCAL SHUTDOWN DISTRIBUTION TRANSFORMER                | AUXILIARY | 587.00     | AB EMER DSL GEN RM   |
| 4           | 1     | 1-TR11A        | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC BUS 11A SUPPLY TRANSFORMER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR   |
| 4           | 1     | 1-TR11B        | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC BUS 11B SUPPLY TRANSFORMER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR   |
| 4           | 2     | 1-TR11C        | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC BUS 11C SUPPLY TRANSFORMER  | AUXILIARY | 609.00     | 4KV RM - CD 4KV SWGR |
| 4           | 2     | 1-TR11D        | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC BUS 11D SUPPLY TRANSFORMER  | AUXILIARY | 609.00     | 4KV RM - 600V SWGR   |
| 5           | 2     | 1-PP-10E       | 0      | CCW / EAST CCW PUMP   | AUXILIARY | 609.00     | 609 HALLWAY          |
| 5           | 2     | 1-PP-10W       | 0      | CCW / WEST CCW PUMP   | AUXILIARY | 609.00     | 609 HALLWAY          |
| 5           | 2     | 1-PP-26N       | 0      | SAFETY INJECTION / NORTH SAFETY INJECTION PUMP  | AUXILIARY | 587.00     | N SAFETY INJ PMP RM  |





**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description   | Building    | Floor Elev | Room or Row Col               |
|-------------|-------|--------------|--------|--|-------------|------------|-------------------------------|
| 5           | 1     | 1-PP-26S     | 0      | SAFETY INJECTION / SOUTH SAFETY INJECTION PUMP   | AUXILIARY   | 587.00     | S SAFETY INJ PMP RM           |
| 5           | 2     | 1-PP-3E      | 0      | AUX FEEDWATER / EAST MOTOR DRIV AUX FEEDWATER PUMP                                       | TURBINE     | 591.00     | E MOTOR DRIVEN AUX FDWTR PU   |
| 5           | 1     | 1-PP-3W      | 0      | AUX FEEDWATER / WEST MOTOR DRIVEN AUX FEEDWATER PUMP                                     | TURBINE     | 591.00     | W MOTOR DRIVEN AUX FDWTR PU   |
| 5           | 12    | 1-PP-4       | 0      | AUX FEEDWATER / TURBINE DRIV AUX FEEDWATER PUMP  | TURBINE     | 591.00     | TB DRIVEN AUX FDWTR PMP       |
| 5           | 2     | 1-PP-48-1    | 0      | CVCS / BORIC ACID STORAGE TANKS TRANSFER PUMP 1  | AUXILIARY   | 587.00     | BORIC ACID STOR TANK          |
| 5           | 1     | 1-PP-48-2    | 0      | CVCS / BORIC ACID STORAGE TANKS TRANSFER PUMP 2  | AUXILIARY   | 587.00     | BORIC ACID STOR TANK          |
| 5           | 12    | 1-PP-49      | 0      | CVCS / RECIPROCATING CHARGING PUMP   | AUXILIARY   | 587.00     | RECIPROCATING CHRG PMP RM     |
| 5           | 2     | 1-PP-50E     | 0      | CVCS / EAST CENTRIFUGAL CHARGING PUMP  | AUXILIARY   | 587.00     | E CNTRFGL CHARG PMP RM        |
| 5           | 1     | 1-PP-50W     | 0      | CVCS / WEST CENTRIFUGAL CHARGING PUMP  | AUXILIARY   | 587.00     | W CENTRIFUGAL CHRG PMP RM     |
| 5           | 2     | 1-PP-82N     | 0      | CONTROL ROOM A/C CHILL WATER / CONTROL ROOM NORTH CHILL WATER CIRCULATION PUMP           | AUXILIARY   | 650.00     | CTRL RM AIR COND RM           |
| 5           | 1     | 1-PP-82S     | 0      | CONTROL ROOM A/C CHILL WATER / CONTROL A/C SOUTH CHILL WATER CIRCULATION PUMP            | AUXILIARY   | 650.00     | CTRL RM AIR COND RM           |
| 5           | 1     | 1-QT-108-AB1 | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL TRANSFER PUMP #1                          | AUXILIARY   | 587.00     | AB EMER DSL FUEL OIL XFR PMP  |
| 5           | 1     | 1-QT-108-AB2 | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL TRANSFER PUMP #2                          | AUXILIARY   | 587.00     | AB EMER DSL FUEL OIL XFR PMP  |
| 5           | 2     | 1-QT-108-CD1 | 0      | DIESEL FUEL OIL / CD EMERG DIESEL FUEL OIL TRANSFER PUMP 1                               | AUXILIARY   | 587.00     | CD EMER DSL FUEL OIL XFER PMP |
| 5           | 2     | 1-QT-108-CD2 | 0      | DIESEL FUEL OIL / CD EMERG DIESEL FUEL OIL TRANSFER PUMP 2                               | AUXILIARY   | 587.00     | CD EMER DSL FUEL OIL XFER PMP |
| 5           | 1     | 1-QT-111-AB  | 0      | DIESEL LUBE OIL / AB EMERG DIESEL LUBE OIL BEFORE AND AFTER PUMP                         | AUXILIARY   | 579.00     | AB EMER DSL LUBE OIL PIT      |
| 5           | 2     | 1-QT-111-CD  | 0      | DIESEL LUBE OIL / CD EMERG DIESEL LUBE OIL BEFORE AND AFTER PUMP                         | AUXILIARY   | 579.00     | CD EMER DSL LUBE OIL PIT      |
| 5           | 1     | 1-QT-117-AB  | 0      | DIESEL LUBE OIL / AB EMERG DIESEL LUBE OIL HEATER QT-118-AB PUMP                         | AUXILIARY   | 579.00     | AB EMER DSL LUBE OIL PIT      |
| 5           | 2     | 1-QT-117-CD  | 0      | DIESEL LUBE OIL / CD EMERG DIESEL LUBE OIL HEATER QT-118-CD PUMP                         | AUXILIARY   | 579.00     | CD EMER DSL LUBE OIL PIT      |
| 5           | 1     | 1-QT-119-AB  | 0      | DIESEL LUBE OIL / AB EMERG DIESEL LUBE OIL FILTER (QT-118-AB) PUMP                       | AUXILIARY   | 579.00     | AB EMER DSL LUBE OIL PIT      |
| 5           | 2     | 1-QT-119-CD  | 0      | DIESEL LUBE OIL / CD EMERG DIESEL BYPASS LUBE OIL FILTER (QT-118-CD) PUMP                | AUXILIARY   | 579.00     | CD EMER DSL LUBE OIL PIT      |
| 5           | 1     | 1-QT-130-AB1 | 0      | DIESEL JACKET WATER / AB EMERG DIESEL JACKET WATER PUMP 1                                | AUXILIARY   | 587.00     | AB EMER DSL GEN RM            |
| 5           | 1     | 1-QT-130-AB2 | 0      | DIESEL JACKET WATER / AB EMERG DIESEL JACKET WATER PUMP 2                                | AUXILIARY   | 587.00     | AB EMER DSL GEN RM            |
| 5           | 2     | 1-QT-130-CD1 | 0      | DIESEL JACKET WATER / CD EMERG DIESEL JACKET WATER PUMP 1                                | AUXILIARY   | 587.00     | CD EMER DSL GEN RM            |
| 5           | 2     | 1-QT-130-CD2 | 0      | DIESEL JACKET WATER / CD EMERG DIESEL JACKET WATER PUMP 2                                | AUXILIARY   | 587.00     | CD EMER DSL GEN RM            |
| 5           | 1     | 1-QT-135-AB  | 0      | DIESEL JACKET WATER / AB EMERG DIESEL AUX JACKET WATER PUMP                              | AUXILIARY   | 587.00     | AB EMER DSL GEN RM            |
| 5           | 2     | 1-QT-135-CD  | 0      | DIESEL JACKET WATER / CD EMERG DIESEL AUX JACKET WATER PUMP                              | AUXILIARY   | 587.00     | CD EMER DSL GEN RM            |
| 5           | 12    | 12-PP-10     | 0      | CCW / SPARE CCW PUMP   | AUXILIARY   | 609.00     | 609 HALLWAY                   |
| 5           | 12    | 12-PP-31N    | 0      | SPENT FUEL PIT COOLING/CLEANUP / NORTH SPENT FUEL PIT PUMP                               | UNIT #1 AUX | 609.00     | SPENT FUEL PIT HEAT XCHGR RM  |
| 6           | 2     | 1-PP-35E     | 0      | RHR / EAST RHR PUMP  | AUXILIARY   | 573.00     | EAST RHR PUMP RM              |
| 6           | 1     | 1-PP-35W     | 0      | RHR / WEST RHR PUMP  | AUXILIARY   | 573.00     | W RHR PUMP RM                 |
| 6           | 2     | 1-PP-7E      | 0      | ESW / EAST ESW PUMP  | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR PMP RM      |
| 6           | 1     | 1-PP-7W      | 0      | ESW / WEST ESW PUMP  | SCREENHOUSE | 591.00     | W ESSNTL SERV WTR PMP RM      |
| 6           | 2     | 1-PP-9E      | 0      | CONTAINMENT SPRAY / EAST CONTAINMENT SPRAY PUMP  | AUXILIARY   | 573.00     | E CONT SPRAY PMP RM           |
| 6           | 1     | 1-PP-9W      | 0      | CONTAINMENT SPRAY / WEST CONTAINMENT SPRAY PUMP  | AUXILIARY   | 573.00     | W CONT SPRAY PMP RM           |
| 7           | 2     | 1-CRV-410    | 0      | CCW / DEMINERALIZED MAKEUP WATER TO CCW SURGE TANK 'A' 1.5 in AIR OPERATED SHUTOFF VALVE | AUXILIARY   | 650.00     | 650 HALLWAY                   |
| 7           | 1     | 1-CRV-411    | 0      | CCW / DEMINERALIZED MAKEUP WATER TO CCW SURGE TANK 'B' 1.5 in AIR OPERATED SHUTOFF VALVE | AUXILIARY   | 650.00     | 650 HALLWAY                   |
| 7           | 2     | 1-DCR-301    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 1 BLOWDOWN SAMPLE DSR-301 CONTAINMENT ISOLATION VALVE | AUXILIARY   | 591.00     | VESTIBULE                     |
| 7           | 1     | 1-DCR-302    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 2 BLOWDOWN SAMPLE DSR-302 CONTAINMENT ISOLATION VALVE | AUXILIARY   | 591.00     | VESTIBULE                     |
| 7           | 1     | 1-DCR-303    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 3 BLOWDOWN SAMPLE DSR-303 CONTAINMENT ISOLATION VALVE | AUXILIARY   | 591.00     | VESTIBULE                     |
| 7           | 2     | 1-DCR-304    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 4 BLOWDOWN SAMPLE DSR-304 CONTAINMENT ISOLATION VALVE | AUXILIARY   | 591.00     | VESTIBULE                     |



**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID  | Rev No | System / Equipment Description  | Building    | Floor Elev | Room or Row Col               |
|-------------|-------|---------------|--------|---|-------------|------------|-------------------------------|
| 7           | 2     | 1-DCR-310     | 0      | BLOWDOWN / STEAM GENERATOR OME-3-1 BLOWDOWN CONTAINMENT ISOLATION VALVE   | AUXILIARY   | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 7           | 1     | 1-DCR-320     | 0      | BLOWDOWN / STEAM GENERATOR OME-3-2 BLOWDOWN CONTAINMENT ISOLATION VALVE   | AUXILIARY   | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 7           | 1     | 1-DCR-330     | 0      | BLOWDOWN / STEAM GENERATOR OME-3-3 BLOWDOWN CONTAINMENT ISOLATION VALVE   | AUXILIARY   | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 7           | 2     | 1-DCR-340     | 0      | BLOWDOWN / STEAM GENERATOR OME-3-4 BLOWDOWN CONTAINMENT ISOLATION VALVE   | AUXILIARY   | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 7           | 12    | 1-DRV-407     | 0      | STEAM LINE DRAINS / MAIN STEAM LEADS CONDENSATION DRAIN TANK TK-200, OUTLET SHUTOFF VALVE                                     | AUXILIARY   | 621.00     | W MAIN STM STOP ENCL          |
| 7           | 1     | 1-FRV-245     | 0      | AUX FEEDWATER / WEST MOTOR DRIV AUX FEEDWATER PUMP PP-3W 2 In AIR OPERATED TEST VALVE   | TURBINE     | 591.00     | W MOTOR DRIVEN AUX FDWTR PU   |
| 7           | 1     | 1-FRV-247     | 0      | AUX FEEDWATER / WEST MOTOR DRIV AUX FEEDWATER PUMP PP-3W EMERG 1 In AIR OPERATED LEAKOFF GLOBE VALVE                          | TURBINE     | 591.00     | W MOTOR DRIVEN AUX FDWTR PU   |
| 7           | 2     | 1-FRV-255     | 0      | AUX FEEDWATER / EAST MOTOR DRIV AUX FEEDWATER PUMP PP-3E 2 In AIR OPERATED TEST VALVE   | TURBINE     | 591.00     | E MOTOR DRIVEN AUX FDWTR PU   |
| 7           | 12    | 1-FRV-256     | 0      | AUX FEEDWATER / TURBINE DRIV AUX FEED PUMP PP-4 2 In AIR OPERATED TEST VALVE  | TURBINE     | 591.00     | TB DRIVEN AUX FDWTR PMP       |
| 7           | 2     | 1-FRV-257     | 0      | AUX FEEDWATER / EAST MOTOR DRIV AUX FEEDWATER PUMP PP-3E EMERG 1 In AIR OPERATED LEAKOFF VALVE                                | TURBINE     | 591.00     | E MOTOR DRIVEN AUX FDWTR PU   |
| 7           | 12    | 1-FRV-258     | 0      | AUX FEEDWATER / TURBINE DRIV AUX FEED PUMP EMERG 1 In AIR OPERATED LEAKOFF GLOBE VALVE  | TURBINE     | 591.00     | TB DRIVEN AUX FDWTR PMP       |
| 7           | 12    | 1-GCR-314     | 0      | NITROGEN (REACTOR PLANT SERVICE) / NITROGEN SUPPLY TO ACCUMULATOR TANKS CONTAINMENT ISOLATION VALVE                           | AUXILIARY   | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 7           | 12    | 1-GRV-341     | 0      | NITROGEN (REACTOR PLANT SERVICE) / NITROGEN SUPPLY TO ACCUMULATOR TANKS VENT TO ATMOS. VALVE                                  | CONTAINMENT | 598.00     | ANNULUS, QUAD2                |
| 7           | 12    | 1-HV-SGR-MD-1 | 0      | AUX BUILDING VENTILATION / CONTROL ROD DRIVE EQUIP ROOM AND INVERTER AREA VENTILATION RECIRCULATING AIR INLET DAMPER          | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR            |
| 7           | 12    | 1-HV-SGR-MD-2 | 0      | AUX BUILDING VENTILATION / CONTROL ROD DRIVE EQUIP ROOM AND INVERTER AREA VENTILATION RECIRCULATING AIR INLET DAMPER          | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR            |
| 7           | 2     | 1-RV-112      | 0      | NITROGEN (REACTOR PLANT SERVICES) / ACCUMULATOR TANK OME-6-1 NITROGEN SUPPLY VENT VALVE                                       | CONTAINMENT | 612.00     | ACCUM TANK1 AREA              |
| 7           | 2     | 1-RV-116      | 0      | RHR / ACCUMULATOR TANK OME-6-1 0.75 In AIR OPERATED OUTLET TO REACTOR COOLANT LOOP #1 COLD LEG TEST VALVE                     | CONTAINMENT | 598.00     | ANNULUS, QUAD1                |
| 7           | 1     | 1-RV-122      | 0      | NITROGEN (REACTOR PLANT SERVICES) / ACCUMULATOR TANK OME-6-2 NITROGEN SUPPLY VENT VALVE                                       | CONTAINMENT | 612.00     | ACCUM TANK2 AREA              |
| 7           | 1     | 1-RV-126      | 0      | RHR / ACCUMULATOR TANK OME-6-2 0.75 In AIR OPERATED OUTLET AND SAFETY INJECTION TO REACTOR COOLANT LOOP 2 COLD LEG TEST VALVE | CONTAINMENT | 598.00     | ANNULUS, QUAD2                |
| 7           | 2     | 1-RV-132      | 0      | NITROGEN (REACTOR PLANT SERVICES) / ACCUMULATOR TANK OME-6-3 NITROGEN SUPPLY VENT VALVE                                       | CONTAINMENT | 612.00     | ACCUM TANK3 AREA              |
| 7           | 2     | 1-RV-136      | 0      | RHR / ACCUMULATOR TANK OME-6-3 OUTLET AND SAFETY INJECTION TO REACTOR COOLANT LOOP 3 COLD LEG 0.75 In AIR OPERATED TEST VALVE | CONTAINMENT | 598.00     | ANNULUS, QUAD3                |
| 7           | 1     | 1-RV-142      | 0      | NITROGEN (REACTOR PLANT SERVICES) / ACCUMULATOR TANK OME-6-4 NITROGEN SUPPLY VENT VALVE                                       | CONTAINMENT | 612.00     | ACCUM TANK4 AREA              |
| 7           | 1     | 1-RV-146      | 0      | RHR / ACCUMULATOR TANK OME-6-4 1 In AIR OPERATED OUTLET AND SAFETY INJECTION TO REACTOR COOLANT LOOP 4 COLD LEG TEST VALVE    | CONTAINMENT | 598.00     | ANNULUS, QUAD4                |
| 7           | 1     | 1-RV-147      | 0      | RHR / WEST RHR AND SOUTH SAFETY INJECTION TO REACTOR COOLANT LOOPS 2 AND 3 0.75 In AIR OPERATED TEST VALVE                    | CONTAINMENT | 612.00     | HV-CEQ-1 FAN RM               |
| 7           | 2     | 1-RV-148      | 0      | RHR / EAST RHR AND NORTH SAFETY INJECTION TO REACTOR COOLANT LOOPS 1 AND 4 0.75 In AIR OPERATED TEST VALVE                    | CONTAINMENT | 612.00     | HV-CEQ-1 FAN RM               |
| 7           | 1     | 1-RV-149      | 0      | RHR / WEST RHR TO REACTOR COOLANT LOOPS 2 AND 3 0.75 In AIR OPERATED TEST VALVE   | CONTAINMENT | 612.00     | HV-CEQ-1 FAN RM               |
| 7           | 2     | 1-RV-150      | 0      | RHR / EAST RHR TO REACTOR COOLANT LOOPS 1 AND 4 0.75 In AIR OPERATED TEST VALVE   | CONTAINMENT | 612.00     | HV-CEQ-1 FAN RM               |
| 7           | 12    | 1-RV-260      | 0      | SAFETY INJECTION / SAFETY INJECTION TEST LINE SHUTOFF 0.75 In AIR OPERATED VALVE  | AUXILIARY   | 587.00     | N SAFETY INJ PMP RM           |



**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Tran | Equipment ID | Rev No | System / Equipment Description   | Building    | Floor Elev | Room or Row Col            |
|-------------|------|--------------|--------|--|-------------|------------|----------------------------|
| 7           | 2    | 1-RV-310     | 0      | RHR / EAST RHR HEAT EXCHANGER HE-17E<br>8 in AIR OPERATED OUTLET FLOW<br>CONTROL VALVE                             | AUXILIARY   | 609.00     | EAST RHR HEAT<br>EXCHGR RM |
| 7           | 12   | 1-RV-311     | 0      | RHR / RHR HEAT EXCHANGERS BYPASS<br>FLOW 8 in AIR OPERATED CONTROL VALVE   | AUXILIARY   | 609.00     | EAST RHR HEAT<br>EXCHGR RM |
| 7           | 1    | 1-RV-320     | 0      | RHR / WEST RHR HEAT EXCHANGER HE-<br>17W 8 in AIR OPERATED OUTLET FLOW<br>CONTROL VALVE                            | AUXILIARY   | 609.00     | W RHR HEAT XCHGR<br>RM     |
| 7           | 12   | 1-RV-50      | 0      | BORON INJECTION / BORON INJECTION TO<br>ACCUMULATOR FILL LINE 1 in AIR<br>OPERATED CONTROL VALVE                   | CONTAINMENT | 598.00     | ANNULUS, QUAD2             |
| 7           | 12   | 1-RV-60      | 0      | SAFETY INJECTION / SAFETY INJECTION TO<br>ACCUMULATOR FILL LINE 1 in AIR<br>OPERATED CONTROL VALVE                 | CONTAINMENT | 598.00     | ANNULUS, QUAD2             |
| 7           | 2    | 1-MCR-251    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR<br>1 STEAM SAMPLE MSX-101 0.5 in AIR<br>OPERATED CONTAINMENT ISOLATION<br>VALVE | AUXILIARY   | 591.00     | VESTIBULE                  |
| 7           | 1    | 1-MCR-252    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR<br>2 STEAM SAMPLE MSX-102 0.5 in AIR<br>OPERATED CONTAINMENT ISOLATION<br>VALVE | AUXILIARY   | 591.00     | VESTIBULE                  |
| 7           | 1    | 1-MCR-253    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR<br>3 STEAM SAMPLE MSX-103 0.5 in AIR<br>OPERATED CONTAINMENT ISOLATION<br>VALVE | AUXILIARY   | 591.00     | VESTIBULE                  |
| 7           | 2    | 1-MCR-254    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR<br>4 STEAM SAMPLE MSX-104 0.5 in AIR<br>OPERATED CONTAINMENT ISOLATION<br>VALVE | AUXILIARY   | 591.00     | VESTIBULE                  |
| 7           | 2    | 1-MRV-151    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR<br>1 STEAM SAMPLE MSX-101 0.5 in AIR<br>OPERATED CONTAINMENT ISOLATION<br>VALVE | CONTAINMENT | 612.00     | E CONT LWR VENT<br>RM      |
| 7           | 1    | 1-MRV-152    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR<br>2 STEAM SAMPLE MSX-102 0.5 in AIR<br>OPERATED CONTAINMENT ISOLATION<br>VALVE | CONTAINMENT | 612.00     | W CONT LOWER<br>VENT RM    |
| 7           | 1    | 1-MRV-153    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR<br>3 STEAM SAMPLE MSX-103 0.5 in AIR<br>OPERATED CONTAINMENT ISOLATION<br>VALVE | CONTAINMENT | 612.00     | W CONT LOWER<br>VENT RM    |
| 7           | 2    | 1-MRV-154    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR<br>4 STEAM SAMPLE MSX-104 0.5 in AIR<br>OPERATED CONTAINMENT ISOLATION<br>VALVE | CONTAINMENT | 591.00     | E CONT LWR VENT<br>RM      |
| 7           | 2    | 1-MRV-211    | 0      | MAIN STEAM / STEAM GENERATOR 1 STOP<br>VALVE MRV-210 STEAM CYLINDER 'A' DUMP<br>VALVE                              | AUXILIARY   | 633.00     | E MAIN STM STOP<br>ENCL    |
| 7           | 2    | 1-MRV-212    | 0      | MAIN STEAM / STEAM GENERATOR 1 STOP<br>VALVE MRV-210 STEAM CYLINDER 'B' DUMP<br>VALVE                              | AUXILIARY   | 633.00     | E MAIN STM STOP<br>ENCL    |
| 7           | 2    | 1-MRV-213    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-<br>1 PORV  | AUXILIARY   | 633.00     | E MAIN STM STOP<br>ENCL    |
| 7           | 1    | 1-MRV-221    | 0      | MAIN STEAM / STEAM GENERATOR 2 STOP<br>VALVE MRV-220 STEAM CYLINDER 'A' DUMP<br>VALVE                              | AUXILIARY   | 633.00     | W MAIN STM STOP<br>ENCL    |
| 7           | 1    | 1-MRV-222    | 0      | MAIN STEAM / STEAM GENERATOR 2 STOP<br>VALVE MRV-220 STEAM CYLINDER 'B' DUMP<br>VALVE                              | AUXILIARY   | 633.00     | W MAIN STM STOP<br>ENCL    |
| 7           | 1    | 1-MRV-223    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2<br>PORV   | AUXILIARY   | 633.00     | W MAIN STM STOP<br>ENCL    |
| 7           | 1    | 1-MRV-231    | 0      | MAIN STEAM / STEAM GENERATOR 3 STOP<br>VALVE MRV-230 STEAM CYLINDER 'A' DUMP<br>VALVE                              | AUXILIARY   | 633.00     | W MAIN STM STOP<br>ENCL    |
| 7           | 1    | 1-MRV-232    | 0      | MAIN STEAM / STEAM GENERATOR 3 STOP<br>VALVE MRV-230 STEAM CYLINDER 'B' DUMP<br>VALVE                              | AUXILIARY   | 633.00     | W MAIN STM STOP<br>ENCL    |
| 7           | 1    | 1-MRV-233    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3<br>PORV   | AUXILIARY   | 633.00     | W MAIN STM STOP<br>ENCL    |
| 7           | 2    | 1-MRV-241    | 0      | MAIN STEAM / STEAM GENERATOR 4 STOP<br>VALVE MRV-240 STEAM CYLINDER 'A' DUMP<br>VALVE                              | AUXILIARY   | 633.00     | E MAIN STM STOP<br>ENCL    |
| 7           | 2    | 1-MRV-242    | 0      | MAIN STEAM / STEAM GENERATOR 4 STOP<br>VALVE MRV-240 STEAM CYLINDER 'B' DUMP<br>VALVE                              | AUXILIARY   | 633.00     | E MAIN STM STOP<br>ENCL    |
| 7           | 2    | 1-MRV-243    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4<br>PORV   | AUXILIARY   | 633.00     | E MAIN STM STOP<br>ENCL    |
| 7           | 2    | 1-NRV-101    | 0      | NUCLEAR SAMPLING / REACTOR COOLANT<br>LOOP 1 HOT LEG SAMPLE NSX-101<br>SHUTOFF VALVE                               | CONTAINMENT | 598.00     | ANNULUS, QUAD1             |
| 7           | 12   | 1-NRV-102    | 0      | NUCLEAR SAMPLING / PRESSURIZER<br>LIQUID SPACE SAMPLE NSX-102 0.5 in AIR<br>OPERATED SHUTOFF VALVE                 | CONTAINMENT | 612.00     | INSTRUMENTATION<br>RM      |
| 7           | 1    | 1-NRV-103    | 0      | NUCLEAR SAMPLING / REACTOR COOLANT<br>LOOP 3 HOT LEG SAMPLE NSV-103<br>SHUTOFF VALVE                               | CONTAINMENT | 598.00     | ANNULUS, QUAD3             |
| 7           | 12   | 1-NRV-104    | 0      | NUCLEAR SAMPLING / PRESSURIZER<br>STEAM SPACE SAMPLE NSX-104 0.5 in AIR<br>OPERATED SHUTOFF VALVE                  | CONTAINMENT | 612.00     | INSTRUMENTATION<br>RM      |



**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description   | Building    | Floor Elev | Room or Row Col                |
|-------------|-------|--------------|--------|--|-------------|------------|--------------------------------|
| 7           | 1     | 1-NRV-151    | 0      | PRESSURIZER / PRESSURIZER 'B' PRESSURE RELIEF VALVE  | CONTAINMENT | 650.00     | PRESSRZR ENCL, INTERIOR        |
| 7           | 1     | 1-NRV-152    | 0      | PRESSURIZER / PRESSURIZER 'B' PRESSURE RELIEF VALVE  | CONTAINMENT | 650.00     | PRESSRZR ENCL, INTERIOR        |
| 7           | 2     | 1-NRV-153    | 0      | PRESSURIZER / PRESSURIZER 'A' PRESSURE RELIEF VALVE  | CONTAINMENT | 650.00     | PRESSRZR ENCL, INTERIOR        |
| 7           | 1     | 1-NRV-163    | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP 3 TO PRESSURIZER 4 In AIR OPERATED VALVE  | CONTAINMENT | 612.00     | LOWER CONT, QUAD3              |
| 7           | 2     | 1-NRV-164    | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP 4 TO PRESSURIZER SPRAY 4 In AIR OPERATED CONTROL VALVE  | CONTAINMENT | 612.00     | LOWER CONT, QUAD3              |
| 7           | 12    | 1-QRV-10     | 0      | RCTR COOLANT PMP SEAL WTR INJ/LEAKOFF / RCP 1 SEAL 1 LEAKOFF TO RCP SEAL WATER RETURN FILTER QC-109 2 In AIR OPERATED SHUTOFF VALVE                            | CONTAINMENT | 617.00     | LOWER CONT, QUAD1              |
| 7           | 2     | 1-QRV-111    | 0      | CVCS / REACTOR COOLANT NORMAL LETDOWN TRAIN 'A' SHUTOFF VALVE  | CONTAINMENT | 612.00     | LOWER CONT, QUAD4              |
| 7           | 1     | 1-QRV-112    | 0      | CVCS / REACTOR COOLANT NORMAL LETDOWN TRAIN 'B' SHUTOFF VALVE  | CONTAINMENT | 612.00     | LOWER CONT, QUAD4              |
| 7           | 1     | 1-QRV-113    | 0      | CVCS / REACTOR COOLANT EXCESS LETDOWN TO EXCESS LETDOWN HEAT EXCHANGER HE-13 1 In AIR OPERATED 'B' SHUTOFF VALVE   | CONTAINMENT | 612.00     | LOWER CONT, QUAD4              |
| 7           | 2     | 1-QRV-114    | 0      | CVCS / REACTOR COOLANT EXCESS LETDOWN TO EXCESS LETDOWN HEAT EXCHANGER HE-13 1 In AIR OPERATED 'A' SHUTOFF VALVE   | CONTAINMENT | 612.00     | LOWER CONT, QUAD4              |
| 7           | 12    | 1-QRV-150    | 0      | RCTR COOLANT PMP SEAL WTR INJ/LEAKOFF / REACTOR COOLANT PUMPS STARTUP SEAL SYSTEM BYPASS TO SEAL WATER RETURN FILTER QC-109 0.75 In AIR OPERATED SHUTOFF VALVE | CONTAINMENT | 598.00     | ANNULUS, QUAD2                 |
| 7           | 12    | 1-QRV-170    | 0      | CVCS / EXCESS LETDOWN HEAT EXCHANGER HE-13 1 In AIR OPERATED OUTLET PRESSURE CONTROL VALVE   | CONTAINMENT | 612.00     | REGEN HEAT XCHGR RM            |
| 7           | 12    | 1-QRV-171    | 0      | CVCS / EXCESS LETDOWN HEAT EXCHANGER HE-13 1 In AIR OPERATED OUTLET DIVERSION VALVE  | CONTAINMENT | 612.00     | REGEN HEAT XCHGR RM            |
| 7           | 12    | 1-QRV-20     | 0      | RCTR COOLANT PMP SEAL WTR INJ/LEAKOFF / RCP 2 SEAL 1 LEAKOFF TO RCP SEAL WATER RETURN FILTER QC-109 2 In AIR OPERATED SHUTOFF VALVE                            | CONTAINMENT | 617.00     | LOWER CONT, QUAD2              |
| 7           | 12    | 1-QRV-251    | 0      | CVCS / SEAL INJECTION WATER FLOW 3 In AIR OPERATED CONTROL VALVE   | AUXILIARY   | 587.00     | RECIPROCATING CHRG PMP RM      |
| 7           | 12    | 1-QRV-30     | 0      | RCTR COOLANT PMP SEAL WTR INJ/LEAKOFF / RCP 3 SEAL 1 LEAKOFF TO RCP SEAL WATER RETURN FILTER QC-109 2 In AIR OPERATED SHUTOFF VALVE                            | CONTAINMENT | 612.00     | LOWER CONT, QUAD3              |
| 7           | 12    | 1-QRV-40     | 0      | RCTR COOLANT PMP SEAL WTR INJ/LEAKOFF / RCP 4 SEAL 1 LEAKOFF TO RCP RETURN FILTER QC-109 2 In AIR OPERATED SHUTOFF VALVE                                       | CONTAINMENT | 612.00     | LOWER CONT, QUAD4              |
| 7           | 12    | 1-QRV-400    | 0      | CVCS / NORTH BORIC ACID BLENDER OP-21 2 In AIR OPERATED TO CVCS CHARGING PUMP SUCTION SHUTOFF VALVE  | AUXILIARY   | 609.00     | VOL CONTROL TANK E HALLWAY     |
| 7           | 12    | 1-QRV-411    | 0      | CVCS (BORON MAKEUP) / NORTH BORIC ACID FILTER TO CVCS CHARGING PUMPS AND NORTH BORIC ACID BLENDER 1 In AIR OPERATED FLOW CONTROL VALVE                         | AUXILIARY   | 587.00     | BORIC ACID STOR TANK           |
| 7           | 12    | 1-QRV-451    | 0      | BORON MAKEUP (CVCS) / NORTH BORIC ACID BLENDER OP-21 TO REACTOR COOLANT LETDOWN VOLUME CONTROL TANK SHUTOFF VALVE  | AUXILIARY   | 609.00     | VOL CONTROL TANK E HALLWAY     |
| 7           | 12    | 1-SV-101     | 0      | NITROGEN (REACTOR PLANT SERVICE) / NITROGEN SUPPLY HEADER TO ACCUMULATOR TANKS SAFETY VALVE  | AUXILIARY   | 591.00     | STARTUP BLOWDOWN FLASH TANK RM |
| 7           | 12    | 1-SV-102     | 0      | RHR / RHR TO REACTOR COOLANT LOOPS 2 AND 3 COLD LEGS SAFETY VALVE  | CONTAINMENT | 598.00     | ANNULUS, QUAD2 AZ 122          |
| 7           | 12    | 1-SV-103     | 0      | RESIDUAL HEAT REMOVAL / REACTOR COOLANT LOOP #2 HOT LEG TO RESIDUAL HEAT REMOVAL PUMPS SAFETY VALVE  | CONTAINMENT | 598.00     | ANNULUS, QUAD2                 |
| 7           | 2     | 1-SV-104E    | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17E OUTLET SAFETY VALVE   | AUXILIARY   | 609.00     | EAST RHR HEAT EXCHGR RM        |
| 7           | 1     | 1-SV-104W    | 0      | RESIDUAL HEAT REMOVAL / WEST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17W OUTLET SAFETY VALVE   | AUXILIARY   | 609.00     | W RHR HEAT XCHGR RM            |
| 7           | 1     | 1-SV-120-AB  | 0      | DIESEL STARTING AIR / 1-XTC-301 AND 1-XTC-302 CONTROL AIR SAFETY VALVE   | AUXILIARY   | 587.00     | AB EMER DSL GEN RM             |
| 7           | 2     | 1-SV-120-CD  | 0      | DIESEL STARTING AIR / 1-XTC-306 AND 1-XTC-307 CONTROL AIR SAFETY VALVE   | AUXILIARY   | 587.00     | CD EMER DSL GEN RM             |
| 7           | 12    | 1-SV-121     | 0      | CCW / 1-DRA-300 SAMPLE HEAT EXCHANGERS CCW RETURN HEADER SAFETY VALVE  | AUXILIARY   | 591.00     | STARTUP BLOWDOWN FLASH TANK RM |
| 7           | 12    | 1-SV-122-3   | 0      | CCW / CCW TO CONTAINMENT VENT FAN HV-CEQ-1 MOTOR AIR COOLER CCW OUTLET SAFETY VALVE  | CONTAINMENT | 625.00     | HV-CEQ-1 FAN ROOM              |



**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description  | Building    | Floor Elev | Room or Row Col             |
|-------------|-------|--------------|--------|---|-------------|------------|-----------------------------|
| 7           | 12    | 1-SV-122-37  | 0      | CCW / REACTOR SUPPORT COOLERS CCW RETURN HEADER SAFETY VALVE  | CONTAINMENT | 593.00     | ANNULUS, QUAD3 AZ 181       |
| 7           | 12    | 1-SV-122-4   | 0      | CCW / CCW TO CONTAINMENT VENT FAN HV-CEQ-2 MOTOR AIR COOLER CCW OUTLET SV   | CONTAINMENT | 625.00     | HV-CEQ-1 FAN ROOM           |
| 7           | 1     | 1-SV-139-AB  | 0      | DIESEL STARTING AIR / AB EMERG DIESEL STARTING AIR TO TURBOCHARGER SAFETY VALVE   | AUXILIARY   | 587.00     | AB EMER DSL GEN RM          |
| 7           | 2     | 1-SV-139-CD  | 0      | DIESEL STARTING AIR / CD EMERG DIESEL STARTING AIR TO TURBOCHARGER SAFETY VALVE   | AUXILIARY   | 587.00     | CD EMER DSL GEN RM          |
| 7           | 12    | 1-SV-140-1   | 0      | AUX FEEDWATER / TURBINE DRIV AUX FEED PUMP GOVERNOR OIL COOLER COOLING WATER INLET SAFETY VALVE                         | TURBINE     | 591.00     | TB DRIVEN AUX FDWTR PMP     |
| 7           | 12    | 1-SV-140-2   | 0      | AUX FEEDWATER / TURBINE DRIV AUX FEED PUMP OIL COOLER COOLING WATER INLET SAFETY VALVE                                  | TURBINE     | 591.00     | TB DRIVEN AUX FDWTR PMP     |
| 7           | 2     | 1-SV-14E     | 0      | ESW / EAST CONTAINMENT SPRAY HEAT EXCHANGER HE-18E SHELL SIDE SAFETY VALVE  | AUXILIARY   | 609.00     | E CONT SPRAY HEAT XCHGR RM  |
| 7           | 1     | 1-SV-14W     | 0      | ESW / WEST CONTAINMENT SPRAY HEAT EXCHANGER HE-18W SHELL SIDE SAFETY VALVE  | AUXILIARY   | 609.00     | W CONT SPRAY HEAT XCHGR RM  |
| 7           | 2     | 1-SV-15E     | 0      | ESSENTIAL SERVICE WATER / EAST COMPONENT COOLING WATER HEAT EXCHANGER HE-15E TUBE SIDE SAFETY VALVE                     | AUXILIARY   | 609.00     | 609 HALLWAY                 |
| 7           | 1     | 1-SV-15W     | 0      | ESSENTIAL SERVICE WATER / WEST COMPONENT COOLING WATER HEAT EXCHANGER HE-15W TUBE SIDE SAFETY VALVE                     | AUXILIARY   | 609.00     | 609 HALLWAY                 |
| 7           | 2     | 1-SV-16-AB   | 0      | ESSENTIAL SERVICE WATER / AB EMERGENCY DIESEL JACKET WATER COOLER QT-131-AB ESSENTIAL SERVICE WATER OUTLET SAFETY VALVE | AUXILIARY   | 587.00     | AB EMER DSL GEN RM          |
| 7           | 2     | 1-SV-16-CD   | 0      | ESSENTIAL SERVICE WATER / CD EMERGENCY DIESEL JACKET WATER COOLER QT-131-CD ESSENTIAL SERVICE WATER OUTLET SAFETY VALVE | AUXILIARY   | 587.00     | CD EMER DSL GEN RM          |
| 7           | 2     | 1-SV-169E    | 0      | AUX FEEDWATER / EAST MOTOR DRIV AUX FEED PUMP PP-3E SUCTION SAFETY VALVE  | TURBINE     | 591.00     | E MOTOR DRIVEN AUX FDWTR PU |
| 7           | 1     | 1-SV-169W    | 0      | AUX FEEDWATER / WEST MOTOR DRIV AUX FEEDWATER PUMP SUCTION SAFETY VALVE   | TURBINE     | 591.00     | W MOTOR DRIVEN AUX FDWTR PU |
| 7           | 2     | 1-SV-1A-1    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 SAFETY VALVE 1A  | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL        |
| 7           | 1     | 1-SV-1A-2    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2 SAFETY VALVE 1A  | AUXILIARY   | 633.00     | W MAIN STM STOP ENCL        |
| 7           | 1     | 1-SV-1A-3    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3 SAFETY VALVE 1A  | AUXILIARY   | 633.00     | W MAIN STM STOP ENCL        |
| 7           | 2     | 1-SV-1A-4    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 SAFETY VALVE 1A  | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL        |
| 7           | 2     | 1-SV-1B-1    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 SAFETY VALVE 1B  | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL        |
| 7           | 1     | 1-SV-1B-2    | 0      | MAIN STEAM / STEAM GENERATOR 2 SAFETY VALVE 1B  | AUXILIARY   | 633.00     | W MAIN STM STOP ENCL        |
| 7           | 1     | 1-SV-1B-3    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3 SAFETY VALVE 1B  | AUXILIARY   | 633.00     | W MAIN STM STOP ENCL        |
| 7           | 2     | 1-SV-1B-4    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 SAFETY VALVE 1B  | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL        |
| 7           | 1     | 1-SV-200-AB  | 0      | DIESEL FUEL OIL / AB EMERG DIESEL FUEL OIL MANIFOLDS TO FUEL OIL DAY TANK SAFETY VALVE                                  | AUXILIARY   | 587.00     | AB EMER DSL GEN RM          |
| 7           | 2     | 1-SV-200-CD  | 0      | DIESEL FUEL OIL / CD EMERG DIESEL FUEL OIL MANIFOLDS TO FUEL OIL DAY TANK SAFETY VALVE                                  | AUXILIARY   | 587.00     | CD EMER DSL GEN RM          |
| 7           | 1     | 1-SV-201-AB1 | 0      | DIESEL FUEL OIL / AB EMERG DIESEL FRONT BANK FUEL OIL MANIFOLD SAFETY VALVE   | AUXILIARY   | 587.00     | AB EMER DSL GEN RM          |
| 7           | 1     | 1-SV-201-AB2 | 0      | DIESEL FUEL OIL / AB EMERG DIESEL REAR BANK FUEL OIL MANIFOLD SAFETY VALVE  | AUXILIARY   | 587.00     | AB EMER DSL GEN RM          |
| 7           | 2     | 1-SV-201-CD1 | 0      | DIESEL FUEL OIL / CD EMERG DIESEL FRONT BANK FUEL OIL MANIFOLD SAFETY VALVE   | AUXILIARY   | 587.00     | CD EMER DSL GEN RM          |
| 7           | 2     | 1-SV-201-CD2 | 0      | DIESEL FUEL OIL / CD EMERG DIESEL REAR BANK FUEL OIL MANIFOLD SAFETY VALVE  | AUXILIARY   | 587.00     | CD EMER DSL GEN RM          |
| 7           | 2     | 1-SV-2A-1    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 SAFETY VALVE 2A  | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL        |
| 7           | 1     | 1-SV-2A-2    | 0      | MAIN STEAM / STEAM GENERATOR 2 SAFETY VALVE 2A  | AUXILIARY   | 591.00     | TB DRIVEN AUX FDWTR PMP     |
| 7           | 1     | 1-SV-2A-3    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3 SAFETY VALVE 2A  | AUXILIARY   | 633.00     | W MAIN STM STOP ENCL        |
| 7           | 2     | 1-SV-2A-4    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 SAFETY VALVE 2A  | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL        |
| 7           | 2     | 1-SV-2B-1    | 0      | MAIN STEAM / STEAM OME-3-1 SAFETY VALVE 2B  | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL        |
| 7           | 1     | 1-SV-2B-2    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2 SAFETY VALVE 2B  | AUXILIARY   | 633.00     | W MAIN STM STOP ENCL        |



**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID    | Rev No | System / Equipment Description  | Building         | Floor Elev | Room or Row Col                        |
|-------------|-------|-----------------|--------|---|------------------|------------|--|
| 7           | 1     | 1-SV-2B-3       | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3 SAFETY VALVE 2B  | AUXILIARY        | 633.00     | W MAIN STM STOP ENCL                   |
| 7           | 2     | 1-SV-2B-4       | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 SAFETY VALVE 2B  | AUXILIARY        | 633.00     | E MAIN STM STOP ENCL                   |
| 7           | 2     | 1-SV-3-1        | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 SAFETY VALVE 3   | AUXILIARY        | 633.00     | E MAIN STM STOP ENCL                   |
| 7           | 1     | 1-SV-3-2        | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2 SAFETY VALVE 3   | AUXILIARY        | 633.00     | W MAIN STM STOP ENCL                   |
| 7           | 1     | 1-SV-3-3        | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3 SAFETY VALVE #3  | AUXILIARY        | 633.00     | W MAIN STM STOP ENCL                   |
| 7           | 2     | 1-SV-3-4        | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 SAFETY VALVE 3   | AUXILIARY        | 633.00     | E MAIN STM STOP ENCL                   |
| 7           | 12    | 1-SV-45A        | 0      | PRESSURIZER / PRESSURIZER OME-4 SAFETY VALVE 'A'  | CONTAINMENT      | 650.00     | PRESSRZR ENCL, INTERIOR                |
| 7           | 12    | 1-SV-45B        | 0      | PRESSURIZER / PRESSURIZER OME-4 SAFETY VALVE 'B'  | CONTAINMENT      | 650.00     | PRESSRZR ENCL, INTERIOR                |
| 7           | 12    | 1-SV-45C        | 0      | PRESSURIZER / PRESSURIZER OME-4 SAFETY VALVE 'C'  | CONTAINMENT      | 650.00     | PRESSRZR ENCL, INTERIOR                |
| 7           | 12    | 1-SV-50         | 0      | REACTOR COOLANT SYSTEM / REACTOR COOLANT PUMP SEAL 1 AND STARTUP SEAL SYSTEM BYPASS TO SEAL WATER RETURN FILTERS SAFETY VALVE | CONTAINMENT      | 598.00     | ANNULUS, QUAD3                         |
| 7           | 12    | 1-SV-51         | 0      | CVCS / CHARGING TO REGENERATE HEAT EXCHANGER HE-12 LETDOWN OUTLET SAFETY VALVE  | CONTAINMENT      | 598.00     | ANNULUS, QUAD4                         |
| 7           | 12    | 1-SV-54         | 0      | CVCS / REACTOR COOLANT PUMP SEAL WATER HEAT EXCHANGER HE-11 SAFETY VALVE  | AUXILIARY        | 609.00     | SEAL WTR HEAT XCHGR RM                 |
| 7           | 12    | 1-SV-56         | 0      | CVCS / CHARGING PUMPS SUCTION HEADER SAFETY VALVE   | AUXILIARY        | 587.00     | RECIPROCATING CHRG PMP RM              |
| 7           | 12    | 1-SV-60         | 0      | COMPONENT COOLING WATER / COMPONENT COOLING WATER SURGE TANK TK-37 SAFETY VALVE   | AUXILIARY        | 650.00     | 650 HALLWAY                            |
| 7           | 1     | 1-SV-61-AB      | 0      | DIESEL JACKET WATER / AB EMERGENCY DIESEL AUXILIARY JACKET WATER HEATER QT-134-AB SAFETY VALVE                                | AUXILIARY        | 587.00     | AB EMER DSL GEN RM                     |
| 7           | 2     | 1-SV-61-CD      | 0      | DIESEL JACKET WATER / CD EMERGENCY DIESEL AUXILIARY JACKET WATER HEATER QT-134-CD SAFETY VALVE                                | AUXILIARY        | 587.00     | CD EMER DSL GEN RM                     |
| 7           | 12    | 1-SV-62-1,2,3,4 | 0      | CCW / REACTOR COOLANT PUMP PP-45-1 THERMAL BARRIER CCW OUTLET SAFETY VALVE  | CONTAINMENT      | 617.00     | LOWER CONT, QUAD1                      |
| 7           | 12    | 1-SV-63         | 0      | CCW / REACTOR COOLANT PUMP MOTORS BEARING OIL COOLERS CCW RETURN HEADER SAFETY VALVE  | CONTAINMENT      | 598.00     | ANNULUS, QUAD 2 AZ 160                 |
| 7           | 12    | 1-SV-64         | 0      | CCW / EXCESS LETDOWN HEAT EXCHANGER HE-13 CCW OUTLET SAFETY VALVE   | CONTAINMENT      | 598.00     | ANNULUS, QUAD3 AZ 195                  |
| 7           | 12    | 1-SV-65         | 0      | CCW / LETDOWN HEAT EXCHANGER HE-14 CCW OUTLET SAFETY VALVE  | AUXILIARY        | 633.00     | 633 HALLWAY                            |
| 7           | 12    | 1-SV-66         | 0      | COMPONENT COOLING WATER / CCW TO NORTH BORIC ACID EVAP DRUM 12-HE-19-DN SAFETY VALVE  | AUXILIARY        | 587.00     | 587 HALLWAY                            |
| 7           | 12    | 1-SV-67-1       | 0      | CCW / POST-ACCIDENT UNOILUTED LIQUID SAMPLE HE QC-501-13 CCW OUTLET SV  | AUXILIARY        | 587.00     | REFUELING WATER PURIFICATION PUMP ROOM |
| 7           | 12    | 1-SV-67-2       | 0      | CCW / NUCLEAR SAMPLING SAMPLE RACK 'A' CCW RETURN HEADER SAFETY VALVE   | AUXILIARY        | 587.00     | NUCLEAR SAMPLING RM                    |
| 7           | 12    | 1-SV-67-3       | 0      | CCW / NUCLEAR SAMPLING SAMPLE RACK 'B' CCW RETURN HEADER SAFETY VALVE   | AUXILIARY        | 587.00     | NUCLEAR SAMPLING RM                    |
| 7           | 12    | 1-SV-68         | 0      | CCW / REACTOR COOLANT PUMP SEAL WATER HE HE-11 CCW OUTLET SAFETY VALVE  | AUXILIARY        | 609.00     | 609 HALLWAY                            |
| 7           | 12    | 1-SV-71         | 0      | CCW / NORTH SPENT FUEL PIT HTX 12-HE-16N CCW OUTLET SAFETY VALVE  | AUXILIARY UNIT 1 | 609.00     | SPENT FUEL PIT HEAT XCHGR RM           |
| 7           | 2     | 1-SV-72E        | 0      | COMPONENT COOLING WATER / EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17E COMPONENT COOLING WATER OUTLET SAFETY VALVE        | AUXILIARY        | 609.00     | 609 HALLWAY                            |
| 7           | 1     | 1-SV-72W        | 0      | COMPONENT COOLING WATER / WEST RESIDUAL HEAT REMOVAL HEAT EXCHANGER COMPONENT COOLING WATER OUTLET SAFETY VALVE               | AUXILIARY        | 633.00     | 633 HALLWAY                            |
| 7           | 1     | 1-SV-78-AB1     | 0      | DIESEL STARTING AIR / AB EMERG DIESEL STARTING AIR RECEIVER 1 QT-141-AB1 SAFETY VALVE   | AUXILIARY        | 587.00     | AB EMER DSL GEN RM                     |
| 7           | 1     | 1-SV-78-AB2     | 0      | DIESEL STARTING AIR / AB EMERG DIESEL STARTING AIR RECEIVER QT-141-AB2 SAFETY VALVE   | AUXILIARY        | 587.00     | AB EMER DSL GEN RM                     |
| 7           | 2     | 1-SV-78-CD1     | 0      | DIESEL STARTING AIR / CD EMERG DIESEL STARTING AIR RECEIVER QT-141CD1 SAFETY VALVE  | AUXILIARY        | 587.00     | CD EMER DSL GEN RM                     |
| 7           | 2     | 1-SV-78-CD2     | 0      | DIESEL STARTING AIR / CD EMERGENCY DIESEL STARTING AIR RECEIVER(QT-141-CD2) SAFETY VALVE                                      | AUXILIARY        | 587.00     | CD EMER DSL GEN RM                     |
| 7           | 1     | 1-SV-79-AB1     | 0      | DIESEL STARTING AIR / AB EMERG DIESEL CONTROL AIR DRYER QT-143-AB1 SAFETY VALVE   | AUXILIARY        | 587.00     | AB EMER DSL GEN RM                     |



**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description   | Building    | Floor Elev | Room or Row Col           |
|-------------|-------|--------------|--------|--|-------------|------------|---------------------------|
| 7           | 1     | 1-SV-79-AB2  | 0      | DIESEL STARTING AIR / AB EMERG DIESEL CONTROL AIR DRYER QT-143-AB2 SAFETY VALVE  | AUXILIARY   | 587.00     | AB EMER DSL GEN RM        |
| 7           | 2     | 1-SV-79-CD1  | 0      | DIESEL STARTING AIR / CD EMERG DIESEL CONTROL AIR DRYER QT-143-CD1 SAFETY VALVE  | AUXILIARY   | 587.00     | CD EMER DSL GEN RM        |
| 7           | 2     | 1-SV-79-CD2  | 0      | DIESEL STARTING AIR / CD EMERG DIESEL CONTROL AIR DRYER QT-143-CD2 SAFETY VALVE  | AUXILIARY   | 587.00     | CD EMER DSL GEN RM        |
| 7           | 2     | 1-SV-94N     | 0      | CTRL RM AIR CONDITIONING CHILL WTR / CONTROL ROOM AIR CONDITIONING NORTH CHILL WATER EXPANSION TANK TK-76N SAFETY VALVE    | AUXILIARY   | 650.00     | CTRL RM AIR COND RM       |
| 7           | 1     | 1-SV-94S     | 0      | CTRL RM AIR CONDITIONING CHILL WTR / CONTROL ROOM AIR CONDITIONING SOUTH CHILL WATER EXPANSION TANK TK-76S SAFETY VALVE    | AUXILIARY   | 650.00     | CTRL RM AIR COND RM       |
| 7           | 12    | 1-SV-96      | 0      | REFUELING WATER STORAGE TANK SUPPLY / SAFETY INJECTION PUMPS SUCTION HEADER SAFETY VALVE                                   | AUXILIARY   | 587.00     | N SAFETY INJ PMP RM       |
| 7           | 12    | 1-SV-97      | 0      | BORON INJECTION / BORON INJECTION TANK TK-11 OUTLET SAFETY VALVE   | AUXILIARY   | 612.00     | BORON INJECTION TANK ROOM |
| 7           | 12    | 1-SV-98N     | 0      | SAFETY INJECTION / NORTH SAFETY INJECTION PUMP PP-26N DISCHARGE HEADER SAFETY VALVE  | AUXILIARY   | 587.00     | N SAFETY INJ PMP RM       |
| 7           | 12    | 1-SV-98S     | 0      | SAFETY INJECTION / SOUTH SAFETY INJECTION PUMP PP-26S DISCHARGE HEADER SAFETY VALVE  | AUXILIARY   | 587.00     | S SAFETY INJ PMP RM       |
| 7           | 2     | 1-VRV-315    | 0      | CONTROL ROOM A/C CHILL WATER / CONTROL ROOM VENT UNIT HV-ACRA-1 CHILL WATER INLET/BYPASS, 3-WAY AIR OPERATED CONTROL VALVE | AUXILIARY   | 650.00     | CONTROL ROOM A/C ROOM     |
| 7           | 1     | 1-VRV-325    | 0      | CONTROL ROOM A/C CHILL WATER / CONTROL ROOM VENT UNIT HV-ACRA-2 CHILL WATER INLET/BYPASS 3-WAY AIR OPERATED CONTROL VALVE  | AUXILIARY   | 650.00     | CONTROL ROOM A/C ROOM     |
| 7           | 2     | 1-WRV-721    | 0      | ESW / AB EMERG DIESEL SOUTH COMBUSTION AIR AFTERCOOLER HE-47ABS ESW INLET/BYPASS VALVE                                     | AUXILIARY   | 587.00     | AB EMER DSL GEN RM        |
| 7           | 2     | 1-WRV-723    | 0      | ESW / AB EMERG DIESEL GENERATOR NORTH COMBUSTION AIR AFTERCOOLER HE-47ABN ESW INLET/BYPASS VALVE                           | AUXILIARY   | 587.00     | AB EMER DSL GEN RM        |
| 7           | 2     | 1-WRV-725    | 0      | ESW / CD EMERG DIESEL SOUTH COMBUSTION AIR AFTERCOOLER HE-47COS ESW INLET/BYPASS VALVE                                     | AUXILIARY   | 587.00     | CD EMER DSL GEN RM        |
| 7           | 2     | 1-WRV-727    | 0      | ESW / CD EMERGENCY DIESEL NORTH COMBUSTION AIR AFTERCOOLER HE-47-CDN ESW INLET/BYPASS VALVE                                | AUXILIARY   | 587.00     | CD EMER DSL GEN RM        |
| 7           | 2     | 1-WRV-761    | 0      | ESW / EAST ESW PUMP PP-7E DISCHARGE STRAINER EAST BASKET BACKWASH OUTLET SHUTOFF VALVE                                     | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR PMP RM  |
| 7           | 1     | 1-WRV-762    | 0      | ESW / WEST ESW PUMP PP-7W DISCHARGE STRAINER EAST BASKET BACKWASH OUTLET SHUTOFF VALVE                                     | SCREENHOUSE | 591.00     | W ESSNTL SERV WTR PMP RM  |
| 7           | 2     | 1-WRV-766    | 0      | ESW / EAST ESW PUMP PP-7E DISCHARGE STRAINER EAST BASKET BACKWASH 4 in AIR OPERATED INLET SHUTOFF VALVE                    | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR PMP RM  |
| 7           | 1     | 1-WRV-767    | 0      | ESW / WEST ESW PUMP PP-7W DISCHARGE STRAINER EAST BASKET BACKWASH INLET 4 in AIR OPERATED SHUTOFF VALVE                    | SCREENHOUSE | 591.00     | W ESSNTL SERV WTR PMP RM  |
| 7           | 2     | 1-WRV-771    | 0      | ESW / EAST ESW PUMP PP-7E DISCHARGE STRAINER WEST BASKET BACKWASH OUTLET SHUTOFF VALVE                                     | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR PMP RM  |
| 7           | 1     | 1-WRV-772    | 0      | ESW / WEST ESW PUMP PP-7W DISCHARGE STRAINER WEST BASKET BACKWASH SHUTOFF VALVE  | SCREENHOUSE | 591.00     | W ESSNTL SERV WTR PMP RM  |
| 7           | 2     | 1-WRV-776    | 0      | ESW / EAST ESW PUMP PP-7E DISCHARGE STRAINER WEST BASKET BACKWASH INLET 4 in AIR OPERATED SHUTOFF VALVE                    | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR PMP RM  |
| 7           | 1     | 1-WRV-777    | 0      | ESW / WEST ESW PUMP PP-7W DISCHARGE STRAINER WEST BASKET BACKWASH INLET 4 in AIR OPERATED SHUTOFF VALVE                    | SCREENHOUSE | 591.00     | W ESSNTL SERV WTR PMP RM  |
| 7           | 1     | 1-XRV-220    | 0      | DIESEL STARTING AIR / AB EMERG DIESEL STARTING AIR JET ASSIST CONTROL VALVE  | AUXILIARY   | 587.00     | AB EMER DSL GEN RM        |
| 7           | 1     | 1-XRV-221    | 0      | DIESEL STARTING AIR / AB EMERG DIESEL FRONT BANK STARTING AIR SHUTOFF VALVE  | AUXILIARY   | 587.00     | AB EMER DSL GEN RM        |
| 7           | 1     | 1-XRV-222    | 0      | DIESEL STARTING AIR / AB EMERG DIESEL REAR BANK STARTING AIR SHUTOFF VALVE   | AUXILIARY   | 587.00     | AB EMER DSL GEN RM        |
| 7           | 2     | 1-XRV-225    | 0      | DIESEL STARTING AIR / CD EMERG DIESEL STARTING AIR JET ASSIST CONTROL VALVE  | AUXILIARY   | 587.00     | CD EMER DSL GEN RM        |
| 7           | 2     | 1-XRV-226    | 0      | DIESEL STARTING AIR / CD EMERG DIESEL FRONT BANK STARTING AIR SHUTOFF VALVE  | AUXILIARY   | 587.00     | CD EMER DSL GEN RM        |
| 7           | 2     | 1-XRV-227    | 0      | DIESEL STARTING AIR / CD EMERG DIESEL REAR BANK STARTING AIR SHUTOFF VALVE   | AUXILIARY   | 587.00     | CD EMER DSL GEN RM        |

**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description   | Building  | Floor Elev | Room or Row Col                 |
|-------------|-------|--------------|--------|--|-----------|------------|---------------------------------|
| 7           | 12    | 12-CRV-51    | 0      | CONDENSATE STORAGE SUPPLY / UNIT 1 AND 2 CONDENSATE STORAGE TANK CROSSTIE 8 in AIR OPERATED SHUTOFF VALVE                    | TURBINE   | 591.00     | AUX FEED PMP E HALLWAY          |
| 7           | 12    | 12-QRV-410   | 0      | CVCS / NORTH EAST TK-12N 2 in AIR OPERATED INLET FLOW CONTROL VALVE  | AUXILIARY | 587.00     | BORIC ACID STOR TANK            |
| 7           | 12    | 12-QRV-420   | 0      | CVCS (BORON MAKEUP) / MIDDLE EAST TK-12M 2 in AIR OPERATED INLET FLOW CONTROL VALVE  | AUXILIARY | 587.00     | BORIC ACID STOR TANK            |
| 7           | 12    | 12-SV-217    | 0      | NITROGEN (REACTOR PLANT SERVICE) / REACTOR PLANT NITROGEN BULK STORAGE TANKS SAFETY VALVE                                    | GROUND    | 609.00     | REACTOR GAS BOTTLE STORAGE AREA |
| 7           | 12    | 12-SV-69N    | 0      | CCW / N. RADIOACTIVE WASTE GAS COMP SEAL WTR HE OME-44N-2 CCW OUTLET SV  | AUXILIARY | 609.00     | 609 HALLWAY                     |
| 7           | 12    | 12-SV-69S    | 0      | CCW / S. RADIOACTIVE WASTE GAS COMP SEAL WTR HE OME-44S-2 CCW OUTLET SV  | AUXILIARY | 609.00     | 609 HALLWAY                     |
| 8           | 2     | 1-CCM-451    | 0      | CCW / REACTOR COOLANT PUMPS BEARING OIL COOLERS CCW RETURN HEADER 'A' CONTAINMENT 8 in MOTOR OPERATED ISOLATION VALVE        | AUXILIARY | 591.00     | STARTUP BLOWDOWN FLASH TANK RM  |
| 8           | 1     | 1-CCM-452    | 0      | CCW / RC PUMPS BEARING OIL COOLERS CCW RETURN HEADER 'B' CONTAINMENT 8 in MOTOR OPERATED ISOLATION VALVE                     | AUXILIARY | 591.00     | STARTUP BLOWDOWN FLASH TANK RM  |
| 8           | 2     | 1-CCM-453    | 0      | CCW / RCP THERMAL BARRIER CCW OUTLET 'A' CONTAINMENT 4 in MOTOR OPERATED ISOLATION VALVE                                     | AUXILIARY | 591.00     | STARTUP BLOWDOWN FLASH TANK RM  |
| 8           | 1     | 1-CCM-454    | 0      | CCW / RC PUMPS THERMAL BARRIER CCW RETURN HEADER 'B' CONTAINMENT 4 in MOTOR OPERATED ISOLATION VALVE                         | AUXILIARY | 591.00     | STARTUP BLOWDOWN FLASH TANK RM  |
| 8           | 2     | 1-CCM-458    | 0      | CCW / CCW TO REACTOR COOLANT PUMPS TRAIN 'A' CONTAINMENT ISOLATION VALVE   | AUXILIARY | 591.00     | STARTUP BLOWDOWN FLASH TANK RM  |
| 8           | 1     | 1-CCM-459    | 0      | CCW / CCW TO REACTOR COOLANT PUMPS TRAIN 'B' CONTAINMENT ISOLATION VALVE   | AUXILIARY | 591.00     | STARTUP BLOWDOWN FLASH TANK RM  |
| 8           | 2     | 1-CMO-410    | 0      | CCW / EAST CCW TO HEAT EXCHANGER HE-15E CCW OUTLET SHUTOFF VALVE   | AUXILIARY | 609.00     | 609 HALLWAY                     |
| 8           | 2     | 1-CMO-411    | 0      | CCW / CCW PUMPS SUCTION CROSSTIE HEADER 'A' 18 in MOTOR OPERATED SHUTOFF VALVE   | AUXILIARY | 609.00     | 609 HALLWAY                     |
| 8           | 2     | 1-CMO-412    | 0      | CCW / CCW PUMPS DISCHARGE CROSSTIE HEADER 'A' 18 in MOTOR OPERATED SHUTOFF VALVE   | AUXILIARY | 609.00     | 609 HALLWAY                     |
| 8           | 1     | 1-CMO-413    | 0      | CCW / CCW PUMPS SUCTION CROSSTIE HEADER 'B' 18 in MOTOR OPERATED SHUTOFF VALVE   | AUXILIARY | 609.00     | 609 HALLWAY                     |
| 8           | 1     | 1-CMO-414    | 0      | CCW / CCW PUMPS DISCHARGE CROSSTIE HEADER 'A' 18 in MOTOR OPERATED SHUTOFF VALVE   | AUXILIARY | 609.00     | 609 HALLWAY                     |
| 8           | 2     | 1-CMO-415    | 0      | CCW / CCW TO MISCELLANEOUS SERVICE HEADER 'A' 18 in MOTOR OPERATED SHUTOFF VALVE   | AUXILIARY | 609.00     | 609 HALLWAY                     |
| 8           | 1     | 1-CMO-416    | 0      | CCW / CCW TO MISCELLANEOUS SERVICE HEADER 'B' 18 in MOTOR OPERATED SHUTOFF VALVE   | AUXILIARY | 609.00     | 609 HALLWAY                     |
| 8           | 2     | 1-CMO-419    | 0      | CCW / EAST RHR HEAT EXCHANGER HE-17E CCW OUTLET SHUTOFF VALVE  | AUXILIARY | 609.00     | 609 HALLWAY                     |
| 8           | 1     | 1-CMO-420    | 0      | CCW / WEST CCW TO HEAT EXCHANGER HE-15W CCW OUTLET SHUTOFF VALVE   | AUXILIARY | 609.00     | 609 HALLWAY                     |
| 8           | 2     | 1-CMO-429    | 0      | CCW / WEST RHR HEAT EXCHANGER HE-17W CCW OUTLET SHUTOFF VALVE  | AUXILIARY | 633.00     | 633 HALLWAY                     |
| 8           | 1     | 1-FMO-211    | 0      | AUX FEEDWATER / TURBINE DRIV AUX FEED PUMP PP-4 DISCHARGE TO STEAM GENERATOR OME-3-1 4 in MOTOR OPERATED CONTROL VALVE       | AUXILIARY | 612.00     | E MAIN STM STOP ENCL            |
| 8           | 1     | 1-FMO-212    | 0      | AUX FEEDWATER / WEST MOTOR DRIV AUX FEEDWATER PUMP PP-3W SUPPLY TO STEAM GENERATOR OME-3-1 4 in MOTOR OPERATED CONTROL VALVE | AUXILIARY | 612.00     | E MAIN STM STOP ENCL            |
| 8           | 2     | 1-FMO-221    | 0      | AUX FEEDWATER / TURBINE DRIV AUX FEED PUMP PP-4 DISCHARGE TO STEAM GENERATOR OME-3-2 4 in MOTOR OPERATED CONTROL VALVE       | AUXILIARY | 591.00     | STARTUP BLOWDOWN FLASH TANK RM  |
| 8           | 2     | 1-FMO-222    | 0      | AUX FEEDWATER / EAST MOTOR DRIV AUX FEED PUMP PP-3E SUPPLY TO STEAM GENERATOR OME-3-2 4 in MOTOR OPERATED CONTROL VALVE      | AUXILIARY | 591.00     | STARTUP BLOWDOWN FLASH TANK RM  |
| 8           | 2     | 1-FMO-231    | 0      | AUX FEEDWATER / TURBINE DRIV AUX FEED PUMP PP-4 SUPPLY TO STEAM GENERATOR OME-3-3 4 in MOTOR OPERATED CONTROL VALVE          | AUXILIARY | 591.00     | STARTUP BLOWDOWN FLASH TANK RM  |
| 8           | 2     | 1-FMO-232    | 0      | AUX FEEDWATER / EAST MOTOR DRIV AUX FEED PUMP PP-3E SUPPLY TO STEAM GENERATOR 3-3 4 in MOTOR OPERATED CONTROL VALVE          | AUXILIARY | 591.00     | STARTUP BLOWDOWN FLASH TANK RM  |
| 8           | 1     | 1-FMO-241    | 0      | AUX FEEDWATER / TURBINE DRIV AUX FEED PUMP PP-4 DISCHARGE TO STEAM GENERATOR OME-3-4 4 in MOTOR OPERATED CONTROL VALVE       | AUXILIARY | 612.00     | E MAIN STM STOP ENCL            |

**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID  | Rev No | System / Equipment Description  | Building    | Floor Elev | Room or Row Col              |
|-------------|-------|---------------|--------|---|-------------|------------|------------------------------|
| 8           | 1     | 1-FMO-242     | 0      | AUX FEEDWATER / WEST MOTOR DRIV AUX FEED PUMP PP-3W SUPPLY TO STEAM GENERATOR 3-4 4 In MOTOR OPERATED CONTROL VALVE                     | AUXILIARY   | 612.00     | E MAIN STM STOP ENCL         |
| 8           | 1     | 1-HV-DOP-AB1  | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FAN HV-DGX-1 TEMPERING AIR DAMPER                      | AUXILIARY   | 587.00     | AB EMER DSL GEN RM           |
| 8           | 1     | 1-HV-DOP-AB2  | 0      | DIESEL ROOM VENTILATION / DIESEL GENERATOR ROOM 1AB VENTILATION SUPPLY FAN HV-DGS-1 TEMPERING AIR DAMPER 1-HV-DOP-AB2                   | AUXILIARY   | 587.00     | AB EMER DSL GEN RM           |
| 8           | 2     | 1-HV-DOP-CD1  | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FAN HV-DGX-2 TEMPERING AIR DAMPER                      | AUXILIARY   | 587.00     | CD EMER DSL GEN RM           |
| 8           | 2     | 1-HV-DOP-CD2  | 0      | DIESEL ROOM VENTILATION / DIESEL GEN ROOM 1 CD VENTILATION SUPPLY FAN 1-HV-DGS-2 TEMPERING AIR DAMPER 1-HV-DOP-CD2                      | AUXILIARY   | 587.00     | CD EMER DSL GEN RM           |
| 8           | 1     | 1-HV-DGS-DAB  | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN HV-DGS-1 OUTSIDE AIR SHUTOFF DAMPER                 | AUXILIARY   | 596.00     | RCTR CABLE TUNNEL, QUAD3     |
| 8           | 2     | 1-HV-DGS-DCD  | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN HV-DGS-2 OUTSIDE AIR SHUTOFF DAMPER                 | AUXILIARY   | 586.00     | STORAGE TANK PIPE TUNNEL     |
| 8           | 12    | 1-HV-SGR-MD-3 | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600V SWITCHGEAR TRANSFORMERS TR11A & TR11C AREA VENT SUPPLY FAN HV-SGRS-8 SUCTION DAMPER      | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR           |
| 8           | 12    | 1-HV-SGR-MD-4 | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600V SWITCHGEAR TRANSFORMERS AREA VENTILATION SUPPLY FAN HV-SGRS-7 SUCTION DAMPER             | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR           |
| 8           | 12    | 1-HV-SGR-MD-5 | 0      | AUXILIARY BUILDING VENTILATION / 600VAC MOTOR CONTROL CENTER MEZZANINE AREA VENTILATION SUPPLY FAN HV-SGRS-9 VENT DAMPER                | AUXILIARY   | 613.00     | 4KV RM - MEZZANINE           |
| 8           | 12    | 1-ICM-111     | 0      | RHR / RHR TO REACTOR COOLANT LOOPS 2 AND 3 COLD LEGS CONTAINMENT ISOLATION VALVE  | CONTAINMENT | 598.00     | ANNULUS, QUAD2               |
| 8           | 2     | 1-ICM-129     | 0      | RHR / REACTOR COOLANT LOOP 2 HOT LEG TO RHR PUMPS SUCTION CONTAINMENT ISOLATION VALVE   | CONTAINMENT | 598.00     | ANNULUS, QUAD2               |
| 8           | 2     | 1-ICM-250     | 0      | BORON INJECTION / BORON INJECTION TANK 'A' CONTAINMENT ISOLATION VALVE  | AUXILIARY   | 612.00     | BORON INJ TANK OUTLET VLV RM |
| 8           | 1     | 1-ICM-251     | 0      | BORON INJECTION / BORON INJECTION TANK 'B' CONTAINMENT ISOLATION VALVE  | AUXILIARY   | 612.00     | BORON INJ TANK OUTLET VLV RM |
| 8           | 2     | 1-ICM-260     | 0      | SAFETY INJECTION / NORTH SAFETY INJECTION PUMP PP-26N DISCHARGE CONTAINMENT ISOLATION 4 In MOTOR OPERATED VALVE                         | AUXILIARY   | 587.00     | N SAFETY INJ PMP RM          |
| 8           | 1     | 1-ICM-265     | 0      | SAFETY INJECTION / SOUTH SAFETY INJECTION PUMP PP-26S DISCHARGE CONTAINMENT ISOLATION 4 In MOTOR OPERATED VALVE                         | AUXILIARY   | 587.00     | S SAFETY INJ PMP RM          |
| 8           | 2     | 1-ICM-305     | 0      | RHR / RECIRCULATION SUMP TO EAST RHR/CTS PUMPS SUCTION CONTAINMENT ISOLATION 18 In MOTOR OPERATED VALVE                                 | AUXILIARY   | 591.00     | VESTIBULE                    |
| 8           | 1     | 1-ICM-306     | 0      | RHR / RECIRCULATION SUMP TO WEST RHR/CTS PUMPS SUCTION CONTAINMENT ISOLATION 18 In MOTOR OPERATED VALVE                                 | AUXILIARY   | 591.00     | VESTIBULE                    |
| 8           | 2     | 1-ICM-311     | 0      | RHR / EAST RHR TO REACTOR COOLANT LOOPS 1 AND 4 HOT LEGS CONTAINMENT ISOLATION 8 In MOTOR OPERATED VALVE                                | AUXILIARY   | 609.00     | EAST RHR HEAT EXCHGR RM      |
| 8           | 1     | 1-ICM-321     | 0      | RHR / WEST RHR TO REACTOR COOLANT LOOPS 2 AND 3 HOT LEGS CONTAINMENT ISOLATION 8 In MOTOR OPERATED VALVE                                | AUXILIARY   | 609.00     | W RHR HEAT XCHGR RM          |
| 8           | 1     | 1-IMO-128     | 0      | RHR / REACTOR COOLANT LOOP 2 HOT LEG TO RHR PUMPS SUCTION SHUTOFF VALVE   | CONTAINMENT | 598.00     | LOWER CONT, QUAD2            |
| 8           | 2     | 1-IMO-210     | 0      | CONTAINMENT SPRAY / EAST CONTAINMENT SPRAY PUMP PP-9E DISCHARGE SHUTOFF 10 In MOTOR OPERATED VALVE                                      | AUXILIARY   | 573.00     | E CONT SPRAY PMP RM          |
| 8           | 2     | 1-IMO-211     | 0      | CONTAINMENT SPRAY / EAST CONTAINMENT SPRAY PUMP PP-9E DISCHARGE SHUTOFF 10 In MOTOR OPERATED VALVE                                      | AUXILIARY   | 573.00     | E CONT SPRAY PMP RM          |
| 8           | 2     | 1-IMO-212     | 0      | CONTAINMENT SPRAY / EAST CONTAINMENT SPRAY PUMP PP-9E DISCHARGE TO CONTAINMENT SPRAY ADDITIVE EDUCTOR 2 In MOTOR OPERATED SHUTOFF VALVE | AUXILIARY   | 573.00     | E CONT SPRAY PMP RM          |
| 8           | 2     | 1-IMO-215     | 0      | CONTAINMENT SPRAY / RWST TO EAST CONTAINMENT SPRAY PUMP PP-9E SUCTION 12 In MOTOR OPERATED SHUTOFF VALVE                                | AUXILIARY   | 573.00     | E CONT SPRAY PMP RM          |

**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description  | Building    | Floor Elev | Room or Row Col              |
|-------------|-------|--------------|--------|---|-------------|------------|------------------------------|
| 8           | 1     | 1-IMO-220    | 0      | CONTAINMENT SPRAY / WEST<br>CONTAINMENT SPRAY PUMP PP-9W<br>DISCHARGE SHUTOFF 10 In MOTOR<br>OPERATED VALVE   | AUXILIARY   | 573.00     | W CONT SPRAY PMP<br>RM       |
| 8           | 1     | 1-IMO-221    | 0      | CONTAINMENT SPRAY / WEST<br>CONTAINMENT SPRAY PUMP PP-9W<br>DISCHARGE SHUTOFF 10 In MOTOR<br>OPERATED VALVE   | AUXILIARY   | 573.00     | W CONT SPRAY PMP<br>RM       |
| 8           | 1     | 1-IMO-222    | 0      | CONTAINMENT SPRAY / WEST<br>CONTAINMENT SPRAY PUMP PP-9W<br>DISCHARGE TO CONTAINMENT SPRAY<br>ADDITIVE EDUCTOR SHUTOFF 2 In MOTOR<br>OPERATED VALVE               | AUXILIARY   | 573.00     | W CONT SPRAY PMP<br>RM       |
| 8           | 1     | 1-IMO-225    | 0      | CONTAINMENT SPRAY / RWST TO WEST<br>CONTAINMENT SPRAY PUMP PP-9W<br>SUCTION 12 In MOTOR OPERATED SHUTOFF<br>VALVE   | AUXILIARY   | 573.00     | W CONT SPRAY PMP<br>RM       |
| 8           | 2     | 1-IMO-255    | 0      | BORON INJECTION / BORON INJECTION<br>TANK 'A' INLET SHUTOFF VALVE   | AUXILIARY   | 612.00     | BORON INJ TANK RM            |
| 8           | 1     | 1-IMO-256    | 0      | BORON INJECTION / BORON INJECTION<br>TANK 'B' INLET SHUTOFF VALVE   | AUXILIARY   | 612.00     | BORON INJ TANK RM            |
| 8           | 12    | 1-IMO-281    | 0      | REFUELING WATER STORAGE TANK<br>SUPPLY / TK-33 SUPPLY TO SAFETY<br>INJECTION PUMP SHUTOFF 8 In MOTOR<br>OPERATED VALVE  | AUXILIARY   | 587.00     | N SAFETY INJ PMP<br>RM       |
| 8           | 2     | 1-IMO-262    | 0      | REFUELING WATER STORAGE TANK<br>SUPPLY / SAFETY INJECTION PUMPS<br>RECIRC TO REFUELING WATER STORAGE<br>TANK TK-33 TRAIN 'A' SHUTOFF 2 In MOTOR<br>OPERATED VALVE | AUXILIARY   | 587.00     | S SAFETY INJ PMP<br>RM       |
| 8           | 1     | 1-IMO-263    | 0      | REFUELING WATER STORAGE TANK<br>SUPPLY / SAFETY INJECTION PUMPS<br>RECIRC TO REFUELING WATER STORAGE<br>TANK TK-33 TRAIN 'B' SHUTOFF 2 In MOTOR<br>OPERATED VALVE | AUXILIARY   | 587.00     | S SAFETY INJ PMP<br>RM       |
| 8           | 2     | 1-IMO-270    | 0      | SAFETY INJECTION / SAFETY INJECTION<br>PUMPS DISCHARGE CROSSTIE TRAIN 'A'<br>SHUTOFF 4 In MOTOR OPERATED VALVE  | AUXILIARY   | 587.00     | N SAFETY INJ PMP<br>RM       |
| 8           | 1     | 1-IMO-275    | 0      | SAFETY INJECTION / SAFETY INJECTION<br>PUMPS DISCHARGE CROSSTIE TRAIN 'B'<br>SHUTOFF 4 In MOTOR OPERATED VALVE  | AUXILIARY   | 587.00     | S SAFETY INJ PMP<br>RM       |
| 8           | 2     | 1-IMO-310    | 0      | RHR / EAST RHR PUMP PP-35E SUCTION<br>SHUTOFF 14 In MOTOR OPERATED VALVE  | AUXILIARY   | 573.00     | EAST RHR PUMP RM             |
| 8           | 2     | 1-IMO-312    | 0      | RHR / EAST RHR HEAT EXCHANGER HE-17E<br>OUTLET MIN-FLOW LINE SHUTOFF VALVE  | AUXILIARY   | 609.00     | EAST RHR HEAT<br>EXCHGR RM   |
| 8           | 2     | 1-IMO-314    | 0      | RHR / EAST RHR PUMP PP-35E DISCHARGE<br>CROSSTIE SHUTOFF 8 In MOTOR OPERATED<br>VALVE   | AUXILIARY   | 609.00     | EAST RHR HEAT<br>EXCHGR RM   |
| 8           | 2     | 1-IMO-315    | 0      | RHR / EAST RHR AND NORTH SAFETY<br>INJECTION TO REACTOR COOLANT LOOPS 1<br>AND 4 HOT LEGS SHUTOFF VALVE   | CONTAINMENT | 612.00     | E CONT LWR VENT<br>RM        |
| 8           | 2     | 1-IMO-316    | 0      | RHR / EAST RHR AND NORTH SAFETY<br>INJECTION TO REACTOR COOLANT LOOPS 1<br>AND 4 COLD LEGS SHUTOFF 8 In MOTOR<br>OPERATED VALVE                                   | CONTAINMENT | 612.00     | E CONT LWR VENT<br>RM        |
| 8           | 1     | 1-IMO-320    | 0      | RHR / WEST RHR PUMP PP-35W SUCTION<br>SHUTOFF 14 In MOTOR OPERATED VALVE  | AUXILIARY   | 573.00     | W RHR PUMP RM                |
| 8           | 1     | 1-IMO-322    | 0      | RHR / WEST RHR HEAT EXCHANGER HE-<br>17W OUTLET MIN-FLOW LINE SHUTOFF<br>VALVE  | AUXILIARY   | 609.00     | W RHR HEAT XCHGR<br>RM       |
| 8           | 1     | 1-IMO-324    | 0      | RHR / WEST RHR PUMP PP-35W<br>DISCHARGE CROSSTIE SHUTOFF 8 In<br>MOTOR OPERATED VALVE   | AUXILIARY   | 609.00     | W RHR HEAT XCHGR<br>RM       |
| 8           | 1     | 1-IMO-325    | 0      | RHR / WEST RHR AND SOUTH SAFETY<br>INJECTION TO REACTOR COOLANT LOOPS 2<br>AND 3 HOT LEGS SHUTOFF VALVE   | CONTAINMENT | 612.00     | W CONT LOWER<br>VENT RM      |
| 8           | 1     | 1-IMO-326    | 0      | RHR / WEST RHR AND SOUTH SAFETY<br>INJECTION TO REACTOR COOLANT LOOPS 2<br>AND 3 COLD LEGS SHUTOFF 8 In MOTOR<br>OPERATED VALVE                                   | CONTAINMENT | 612.00     | W CONT LOWER<br>VENT RM      |
| 8           | 2     | 1-IMO-330    | 0      | RHR / EAST RHR TO UPPER CONTAINMENT<br>SPRAY SHUTOFF 8 In MOTOR OPERATED<br>VALVE   | AUXILIARY   | 609.00     | EAST RHR HEAT<br>EXCHGR RM   |
| 8           | 1     | 1-IMO-331    | 0      | RHR / WEST RHR TO UPPER CONTAINMENT<br>SPRAY SHUTOFF 8 In MOTOR OPERATED<br>VALVE   | AUXILIARY   | 609.00     | W RHR HEAT XCHGR<br>RM       |
| 8           | 12    | 1-IMO-340    | 0      | RHR / EAST RHR HEAT EXCHANGER TO<br>CHARGING PUMPS SUCTION SHUTOFF 8 In<br>MOTOR OPERATED VALVE   | AUXILIARY   | 609.00     | EAST RHR HEAT<br>EXCHGR RM   |
| 8           | 12    | 1-IMO-350    | 0      | RHR / WEST RHR HEAT EXCHANGER<br>OUTLET TO SAFETY INJECTION PUMP<br>SUCTION SHUTOFF 8 In MOTOR OPERATED<br>VALVE  | AUXILIARY   | 609.00     | W RHR HEAT XCHGR<br>RM       |
| 8           | 12    | 1-IMO-360    | 0      | SAFETY INJECTION / SAFETY INJECTION<br>PUMPS TO CVCS CHARGING PUMPS<br>SUCTION HEADER CROSSTIE SHUTOFF<br>VALVE   | AUXILIARY   | 587.00     | W CENTRIFUGAL<br>CHRG PMP RM |
| 8           | 2     | 1-IMO-361    | 0      | SAFETY INJECTION / SAFETY INJECTION<br>PUMPS SUCTION TO AND FROM CHARGING<br>PUMPS SUCTION 'A' SHUTOFF 4 In MOTOR<br>OPERATED VALVE                               | AUXILIARY   | 587.00     | N SAFETY INJ PMP<br>RM       |



**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description  | Building    | Floor Elev | Room or Row Col                  |
|-------------|-------|--------------|--------|---|-------------|------------|----------------------------------|
| 8           | 1     | 1-IMO-302    | 0      | SAFETY INJECTION / SAFETY INJECTION PUMPS SUCTION TO AND FROM CHARGING PUMP 'B' SHUTOFF 4 in MOTOR OPERATED VALVE | AUXILIARY   | 587.00     | N SAFETY INJ PMP RM              |
| 8           | 12    | 1-IMO-390    | 0      | RHR / RWST TK-33 TO RHR PUMPS SUCTION SHUTOFF 12 in MOTOR OPERATED VALVE  | AUXILIARY   | 591.00     | VESTIBULE                        |
| 8           | 2     | 1-IMO-51     | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP 1 SHUTOFF 1.5 in MOTOR OPERATED VALVE                   | CONTAINMENT | 598.00     | ANNULUS, QUAD1                   |
| 8           | 1     | 1-IMO-52     | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP 2 SHUTOFF 1.5 in MOTOR OPERATED VALVE                   | CONTAINMENT | 598.00     | ANNULUS, QUAD2                   |
| 8           | 1     | 1-IMO-53     | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP 3 SHUTOFF 1.5 in MOTOR OPERATED VALVE                   | CONTAINMENT | 598.00     | ANNULUS, QUAD3                   |
| 8           | 2     | 1-IMO-54     | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP 4 SHUTOFF 1.5 in MOTOR OPERATED VALVE                   | CONTAINMENT | 598.00     | ANNULUS, QUAD4                   |
| 8           | 2     | 1-IMO-910    | 0      | CVCS / RWST TO CHARGING PUMP SUCTION SHUTOFF VALVE  | AUXILIARY   | 587.00     | RECIPROCATING CHARGING PUMP ROOM |
| 8           | 1     | 1-IMO-911    | 0      | CVCS / RWST TO CHARGING PUMP SUCTION SHUTOFF VALVE  | AUXILIARY   | 587.00     | E CNTRFGL CHARG PMP RM           |
| 8           | 1     | 1-LSO-240    | 0      | DIESEL LUBE OIL / AB EMERG DIESEL UPPER VALVE GEAR LUBRICATION CONTROL SOLENOID 1                                 | AUXILIARY   | 587.00     | AB EMER DSL GEN RM               |
| 8           | 1     | 1-LSO-241    | 0      | DIESEL LUBE OIL / AB EMERG DIESEL UPPER VALVE GEAR LUBRICATION CONTROL SOLENOID 2                                 | AUXILIARY   | 587.00     | AB EMER DSL GEN RM               |
| 8           | 2     | 1-LSO-245    | 0      | DIESEL LUBE OIL / CD EMERG DIESEL GENERATOR UPPER VALVE GEAR LUBRICATION CONTROL SOLENOID 1                       | AUXILIARY   | 587.00     | CD EMER DSL GEN RM               |
| 8           | 2     | 1-LSO-246    | 0      | DIESEL LUBE OIL / CD EMERG DIESEL GENERATOR UPPER VALVE GEAR LUBRICATION CONTROL SOLENOID 2                       | AUXILIARY   | 587.00     | CD EMER DSL GEN RM               |
| 8           | 1     | 1-MCM-221    | 0      | MAIN STEAM / MAIN STEAM LEAD 2 TO AUX FEED PUMP TURBINE 4 in MOTOR OPERATED SHUTOFF VALVE                         | AUXILIARY   | 633.00     | W MAIN STM STOP ENCL             |
| 8           | 1     | 1-MCM-231    | 0      | MAIN STEAM / MAIN STEAM LEAD 3 TO AUX FEED PUMP TURBINE 4 in MOTOR OPERATED SHUTOFF VALVE                         | AUXILIARY   | 633.00     | W MAIN STM STOP ENCL             |
| 8           | 2     | 1-MMO-210    | 0      | MAIN STEAM / STEAM STOP VALVE MRV-210 STEAM CYLINDER DUMP 4 in MOTOR OPERATED VALVES SELECTOR VALVE               | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL             |
| 8           | 1     | 1-MMO-220    | 0      | MAIN STEAM / STEAM STOP VALVE MRV-220 STEAM CYLINDER DUMP 4 in MOTOR OPERATED VALVES SELECTOR VALVE               | AUXILIARY   | 633.00     | W MAIN STM STOP ENCL             |
| 8           | 1     | 1-MMO-230    | 0      | MAIN STEAM / STEAM STOP VALVE MRV-230 STEAM CYLINDER DUMP VALVES 4 in MOTOR OPERATED SELECTOR VALVE               | AUXILIARY   | 633.00     | W MAIN STM STOP ENCL             |
| 8           | 2     | 1-MMO-240    | 0      | MAIN STEAM / STEAM STOP VALVE MRV-240 STEAM CYLINDER DUMP VALVE 4 in MOTOR OPERATED SELECTOR VALVE                | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL             |
| 8           | 1     | 1-NMO-151    | 0      | PRESSURIZER / PRESSURIZER RELIEF VALVE NRV-151 UPSTREAM 3 in MOTOR OPERATED SHUTOFF VALVE                         | CONTAINMENT | 650.00     | PRESSRZR ENCL, INTERIOR          |
| 8           | 1     | 1-NMO-152    | 0      | PRESSURIZER / PRESSURIZER RELIEF VALVE NRV-152 UPSTREAM 3 in MOTOR OPERATED SHUTOFF VALVE                         | CONTAINMENT | 650.00     | PRESSRZR ENCL, INTERIOR          |
| 8           | 2     | 1-NMO-153    | 0      | PRESSURIZER / PRESSURIZER RELIEF VALVE NRV-153 3 in MOTOR OPERATED UPSTREAM SHUTOFF VALVE                         | CONTAINMENT | 650.00     | PRESSRZR ENCL, INTERIOR          |
| 8           | 2     | 1-NSO-21     | 0      | REACTOR COOLANT SYSTEM / REACTOR VESSEL HEAD VENT 1 in SOLENOID VALVE   | CONTAINMENT | 622.00     | REACTOR VESSEL HEAD AREA         |
| 8           | 2     | 1-NSO-22     | 0      | REACTOR COOLANT SYSTEM / REACTOR VESSEL HEAD VENT 1 in SOLENOID VALVE   | CONTAINMENT | 622.00     | REACTOR VESSEL HEAD AREA         |
| 8           | 1     | 1-NSO-23     | 0      | REACTOR COOLANT SYSTEM / REACTOR VESSEL HEAD VENT 1 in SOLENOID VALVE   | CONTAINMENT | 621.00     | REACTOR VESSEL HEAD AREA         |
| 8           | 1     | 1-NSO-24     | 0      | REACTOR COOLANT SYSTEM / REACTOR VESSEL HEAD VENT 1 in SOLENOID VALVE   | CONTAINMENT | 621.00     | REACTOR VESSEL HEAD AREA         |
| 8           | 2     | 1-NSO-61     | 0      | REACTOR COOLANT SYSTEM VENTS / PRESSURIZER OME-4 POST ACCIDENT VENT 'A' SOLENOID VALVE                            | CONTAINMENT | 650.00     | PRESSRZR ENCL, INTERIOR          |
| 8           | 2     | 1-NSO-62     | 0      | REACTOR COOLANT SYSTEM VENTS / PRESSURIZER OME-4 POST-ACCIDENT VENT 'A' SOLENOID VALVE                            | CONTAINMENT | 650.00     | PRESSRZR ENCL, INTERIOR          |
| 8           | 1     | 1-NSO-63     | 0      | REACTOR COOLANT SYSTEM VENTS / PRESSURIZER OME-4 POST-ACCIDENT VENT 'B' SOLENOID VALVE                            | CONTAINMENT | 650.00     | PRESSRZR ENCL, INTERIOR          |
| 8           | 1     | 1-NSO-64     | 0      | REACTOR COOLANT SYSTEM VENTS / PRESSURIZER OME-4 POST-ACCIDENT VENT 'B' SOLENOID VALVE                            | CONTAINMENT | 650.00     | PRESSRZR ENCL, INTERIOR          |
| 8           | 2     | 1-QCM-250    | 0      | RCTR COOLANT PMP SEAL WTR IN/LEAKOFF / RCP SEAL WATER RETURN 'A' CONTAINMENT ISOLATION 4 in MOTOR OPERATED VALVE  | CONTAINMENT | 598.00     | ANNULUS, QUAD2                   |
| 8           | 1     | 1-QCM-350    | 0      | RCTR COOLANT PMP SEAL WTR IN/LEAKOFF / RCP SEAL WATER RETURN 'B' CONTAINMENT ISOLATION 4 in MOTOR OPERATED VALVE  | AUXILIARY   | 591.00     | VESTIBULE                        |



**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID   | Rev No | System / Equipment Description   | Building    | Floor Elev | Room or Row Col             |
|-------------|-------|----------------|--------|--|-------------|------------|-----------------------------|
| 8           | 2     | 1-QMO-200      | 0      | CVCS / CHARGING TO REGENERATIVE HEAT EXCHANGER 'A' SHUTOFF VALVE   | AUXILIARY   | 587.00     | RECIPROCATING CHRG PMP RM   |
| 8           | 1     | 1-QMO-201      | 0      | CVCS / CHARGING TO REGENERATIVE HEAT EXCHANGER 'B' SHUTOFF VALVE   | AUXILIARY   | 587.00     | RECIPROCATING CHRG PMP RM   |
| 8           | 2     | 1-QMO-225      | 0      | CVCS / EAST CENTRIFUGAL CHARGING PUMP MINI FLOW TO RCP SEAL WATER HEAT EXCHANGER HE-11 2 in MOTOR OPERATED SHUTOFF VALVE | AUXILIARY   | 587.00     | W CENTRIFUGAL CHRG PMP RM   |
| 8           | 1     | 1-QMO-226      | 0      | CVCS / WEST CENTRIFUGAL CHARGING PUMP MINI FLOW TO RCP SEAL WATER HEAT EXCHANGER HE-11 2 in MOTOR OPERATED SHUTOFF VALVE | AUXILIARY   | 587.00     | W CENTRIFUGAL CHRG PMP RM   |
| 8           | 12    | 1-QMO-410      | 0      | CVCS / EMERG. BORATION TO CHARGING PUMP SUCTION SHUTOFF VALVE  | AUXILIARY   | 587.00     | BORIC ACID STOR TANK        |
| 8           | 2     | 1-QMO-451      | 0      | CVCS / REACTOR COOLANT LETDOWN VOLUME CONTROL TANK TK-10 TO CHARGING PUMP 'A' SHUTOFF 4 in MOTOR OPERATED VALVE          | AUXILIARY   | 609.00     | VOL CONTROL TANK E HALLWAY  |
| 8           | 1     | 1-QMO-452      | 0      | CVCS / REACTOR COOLANT LETDOWN VOLUME CONTROL TANK TK-10 TO CHARGING PUMP 'B' SHUTOFF 4 in MOTOR OPERATED VALVE          | AUXILIARY   | 609.00     | VOL CONTROL TANK E HALLWAY  |
| 8           | 12    | 1-QT-506       | 0      | MAIN STEAM / TURBINE DRIV AUX FEED PUMP PP-4 TRIP AND THROTTLE VALVE   | TURBINE     | 591.00     | TB DRIVEN AUX FDWTR PMP     |
| 8           | 2     | 1-WMO-701      | 0      | ESW / EAST ESW PUMP PP-7E DISCHARGE SHUTOFF VALVE  | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR PMP RM    |
| 8           | 1     | 1-WMO-702      | 0      | ESW / WEST ESW PUMP PP-7W DISCHARGE SHUTOFF VALVE  | SCREENHOUSE | 591.00     | W ESSNTL SERV WTR PMP RM    |
| 8           | 1     | 1-WMO-705      | 0      | ESW / WEST ESW SUPPLY HEADER CROSSTIE TO UNIT 2 20 in MOTOR OPERATED SHUTOFF VALVE                                       | TURBINE     | 569.00     | ESSNTL SERV WTR PIPE TUNNEL |
| 8           | 2     | 1-WMO-707      | 0      | ESW / EAST ESSENTIAL SERVICE WATER SUPPLY HEADER CROSSTIE TO UNIT 2 20 in MOTOR OPERATED SHUTOFF VALVE                   | TURBINE     | 569.00     | ESSNTL SERV WTR PIPE TUNNEL |
| 8           | 2     | 1-WMO-711      | 0      | ESW / EAST CONTAINMENT SPRAY HEAT EXCHANGER HE-18E ESW INLET 12 in MOTOR OPERATED SHUTOFF VALVE                          | AUXILIARY   | 633.00     | 633 HALLWAY                 |
| 8           | 2     | 1-WMO-713      | 0      | ESW / EAST CONTAINMENT SPRAY HEAT EXCHANGER ESW OUTLET SHUTOFF VALVE   | AUXILIARY   | 609.00     | 609 HALLWAY                 |
| 8           | 1     | 1-WMO-715      | 0      | ESW / WEST CONTAINMENT SPRAY HEAT EXCHANGER HE-18W ESW INLET 12 in MOTOR OPERATED SHUTOFF VALVE                          | AUXILIARY   | 633.00     | 633 HALLWAY                 |
| 8           | 1     | 1-WMO-717      | 0      | ESW / WEST CONTAINMENT SPRAY HEAT EXCHANGER ESW OUTLET SHUTOFF VALVE   | AUXILIARY   | 609.00     | 609 HALLWAY                 |
| 8           | 1     | 1-WMO-721      | 0      | ESW / WEST ESW SUPPLY HEADER TO AB EMERG DIESEL HEAT EXCHANGER SHUTOFF VALVE   | AUXILIARY   | 587.00     | AB DSL RM SO PIPE TUNN      |
| 8           | 2     | 1-WMO-723      | 0      | ESW / EAST ESW SUPPLY HEADER TO AB EMERG DIESEL HEAT EXCHANGER SHUTOFF VALVE   | AUXILIARY   | 587.00     | AB DSL RM SO PIPE TUNN      |
| 8           | 2     | 1-WMO-725      | 0      | ESW / EAST ESW SUPPLY HEADER TO CD EMERG DIESEL HEAT EXCHANGER SHUTOFF VALVE   | AUXILIARY   | 587.00     | AB DSL RM SO PIPE TUNN      |
| 8           | 1     | 1-WMO-727      | 0      | ESW / WEST ESW SUPPLY HEADER TO CD EMERG DIESEL HEAT EXCHANGER SHUTOFF VALVE   | AUXILIARY   | 587.00     | AB DSL RM SO PIPE TUNN      |
| 8           | 2     | 1-WMO-731      | 0      | ESW / EAST CCW HEAT EXCHANGER HE-15E ESW INLET 16 in MOTOR OPERATED SHUTOFF VALVE  | AUXILIARY   | 609.00     | 609 HALLWAY                 |
| 8           | 2     | 1-WMO-733      | 0      | ESW / EAST CCW HEAT EXCHANGER HE-15E ESW OUTLET SHUTOFF VALVE  | AUXILIARY   | 609.00     | 609 HALLWAY                 |
| 8           | 1     | 1-WMO-735      | 0      | ESW / WEST CCW HEAT EXCHANGER HE-15W ESW INLET 16 in MOTOR OPERATED SHUTOFF VALVE  | AUXILIARY   | 609.00     | 609 HALLWAY                 |
| 8           | 1     | 1-WMO-737      | 0      | ESW / WEST CCW HEAT EXCHANGER HE-15W ESW OUTLET SHUTOFF VALVE  | AUXILIARY   | 609.00     | 609 HALLWAY                 |
| 8           | 1     | 1-WMO-744      | 0      | AFW / (ESW TO WEST MOTOR DRIV AUX FEEDWATER PUMP) SHUTOFF 4 in MOV   | TURBINE     | 591.00     | W MOTOR DRIVEN AUX FDWTR PU |
| 8           | 12    | 1-WMO-753      | 0      | AFW / (ESW TO TURB DRIV AUX FEED PUMP PP-4) SHUTOFF 6 in MOTOR OPERATED VALVE  | TURBINE     | 591.00     | TB DRIVEN AUX FDWTR PMP     |
| 8           | 2     | 1-WMO-754      | 0      | AFW / (ESW TO EAST MOTOR DRIV AUX FEED PUMP) SHUTOFF 4 in MOTOR OPERATED VALVE   | TURBINE     | 591.00     | E MOTOR DRIVEN AUX FDWTR PU |
| 8           | 12    | 1-XSO-505      | 0      | CONTROL AIR / PRESSUREIZER TRAIN 1 in B PRESSURE RELIEF VALVE NRV-152 CONTROL SOLENOID                                   | CONTAINMENT | 650.00     | PRESSRZR ENCL INTERIOR      |
| 8           | 12    | 1-XSO-507      | 0      | CONTROL AIR / PRESSUREIZER TRAIN 'A' PRESSURE RELIEF VALVE NRV-153 CONTROL SOLENOID                                      | CONTAINMENT | 650.00     | PRESSRZR ENCL INTERIOR      |
| 9           | 2     | 1-HV-AES-1     | 0      | AUX BUILDING VENTILATION / AUX BUILDING VENTILATION ENGINEERED SAFETY FEATURE EXHAUST UNIT 1                             | AUXILIARY   | 633.00     | NORM BLOWDOWN FLASHTANK RM  |
| 9           | 1     | 1-HV-AES-2     | 0      | AUX BUILDING VENTILATION / AUX BUILDING VENTILATION ENGINEERED SAFETY FEATURE EXHAUST UNIT 2                             | AUXILIARY   | 633.00     | NORM BLOWDOWN FLASHTANK RM  |
| 9           | 2     | 1-HV-AFP-BRE-1 | 0      | AUX BUILDING VENTILATION / 'N' BATTERY ROOM EAST EXHAUST FAN   | AUXILIARY   | 633.00     | 633 HALLWAY                 |

**DONALD C. COOK NUCLEAR PLANT UNIT # 1**  
**SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**  
**FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID   | Rev No | System / Equipment Description   | Building    | Floor Elev | Room or Row Col             |
|-------------|-------|----------------|--------|--|-------------|------------|-----------------------------|
| 9           | 1     | 1-HV-AFP-BRE-2 | 0      | AUX BUILDING VENTILATION / TR 111 BATTERY ROOM WEST EXHAUST FAN  | AUXILIARY   | 633.00     | 633 HALLWAY                 |
| 9           | 2     | 1-HV-AFP-M1    | 0      | TURBINE BUILDING VENTILATION / EAST MOTOR DRIV AUX FEEDWATER PUMP ROOM EXHAUST FAN                                 | TURBINE     | 591.00     | E MOTOR DRIVEN AUX FDWTR PU |
| 9           | 2     | 1-HV-AFP-M2    | 0      | TURBINE BUILDING VENTILATION / EAST MOTOR DRIV AUX FEED WATER PUMP ROOM SUPPLY FAN                                 | TURBINE     | 591.00     | E MOTOR DRIVEN AUX FDWTR PU |
| 9           | 2     | 1-HV-AFP-T1    | 0      | TURBINE BUILDING VENTILATION / TURB DRIV AUX FEED PUMP ROOM SOUTH EXHAUST FAN                                      | TURBINE     | 591.00     | TB DRIVEN AUX FDWTR PMP     |
| 9           | 1     | 1-HV-AFP-T2    | 0      | TURBINE BUILDING VENTILATION / TURBINE DRIV AUX FEED PUMP ROOM NORTH EXHAUST FAN                                   | TURBINE     | 591.00     | TB DRIVEN AUX FDWTR PMP     |
| 9           | 1     | 1-HV-AFP-X1    | 0      | TURBINE BUILDING VENTILATION / WEST MOTOR DRIV AUX FEED PUMP ROOM EAST EXHAUST FAN                                 | TURBINE     | 591.00     | W MOTOR DRIVEN AUX FDWTR PU |
| 9           | 1     | 1-HV-AFP-X2    | 0      | TURBINE BUILDING VENTILATION / WEST MOTOR DRIV AUX FEEDWATER PUMP ROOM WEST EXHAUST FAN                            | TURBINE     | 591.00     | W MOTOR DRIVEN AUX FDWTR PU |
| 9           | 1     | 1-HV-CEQ-1     | 0      | HYDROGEN SKIMMER / CONTAINMENT HYDROGEN SKIMMER VENTILATION FAN 1  | CONTAINMENT | 625.00     | HV-CEQ-1 FAN RM             |
| 9           | 2     | 1-HV-CEQ-2     | 0      | HYDROGEN SKIMMER / CONTAINMENT HYDROGEN SKIMMER VENTILATION FAN 2  | CONTAINMENT | 625.00     | HV-CEQ-1 FAN RM             |
| 9           | 1     | 1-HV-DGS-1     | 0      | DIESEL ROOM VENTILATION / AB EMERG DIESEL GENERATOR VENTILATION SUPPLY FAN   | AUXILIARY   | 587.00     | AB EMER DSL GEN RM          |
| 9           | 2     | 1-HV-DGS-2     | 0      | DIESEL ROOM GENERATOR / CD EMERG DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN                                      | AUXILIARY   | 587.00     | CD EMER DSL GEN RM          |
| 9           | 1     | 1-HV-DGS-3     | 0      | DIESEL ROOM VENTILATION / AB EMERG DIESEL GENERATOR ROOM CONTROL PANEL VENTILATION SUPPLY FAN                      | AUXILIARY   | 587.00     | AB EMER DSL GEN RM          |
| 9           | 2     | 1-HV-DGS-4     | 0      | DIESEL ROOM VENTILATION / CD EMERG DIESEL GENERATOR ROOM CONTROL PANEL VENTILATION SUPPLY FAN                      | AUXILIARY   | 587.00     | CD EMER DSL GEN RM          |
| 9           | 1     | 1-HV-DGX-1     | 0      | DIESEL ROOM VENTILATION / AB EMERG DIESEL GENERATOR ROOM VENTILATION EXHAUST FAN                                   | AUXILIARY   | 587.00     | AB EMER DSL GEN RM          |
| 9           | 2     | 1-HV-DGX-2     | 0      | DIESEL ROOM VENTILATION / CD EMERG DIESEL GENERATOR VENTILATION EXHAUST FAN  | AUXILIARY   | 587.00     | CD EMER DSL GEN RM          |
| 9           | 1     | 1-HV-SGRS-1A   | 0      | AUXILIARY BUILDING VENTILATION / CONTROL ROD DRIVE EQUIPMENT ROOM AND INVERTER AREA VENTILATION SOUTH SUPPLY FAN   | AUXILIARY   | 609.00     | 4KV RM - 600V SWITCHGEAR    |
| 9           | 1     | 1-HV-SGRS-2    | 0      | AUX BUILDING VENTILATION / 4KV ROOM AB 4KV SWITCHGEAR AREA VENTILATION SUPPLY FAN                                  | AUXILIARY   | 609.00     | 4KV RM - AB 4KV SWGR        |
| 9           | 2     | 1-HV-SGRS-3    | 0      | AUX BUILDING VENTILATION / 4KV ROOM CD 4KV SWITCHGEAR AREA VENTILATION SUPPLY FAN                                  | AUXILIARY   | 609.00     | 4KV RM - CD 4KV SWGR        |
| 9           | 2     | 1-HV-SGRS-4A   | 0      | AUX BUILDING VENTILATION / CONTROL ROD DRIVE EQUIP ROOM AND INVERTER AREA VENTILATION NORTH SUPPLY FAN             | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR          |
| 9           | 12    | 1-HV-SGRS-7    | 0      | AUX BUILDING VENTILATION / 4KV ROOM 600V SWITCHGEAR TRANSFORMER TR-11B AND TR-11D AREA VENTILATION SUPPLY FAN      | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR          |
| 9           | 12    | 1-HV-SGRS-8    | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600V SWITCHGEAR TRANSFORMERS TR11A AND TR11C AREA VENTILATION SUPPLY FAN | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR          |
| 9           | 12    | 1-HV-SGRS-9    | 0      | AUXILIARY BUILDING VENTILATION / 600VAC MOTOR CONTROL CENTER MEZZANINE AREA VENTILATION SUPPL FAN                  | AUXILIARY   | 613.00     | 4KV RM - MEZZANINE          |
| 9           | 1     | 1-HV-SGRX-2    | 0      | AUX BUILDING VENTILATION / 4KV ROOM AB 4KV SWITCHGEAR AREA VENTILATION EXHAUST FAN                                 | AUXILIARY   | 609.00     | 4KV RM - AB 4KV SWGR        |
| 9           | 2     | 1-HV-SGRX-3    | 0      | AUX BUILDING VENTILATION / 4KV ROOM CD 4KV SWITCHGEAR AREA VENTILATION EXHAUST FAN                                 | AUXILIARY   | 609.00     | 4KV RM - CD 4KV SWGR        |
| 9           | 1     | 1-HV-SGRX-5    | 0      | AUX BUILDING VENTILATION / AB BATTERY EQUIPMENT AREA BATTERY ROOM VENTILATION EXHAUST FAN                          | AUXILIARY   | 609.00     | AB BATT EQUIP               |
| 9           | 2     | 1-HV-SGRX-6    | 0      | AUX BUILDING VENTILATION / CD BATTERY EQUIPMENT AREA BATTERY ROOM VENTILATION EXHAUST FAN                          | AUXILIARY   | 626.00     | SWGR CSR                    |
| 9           | 12    | 12-HV-ACCP-1   | 0      | AUX BUILDING VENTILATION / CCW PUMPS VENTILATION NORTH SUPPLY FAN  | AUXILIARY   | 633.00     | 633 HALLWAY                 |
| 9           | 12    | 12-HV-ACCP-2   | 0      | AUX BUILDING VENTILATION / CCW PUMPS VENTILATION MIDDLE SUPPLY FAN   | AUXILIARY   | 633.00     | 633 HALLWAY                 |
| 9           | 12    | 12-HV-ACCP-3   | 0      | AUX BUILDING VENTILATION / CCW PUMPS VENTILATION SOUTH SUPPLY FAN  | AUXILIARY   | 633.00     | 633 HALLWAY                 |
| 9           | 1     | 12-HV-ESW-5    | 0      | SCREENHOUSE VENTILATION / UNIT 1 WEST ESW PUMP ROOM SUPPLY VENTILATION FAN   | SCREENHOUSE | 591.00     | W ESSNTL SERV WTR PMP RM    |
| 9           | 1     | 12-HV-ESW-6    | 0      | SCREENHOUSE VENTILATION / UNIT 1 WEST ESW PUMP ROOM SUPPLY VENTILATION FAN   | SCREENHOUSE | 591.00     | W ESSNTL SERV WTR PMP RM    |

**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID     | Rev No | System / Equipment Description   | Building    | Floor Elev | Room or Row Col               |
|-------------|-------|------------------|--------|--|-------------|------------|-------------------------------|
| 9           | 2     | 12-HV-ESW-7      | 0      | SCREENHOUSE VENTILATION / UNIT #1<br>EAST ESW PUMP ROOM SUPPLY<br>VENTILATION FAN                                | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR<br>PMP RM   |
| 9           | 2     | 12-HV-ESW-8      | 0      | SCREENHOUSE VENTILATION / UNIT 1 ESW<br>PUMP ROOM SUPPLY VENTILATION FAN   | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR<br>PMP RM   |
| 10          | 2     | 1-HV-ACRA-1      | 0      | CONTROL ROOM VENTILATION / CONTROL<br>ROOM VENTILATION NORTH AIR HANDLER<br>PACKAGE                              | AUXILIARY   | 650.00     | CTRL RM AIR COND<br>RM        |
| 10          | 1     | 1-HV-ACRA-2      | 0      | CONTROL ROOM VENTILATION / CONTROL<br>ROOM VENTILATION SOUTH AIR HANDLER<br>PACKAGE                              | AUXILIARY   | 650.00     | CTRL RM AIR COND<br>RM        |
| 10          | 2     | 1-HV-AES-1 (FLT) | 0      | AUX BUILDING VENTILATION / AUX BUILDING<br>VENTILATION ENGINEERED SAFETY<br>FEATURE EXHAUST AIR FILTER UNIT #1   | AUXILIARY   | 633.00     | NORM BLOWDOWN<br>FLASHTANK RM |
| 10          | 1     | 1-HV-AES-2 (FLT) | 0      | AUX BUILDING VENTILATION / AUX BUILDING<br>VENTILATION ENGINEERED SAFETY<br>FEATURE EXHAUST AIR FILTER UNIT #2   | AUXILIARY   | 633.00     | NORM BLOWDOWN<br>FLASHTANK RM |
| 11          | 2     | 1-HE-63N         | 0      | CONTROL ROOM A/C CHILL WATER /<br>CONTROL ROOM A/C NORTH LIQUID CHILLER<br>HV-ACR1 EVAPORATOR                    | AUXILIARY   | 650.00     | CTRL RM AIR COND<br>RM        |
| 11          | 1     | 1-HE-63S         | 0      | CTRL RM AIR CONDITIONING CHILL WTR /<br>CONTROL ROOM AIR CONDITIONING SOUTH<br>LIQUID CHILLER HV-ACR-2 EVAPORAT  | AUXILIARY   | 650.00     | CTRL RM AIR COND<br>RM        |
| 11          | 2     | 1-HE-64N         | 0      | CONTROL ROOM A/C CHILL WATER /<br>CONTROL ROOM A/C NORTH LIQUID<br>CHILLER HV-ACR-1 CONDENSER                    | AUXILIARY   | 650.00     | CTRL RM AIR COND<br>RM        |
| 11          | 1     | 1-HE-64S         | 0      | CONTROL ROOM A/C CHILL WATER /<br>CONTROL ROOM A/C SOUTH LIQUID<br>CHILLER HV-ACR-2 CONDENSER                    | AUXILIARY   | 650.00     | CTRL RM AIR COND<br>RM        |
| 11          | 2     | 1-HV-ACR-1       | 0      | CONTROL ROOM A/C CHILL WATER /<br>CONTROL ROOM NORTH LIQUID CHILLER<br>PACKAGE                                   | AUXILIARY   | 650.00     | CTRL RM AIR COND<br>RM        |
| 11          | 1     | 1-HV-ACR-2       | 0      | CONTROL ROOM A/C CHILL WATER /<br>CONTROL ROOM SOUTHW LIQUID CHILLER<br>PACKAGE                                  | AUXILIARY   | 650.00     | CTRL RM AIR COND<br>RM        |
| 12          | 1     | 1-QT-502-AB      | 0      | DIESEL COMBUSTION AIR / AB EMERG<br>DIESEL TURBOCHARGER  | AUXILIARY   | 587.00     | AB EMER DSL GEN<br>RM         |
| 12          | 2     | 1-QT-502-CD      | 0      | DIESEL COMBUSTION AIR / CD EMERG<br>DIESEL TURBOCHARGER  | AUXILIARY   | 587.00     | CD EMER DSL GEN<br>RM         |
| 14          | 1     | 1-89-AB8C        | 0      | 250 VDC DISTRIBUTION / PLANT BATTERY<br>BATT-AB DISCONNECT SWITCH  | AUXILIARY   | 609.00     | INVERTER AREA                 |
| 14          |       | 1-89-CD8C        | 0      | 250 VDC DISTRIBUTION / PLANT BATTERY<br>BATT-CD DISCONNECT SWITCH  | AUXILIARY   | 628.00     | CD BATTERY<br>EQUIPMENT AREA  |
| 14          | 2     | 1-AFW            | 0      | 120/208V MISC SAFETY RELATED PWR<br>DISTRIB / POWER PANEL  | AUXILIARY   | 587.00     | CD EMER DSL GEN<br>RM         |
| 14          | 2     | 1-AFWX           | 0      | 120/208V MISC SAFETY RELATED PWR<br>DISTRIB / 120/208 VAC AUXILIARY<br>FEEDWATER DISTR PNL                       | AUXILIARY   | 587.00     | CD EMER DSL GEN<br>RM         |
| 14          | 1     | 1-BATT-AB-SH     | 0      | 250V DC DISTRIBUTION / PLANT BATTERY<br>BATT-AB AMMETER SHUNT  | AUXILIARY   | 613.00     | 4KV RM - MEZZANINE            |
| 14          | 2     | 1-BATT-CD-SH     | 0      | 250V DC DISTRIBUTION / PLANT BATTERY<br>BATT-CD AMMETER SHUNT  | AUXILIARY   | 628.00     | CD BATT EQUIP                 |
| 14          | 12    | 1-BATT-N-SH      | 0      | 250VDC CONTROL AND INSTRUMENTATION /<br>METERING SHUNT   | AUXILIARY   | 633.00     | 633 HALLWAY                   |
| 14          | 1     | 1-BC-AB-SH       | 0      | 250 VDC DISTRIBUTION / PLANT BATTERY<br>CHARGER AMMETER BC-AB SHUNT<br>CABINET                                   | AUXILIARY   | 613.00     | 4KV RM - MEZZANINE            |
| 14          | 2     | 1-BC-CD-SH       | 0      | 250V DC DISTRIBUTION / PLANT BATTERY<br>CHARGER BC-CD SHUNT CABINET  | AUXILIARY   | 628.00     | CD BATT EQUIP                 |
| 14          | 1     | 1-BCTC-AB        | 0      | 250V DC DISTRIBUTION / PLANT BATTERY<br>CHARGERS BC-AB1 AND BC-AB2 TRANSFER<br>PANEL                             | AUXILIARY   | 613.00     | 4KV RM - MEZZANINE            |
| 14          | 2     | 1-BCTC-CD        | 0      | 250V DC DISTRIBUTION / PLANT BATTERY<br>CHARGERS BC-CD1 AND BC-CD2<br>TRANSFER PANEL                             | AUXILIARY   | 628.00     | CD BATT EQUIP                 |
| 14          | 1     | 1-CCV-AB         | 0      | 250VDC DISTRIBUTION / POWER PANEL  | AUXILIARY   | 633.00     | CONTROL RM                    |
| 14          | 2     | 1-CCV-CD         | 0      | 250VDC DISTRIBUTION / 250VDC TRAIN 'A'<br>CRITICAL SOLENOID VALVES DISTRIBUTION<br>PANEL                         | AUXILIARY   | 633.00     | CONTROL RM                    |
| 14          | 1     | 1-CRAB           | 0      | 250VDC DISTRIBUTION / POWER PANEL  | AUXILIARY   | 633.00     | CONTROL RM                    |
| 14          | 2     | 1-CRCD           | 0      | 250VDC DISTRIBUTION / POWER PANEL  | AUXILIARY   | 633.00     | CONTROL RM                    |
| 14          | 2     | 1-CRID-I         | 0      | 120VAC CTRL RM INSTRUMENTATION DISTR<br>/ 120VAC CONTROL ROOM INSTRUMENT<br>DISTRIBUTION CH-I                    | AUXILIARY   | 633.00     | CONTROL RM                    |
| 14          | 2     | 1-CRID-II        | 0      | 120V AC DISTRIBUTION / 120V AC CONTROL<br>ROOM INSTRUMENT DISTRIBUTION CH-II                                     | AUXILIARY   | 633.00     | CONTROL RM                    |
| 14          | 1     | 1-CRID-III       | 0      | 120VAC CTRL RM INSTRUMENTATION DISTR<br>/ 120VAC CONTROL ROOM INSTRUMENT<br>DISTRIBUTION CH-III                  | AUXILIARY   | 633.00     | CONTROL RM                    |
| 14          | 1     | 1-CRID-IV        | 0      | 120VAC CTRL RM INSTRUMENTATION DISTR<br>/ 120VAC CONTROL ROOM INSTRUMENT<br>DISTRIBUTION CH-IV                   | AUXILIARY   | 633.00     | CONTROL RM                    |
| 14          | 12    | 1-OCN            | 0      | 250VDC CONTROL AND INSTRUMENTATION /<br>250VDC POWER PANEL   | AUXILIARY   | 633.00     | 633 HALLWAY                   |
| 14          | 1     | 1-ELSC           | 0      | 120/208V MISC SAFETY RELATED PWR<br>DISTRIB / POWER PANEL  | AUXILIARY   | 587.00     | AB EMER DSL GEN<br>RM         |
| 14          | 1     | 1-ELSCX          | 0      | 120/208V MISC SAFETY RELATED PWR<br>DISTRIB / 120/208VAC EMERG LOCAL<br>SHUTDOWN AUXILIARY DISTRIBUTION<br>PANEL | AUXILIARY   | 587.00     | AB EMER DSL GEN<br>RM         |

**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID   | Rev No | System / Equipment Description  | Building    | Floor Elev | Room or Row Col                          |
|-------------|-------|----------------|--------|---|-------------|------------|--|
| 14          | 1     | 1-MCAB         | 0      | 250V DC DISTRIBUTION / 250V DC DISTRIBUTION PANEL MCAB  | AUXILIARY   | 609.00     | AB BATT EQUIP                            |
| 14          | 2     | 1-MCCD         | 0      | 250V DC DISTR / 250V DC DISTRIBUTION POWER PANEL  | AUXILIARY   | 626.00     | CD BATT EQUIP                            |
| 14          | 1     | 1-MDAB         | 0      | 250VDC DISTRIBUTION / 250 VDC POWER PANEL   | AUXILIARY   | 609.00     | AB BATT EQUIP                            |
| 14          | 2     | 1-MDCD         | 0      | 250VDC DISTRIBUTION / POWER PANEL   | AUXILIARY   | 626.00     | CD BATT EQUIP                            |
| 14          | 2     | 1-SSV-A1       | 0      | 250VAC DISTRIBUTION / 250VDC TRAIN 'A' NUCLEAR SAMPLING FEEDER PANEL #1                                 | AUXILIARY   | 587.00     | NUCLEAR SAMPLING RM                      |
| 14          | 2     | 1-SSV-A2       | 0      | 250VDC / 250VDC NUCLEAR SAMPLING FEEDER PANEL #2  | AUXILIARY   | 587.00     | NUCLEAR SAMPLING RM                      |
| 14          | 1     | 1-SSV-B        | 0      | 250VDC DISTRIBUTION / POWER PANEL   | AUXILIARY   | 587.00     | NUCLEAR SAMPLING RM                      |
| 14          | 1     | 1-TDAB         | 0      | 250VDC DISTRIBUTION / 250 VDC POWER PANEL   | AUXILIARY   | 609.00     | AB BATT EQUIP                            |
| 14          | 2     | 1-TDCD         | 0      | 250VDC DISTRIBUTION / POWER PANEL, TRAIN A TRANSFER CABINET   | AUXILIARY   | 626.00     | CD BATT EQUIP                            |
| 14          | 1     | 1-VDAB-1       | 0      | 250V DC DISTR / 250V DC VALVE DISTRIBUTION PANEL VDAB-1   | AUXILIARY   | 633.00     | CONTROL RM                               |
| 14          | 1     | 1-VDAB-2       | 0      | 250VDC DISTR / 250V DC VALVE DISTRIBUTION PANEL VDAB-2  | AUXILIARY   | 633.00     | CONTROL RM                               |
| 14          | 2     | 1-VDOD-1       | 0      | 250VDC DISTR / 250V DC VALVE DISTRIBUTION PANEL VDOD-1  | AUXILIARY   | 633.00     | CONTROL RM                               |
| 14          | 2     | 1-VDOD-2       | 0      | 250V DC DISTR / 250V DC DISTRIBUTION PANEL VDOD-2   | AUXILIARY   | 633.00     | CONTROL RM                               |
| 15          | 1     | 1-BATT-AB      | 0      | 250V DC DISTRIBUTION / PLANT BATT AB  | AUXILIARY   | 609.00     | AB BATT EQUIP                            |
| 15          | 2     | 1-BATT-CD      | 0      | 250V DC DISTRIBUTION / PLANT BATT CD  | AUXILIARY   | 626.00     | CD BATT EQUIP                            |
| 15          | 12    | 1-BATT-N       | 0      | 250VDC CONTROL AND INSTRUMENTATION / TRAIN N PLANT BATTERY  | AUXILIARY   | 633.00     | 633 HALLWAY                              |
| 16          | 12    | 1-BC-A         | 0      | 250VDC CONTROL AND INSTRUMENTATION / BATTERY CHARGER 'A' FOR 'N' TRAIN BATTERY                          | AUXILIARY   | 633.00     | 633 HALLWAY                              |
| 16          | 1     | 1-BC-AB1       | 0      | 250V DC DISTRIBUTION / PLANT BATT BATT-AB BATTERY CHARGER #1  | AUXILIARY   | 613.00     | 4KV RM - MEZZANINE                       |
| 16          | 1     | 1-BC-AB2       | 0      | 250V DC DISTRIBUTION / PLANT BATTERY BATT-AB CHARGER #2   | AUXILIARY   | 613.00     | 4KV RM - MEZZANINE                       |
| 16          | 12    | 1-BC-B         | 0      | 250VDC CONTROL AND INSTRUMENTATION / BATTERY CHARGER 'B' FOR 'N' TRAIN BATTERY                          | AUXILIARY   | 633.00     | 633 HALLWAY                              |
| 16          | 2     | 1-BC-CD1       | 0      | 250V DC DISTRIBUTION / PLANT BATTERY BATT-CD CHARGER #1   | AUXILIARY   | 626.00     | CD BATT EQUIP                            |
| 16          | 2     | 1-BC-CD2       | 0      | 250V DC DISTRIBUTION / PLANT BATTERY BATT-CD CHARGER #2   | AUXILIARY   | 626.00     | CD BATT EQUIP                            |
| 16          | 2     | 1-CRID-I-INV   | 0      | 120VAC CTRL RM INSTRUMENTATION DISTR / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CH-I INVERTER | AUXILIARY   | 609.00     | INVERTER AREA                            |
| 16          | 2     | 1-CRID-II-INV  | 0      | 120V DC DISTRIBUTION / 120V AC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CH-II INVERTER               | AUXILIARY   | 609.00     | INVERTER AREA                            |
| 16          | 1     | 1-CRID-III-INV | 0      | 120V CTRL RM INSTRUMENTATION DISTR / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CH-III INVERTER | AUXILIARY   | 609.00     | INVERTER AREA                            |
| 16          | 1     | 1-CRID-IV-INV  | 0      | 120V CTRL RM INSTRUMENTATION DISTR / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CH-IV INVERTER  | AUXILIARY   | 633.00     | CONTROL RM                               |
| 16          | 1     | 1-DGAB-INV     | 0      | DIESEL GENERATOR, CONTROL AND INSTRUMENT / AB EMERGENCY DIESEL GENERATOR OME-150-AB INVERTER            | AUXILIARY   | 587.00     | AB EMER DSL GEN RM                       |
| 16          | 2     | 1-DGCD-INV     | 0      | DIESEL GENERATION, CONTROL AND INSTRUMENT / DIESEL GENERATOR INVERTER                                   | AUXILIARY   | 587.00     | CD EMER DSL GEN RM                       |
| 17          | 1     | 1-OME-150-AB   | 0      | DIESEL GENERATOR CONTROL AND INSTRUMENTA / AB EMERG DIESEL GENERATOR                                    | AUXILIARY   | 587.00     | AB EMER DSL GEN RM                       |
| 17          | 2     | 1-OME-150-CD   | 0      | DIESEL GENERATION CONTROL AND INSTRUMENT / CD EMERG DIESEL GENERATOR                                    | AUXILIARY   | 587.00     | CD EMER DSL GEN RM                       |
| 18          | 2     | 1-BU-110       | 0      | STEAM GENERATING / STEAM GENERATOR OME-3-1 WIDE RANGE LEVEL INDICATOR TRANSMITTER                       | CONTAINMENT | 612.00     | EAST CONTAINMENT LOWER VENT ROOM, AZ 357 |
| 18          | 1     | 1-BU-120       | 0      | STEAM GENERATING / STEAM GENERATOR OME-3-2 WIDE RANGE LEVEL TRANSMITTER                                 | CONTAINMENT | 612.00     | ACCUMULATOR TANK #2 AREA, AZ 126         |
| 18          | 1     | 1-BU-130       | 0      | STEAM GENERATING / STEAM GENERATOR OME-3-3 WIDE RANGE LEVEL INDICATOR TRANSMITTER                       | CONTAINMENT | 612.00     | WEST CONTAINMENT LOWER VENT ROOM, AZ 180 |
| 18          | 2     | 1-BU-140       | 0      | STEAM GENERATING / STEAM GENERATOR OME-3-4 WIDE RANGE LEVEL INDICATOR TRANSMITTER                       | CONTAINMENT | 612.00     | ACCUMULATOR TANK #4 AREA, AZ 324         |
| 18          | 2     | 1-CLJ-113      | 0      | CONDENSATE STORAGE TANK SUPPLY / CONDENSATE STORAGE TANK TK-32 LEVEL INDICATOR TRANSMITTER              | AUXILIARY   | 588.00     | STORAGE TANK PIPE TUNNEL                 |
| 18          | 1     | 1-CLJ-114      | 0      | CONDENSATE STORAGE TANK SUPPLY / CONDENSATE STORAGE TANK TK-32 LEVEL INDICATOR TRANSMITTER              | AUXILIARY   | 588.00     | STORAGE TANK PIPE TUNNEL                 |
| 18          | 1     | 1-CPS-312      | 0      | DIESEL JACKET WATER / AB EMERG DIESEL JACKET WATER PUMP QT-130-AB1 DISCHARGE PRESSURE SWITCH            | AUXILIARY   | 587.00     | AB EMER DSL GEN RM                       |



**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description  | Building    | Floor Elev | Room or Row Col          |
|-------------|-------|--------------|--------|---|-------------|------------|--------------------------|
| 18          | 1     | 1-CPS-314    | 0      | DIESEL JACKET WATER / AB EMERG<br>DIESEL JACKET WATER PUMP QT-130-AB2<br>DISCHARGE PRESSURE SWITCH        | AUXILIARY   | 587.00     | AB EMER DSL GEN RM       |
| 18          | 2     | 1-CPS-317    | 0      | DIESEL JACKET WATER / CD EMERG<br>DIESEL JACKET WATER PUMP QT-130-CD1<br>DISCHARGE PRESSURE SWITCH        | AUXILIARY   | 587.00     | CD EMER DSL GEN RM       |
| 18          | 2     | 1-CPS-319    | 0      | DIESEL JACKET WATER / CD EMERG<br>DIESEL JACKET WATER PUMP QT-130-CD2<br>DISCHARGE PRESSURE SWITCH        | AUXILIARY   | 587.00     | CD EMER DSL GEN RM       |
| 18          | 2     | 1-CPS-410    | 0      | CCW / EAST CCW PUMP PP-110E<br>DISCHARGE PRESSURE SWITCH  | AUXILIARY   | 609.00     | 609 HALLWAY              |
| 18          | 1     | 1-CPS-420    | 0      | CCW / WEST CCW PUMP PP-10W<br>DISCHARGE PRESSURE SWITCH   | AUXILIARY   | 609.00     | 609 HALLWAY              |
| 18          | 1     | 1-FFI-210    | 0      | AUX FEEDWATER / AUX FEEDWATER TO<br>STEAM GENERATOR OME-3-1 FLOW<br>INDICATOR TRANSMITTER                 | AUXILIARY   | 621.00     | E MAIN STM STOP ENCL     |
| 18          | 2     | 1-FFI-220    | 0      | AUX FEEDWATER / AUX FEEDWATER TO<br>STEAM GENERATOR OME-3-2 FLOW<br>INDICATOR TRANSMITTER                 | AUXILIARY   | 621.00     | W MAIN STM STOP ENCL     |
| 18          | 2     | 1-FFI-230    | 0      | AUX FEEDWATER / AUX FEEDWATER TO<br>STEAM GENERATOR OME-3-3 FLOW<br>INDICATOR TRANSMITTER                 | AUXILIARY   | 621.00     | W MAIN STM STOP ENCL     |
| 18          | 1     | 1-FFI-240    | 0      | AUX FEEDWATER / AUX FEEDWATER TO<br>STEAM GENERATOR OME-3-4 FLOW<br>INDICATOR TRANSMITTER                 | AUXILIARY   | 621.00     | E MAIN STM STOP ENCL     |
| 18          | 2     | 1-IFI-310    | 0      | RHR / EAST RHR HEAT EXCHANGER HE-17E<br>OUTLET LOW RANGE FLOW INDICATOR<br>TRANSMITTER                    | AUXILIARY   | 609.00     | 609 HALLWAY              |
| 18          | 2     | 1-IFI-311    | 0      | RHR / EAST RHR HEAT EXCHANGER HE-17E<br>OUTLET HIGH RANGE FLOW INDICATOR<br>TRANSMITTER                   | AUXILIARY   | 609.00     | 609 HALLWAY              |
| 18          | 1     | 1-IFI-320    | 0      | RHR / WEST RHR HEAT EXCHANGER HE-17W<br>OUTLET LOW RANGE FLOW INDICATOR<br>TRANSMITTER                    | AUXILIARY   | 609.00     | 609 HALLWAY              |
| 18          | 1     | 1-IFI-321    | 0      | RHR / WEST RHR HEAT EXCHANGER HE-17W<br>OUTLET HIGH RANGE FLOW INDICATOR<br>TRANSMITTER                   | AUXILIARY   | 609.00     | 609 HALLWAY              |
| 18          | 12    | 1-IFI-335    | 0      | RHR / RHR TO REACTOR COOLANT LOOPS 2<br>AND 3 COLD LEGS FLOW INDICATING<br>TRANSMITTER                    | AUXILIARY   | 591.00     | VESTIBULE                |
| 18          | 2     | 1-IFI-51     | 0      | BORON INJECTION / BORON INJECTION TO<br>REACTOR COOLANT LOOP #1 FLOW<br>INDICATOR TRANSMITTER             | CONTAINMENT | 598.00     | ANNULUS, QUAD1           |
| 18          | 1     | 1-IFI-52     | 0      | BORON INJECTION / BORON INJECTION TO<br>RC LOOP #2 FLOW INDICATOR<br>TRANSMITTER                          | CONTAINMENT | 598.00     | ANNULUS, QUAD2           |
| 18          | 1     | 1-IFI-53     | 0      | BORON INJECTION / BORON INJECTION TO<br>RC LOOP #3 FLOW INDICATOR<br>TRANSMITTER                          | CONTAINMENT | 598.00     | ANNULUS, QUAD3           |
| 18          | 2     | 1-IFI-54     | 0      | BORON INJECTION / BORON INJECTION TO<br>RC LOOP #4 FLOW INDICATOR<br>TRANSMITTER                          | CONTAINMENT | 598.00     | ANNULUS, QUAD4           |
| 18          | 12    | 1-ILS-950    | 0      | RWST SUPPLY / RWST TK-33 EXTREME<br>LOW LEVEL TRANSMITTER   | AUXILIARY   | 586.00     | STORAGE TANK PIPE TUNNEL |
| 18          | 12    | 1-ILS-951    | 0      | RWST SUPPLY / RWST TK-33 LEVEL<br>TRANSMITTER   | AUXILIARY   | 586.00     | STORAGE TANK PIPE TUNNEL |
| 18          | 1     | 1-LLS-120    | 0      | DIESEL FUEL OIL / AB EMERG DIESEL FUEL<br>OIL DAY TANK QT-107-AB HIGH LEVEL<br>SWITCH 1                   | AUXILIARY   | 587.00     | AB EMER DSL GEN RM       |
| 18          | 1     | 1-LLS-121    | 0      | DIESEL FUEL OIL / AB EMERG DIESEL FUEL<br>OIL DAY TANK QT-107-AB LOW LEVEL<br>SWITCH 1                    | AUXILIARY   | 587.00     | AB EMER DSL GEN RM       |
| 18          | 1     | 1-LLS-122    | 0      | DIESEL FUEL OIL / AB EMERG DIESEL FUEL<br>OIL DAY TANK QT-107-AB HIGH LEVEL<br>SWITCH 2                   | AUXILIARY   | 587.00     | AB EMER DSL GEN RM       |
| 18          | 1     | 1-LLS-123    | 0      | DIESEL FUEL OIL / AB EMERG DIESEL FUEL<br>OIL DAY TANK QT-107-AB LOW LEVEL<br>SWITCH 2                    | AUXILIARY   | 587.00     | AB EMER DSL GEN RM       |
| 18          | 2     | 1-LLS-125    | 0      | DIESEL FUEL OIL / CD EMERG DIESEL FUEL<br>OIL DAY TANK QT-107-CD HIGH LEVEL<br>SWITCH 1                   | AUXILIARY   | 587.00     | CD EMER DSL GEN RM       |
| 18          | 2     | 1-LLS-126    | 0      | DIESEL FUEL OIL / CD EMERG DIESEL FUEL<br>OIL DAY TANK QT-107-CD LOW LEVEL<br>SWITCH 1                    | AUXILIARY   | 587.00     | CD EMER DSL GEN RM       |
| 18          | 2     | 1-LLS-127    | 0      | DIESEL FUEL OIL / CD EMERG DIESEL FUEL<br>OIL DAY TANK QT-107-CD HIGH LEVEL<br>SWITCH 2                   | AUXILIARY   | 587.00     | CD EMER DSL GEN RM       |
| 18          | 2     | 1-LLS-128    | 0      | DIESEL FUEL OIL / CD EMERG DIESEL FUEL<br>OIL DAY TANK QT-107-CD LOW LEVEL<br>SWITCH 2                    | AUXILIARY   | 587.00     | CD EMER DSL GEN RM       |
| 18          | 2     | 1-MPP-210    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1<br>CHANNEL I STEAM PRESSURE<br>TRANSMITTER                           | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL     |
| 18          | 2     | 1-MPP-212    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1<br>CHANNEL IV REACTOR PROTECTION INPUT<br>STEAM PRESSURE TRANSMITTER | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL     |
| 18          | 1     | 1-MPP-220    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2<br>CHANNEL I STEAM PRESSURE<br>TRANSMITTER                           | AUXILIARY   | 633.00     | W MAIN STM STOP ENCL     |





**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID   | Rev No | System / Equipment Description  | Building    | Floor Elev | Room or Row Col             |
|-------------|-------|----------------|--------|---|-------------|------------|-----------------------------|
| 18          | 1     | 1-MPP-222      | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2 CHANNEL II REACTOR PROTECTION INPUT STEAM PRESSURE TRANSMITTER   | AUXILIARY   | 633.00     | W MAIN STM STOP ENCL        |
| 18          | 1     | 1-MPP-230      | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3 CHANNEL I STEAM PRESSURE TRANSMITTER                             | AUXILIARY   | 633.00     | W MAIN STM STOP ENCL        |
| 18          | 1     | 1-MPP-232      | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3 CHANNEL III REACTOR PROTECTION INPUT STEAM PRESSURE TRANSMITTER  | AUXILIARY   | 633.00     | W MAIN STM STOP ENCL        |
| 18          | 2     | 1-MPP-240      | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 CHANNEL I STEAM PRESSURE TRANSMITTER                             | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL        |
| 18          | 1     | 1-MPP-242      | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 CHANNEL IV REACTOR PROTECTION INPUT STEAM PRESSURE TRANSMITTER   | AUXILIARY   | 633.00     | E MAIN STM STOP ENCL        |
| 18          | 1     | 1-NL-151       | 0      | PRESSURIZER / PRESSURIZER LEVEL INDICATOR TRANSMITTER   | CONTAINMENT | 612.00     | INSTRUMENTATION RM          |
| 18          | 2     | 1-NLP-151      | 0      | PRESSURIZER / PRESSURIZER (OME-4) LEVEL TRANSMITTER   | CONTAINMENT | 612.00     | INSTRUMENTATION RM          |
| 18          | 2     | 1-NLP-152      | 0      | PRESSURIZER / PRESSURIZER (OME-4) LEVEL TRANSMITTER   | CONTAINMENT | 612.00     | INSTRUMENTATION RM          |
| 18          | 1     | 1-NLP-153      | 0      | PRESSURIZER / PRESSURIZER (OME-4) LEVEL TRANSMITTER   | CONTAINMENT | 612.00     | INSTRUMENTATION RM          |
| 18          | 2     | 1-NPP-151      | 0      | PRESSURIZER / PRESSURIZER (OME-4) LEVEL TRANSMITTER   | CONTAINMENT | 612.00     | INSTRUMENTATION RM          |
| 18          | 2     | 1-NPP-152      | 0      | PRESSURIZER / PRESSURIZER (OME-4) PRESSURE TRANSMITTER  | CONTAINMENT | 612.00     | INSTRUMENTATION RM          |
| 18          | 1     | 1-NPP-153      | 0      | PRESSURIZER / PRESSURIZER (OME-4) PRESSURE TRANSMITTER  | CONTAINMENT | 612.00     | INSTRUMENTATION RM          |
| 18          | 2     | 1-NPS-121      | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP 2 HOT LEG WIDE RANGE PRESSURE TRANSMITTER                      | CONTAINMENT | 612.00     | W CONT LOWER VENT RM        |
| 18          | 1     | 1-NPS-122      | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP 1 HOT LEG WIDE RANGE PRESSURE TRANSMITTER                      | CONTAINMENT | 612.00     | E CONT LWR VENT RM          |
| 18          | 2     | 1-NRI-21       | 0      | NUCLEAR INSTRUMENTATION / NUCLEAR INST. WIDE RANGE RADIATION DETECTOR                                 | CONTAINMENT | 626.00     | REACTOR CAVITY              |
| 18          | 1     | 1-NRI-23       | 0      | NUCLEAR INSTRUMENTATION / NUCLEAR INST. SOURCE RANGE RADIATION DETECTOR                               | CONTAINMENT | 626.00     | REACTOR CAVITY              |
| 18          | 1     | 1-PPP-301      | 0      | CONTAINMENT VENTILATION / LOWER CONT. CH. II PRESSURE PROTECTION TRANSMITTER                          | AUXILIARY   | 612.00     | 612 AIRLOCK                 |
| 18          | 2     | 1-PPP-302      | 0      | CONTAINMENT VENTILATION / LOWER CONTAINMENT CHANNEL II PRESSURE PROT. TRANSMITTER                     | AUXILIARY   | 612.00     | 612 AIRLOCK                 |
| 18          | 2     | 1-PPP-303      | 0      | CONTAINMENT VENTILATION / LOWER CONTAINMENT CHANNEL I PRESSURE PROTECTION TRANSMITTER                 | AUXILIARY   | 612.00     | 612 AIRLOCK                 |
| 18          | 2     | 1-QFA-210      | 0      | RCTR COOLANT PMP SEAL WTR INJ/LEAKOFF / RCP WATER INJECTION TO RCP PP-45-1 LOW FLOW ALARM TRANSMITTER | AUXILIARY   | 587.00     | 587 HALLWAY                 |
| 18          | 2     | 1-QFA-220      | 0      | RCTR COOLANT PMP SEAL WTR INJ/LEAKOFF / RCP SEAL WATER INJECTION TO RCP 2 LOW FLOW ALARM TRANSMITTER  | AUX         | 587.00     | 587 HALLWAY                 |
| 18          | 1     | 1-QFA-230      | 0      | RCTR COOLANT PMP SEAL WTR INJ/LEAKOFF / RCP SEAL WATER INJECTION TO RCP 3 LOW FLOW ALARM TRANSMITTER  | AUX         | 587.00     | 587 HALLWAY                 |
| 18          | 1     | 1-QFA-240      | 0      | RCTR COOLANT PMP SEAL WTR INJ/LEAKOFF / RCP SEAL WATER TO RCP 4 LOW FLOW ALARM TRANSMITTER            | AUX         | 587.00     | 587 HALLWAY                 |
| 18          | 12    | 1-QFI-200      | 0      | CVCS - CHARGING / CVCS CHG PPS DISCH FLOW INDICATOR   | AUXILIARY   | 587.00     | 587 HALLWAY                 |
| 18          | 12    | 1-QLC-451      | 0      | CVCS / REACTOR COOLANT LETDOWN VCT TK-10 EXTREME HIGH LEVEL CONTROL TRANSMITTER                       | AUXILIARY   | 609.00     | 609 HALLWAY                 |
| 18          | 12    | 1-QLC-452      | 0      | CVCS / REACTOR COOLANT LETDOWN VCT TK-10 HIGH LEVEL CONTROL TRANSMITTER                               | AUXILIARY   | 609.00     | 609 HALLWAY                 |
| 18          | 2     | 1-WDS-701      | 0      | ESW / EAST ESW PUMP PP-7E DISCHARGE STRAINER OME-34E HIGH DIFFERENTIAL PRESSURE SWITCH                | SCREENHOUSE | 591.00     | E ESSNTL SERV WTR PMP RM    |
| 18          | 1     | 1-WDS-702      | 0      | ESW / WEST ESW PUMP PP-7W DISCHARGE STRAINER OME-34W HIGH DIFFERENTIAL PRESSURE SWITCH                | SCREENHOUSE | 591.00     | W ESSNTL SERV WTR PMP RM    |
| 18          | 2     | 1-WPS-701      | 0      | ESW / EAST ESW SUPPLY HEADER PRESSURE SWITCH  | TURBINE     | 569.00     | ESSNTL SERV WTR PIPE TUNNEL |
| 18          | 1     | 1-WPS-705      | 0      | ESW / WEST ESW SUPPLY HEADER PRESSURE SWITCH  | TURBINE     | 569.00     | ESSNTL SERV WTR PIPE TUNNEL |
| 18          | 1     | 1-XPS-300      | 0      | DIESEL COMBUSTION AIR / AB EMERGENCY DIESEL FRONT BANK AIR CHEST EXTREME HIGH PRESSURE SWITCH         | AUXILIARY   | 587.00     | AB EMER DSL GEN RM          |
| 18          | 2     | 1-XPS-305      | 0      | DIESEL COMBUSTION AIR / CD EMERGENCY DIESEL FRONT BANK AIR CHEST EXTREME HIGH PRESSURE SWITCH         | AUXILIARY   | 587.00     | CD EMER DSL GEN RM          |
| 18          | 12    | 1-XRV-RACK-152 | 0      | CONTROL AIR / PRZ TR-8 PRESSURE RELIEF VLV NRV-152 VLV RACK(EMERG AIR PRESSURE REGULATOR)             | CONTAINMENT | 650.00     | UPPER CONT, QUAD4           |



**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Tran | Equipment ID   | Rev No | System / Equipment Description   | Building    | Floor Elev | Room or Row Col             |
|-------------|------|----------------|--------|--|-------------|------------|-----------------------------|
| 18          | 12   | 1-XRV-RACK-153 | 0      | CONTROL AIR / PRZ TR-A PRESSURE RELIEF VLV #NRV-153 VLV RACK(EMERG AIR PRESS REGULATOR)  | CONTAINMENT | 650.00     | UPPER CONT, QUAD4           |
| 18          | 12   | 12-CPS-430     | 0      | CCW / SPARE CCW PUMP DISCHARGE PRESSURE SWITCH   | AUXILIARY   | 609.00     | 609 HALLWAY                 |
| 19          | 2    | 1-CTR-415      | 0      | CCW / EAST CCW HEAT EXCHANGER HE-15E CCW OUTLET TEMPERATURE RECORDER THERMAL SENSOR  | AUXILIARY   | 609.00     | 609 HALLWAY                 |
| 19          | 2    | 1-CTR-425      | 0      | CCW / WEST COMPONENT COOLING WATER HEAT EXCHANGER HE-15W CCW OUTLET TEMPERATURE RECORDER THERMAL SENSOR                            | AUXILIARY   | 609.00     | 609 HALLWAY                 |
| 19          | 12   | 1-NTR-335      | 0      | RHR / RHR TO REACTOR COOLANT LOOP 2 AND 3 COLD LEGS TEMP RECORDER THERMAL SENSOR   | AUXILIARY   | 609.00     | EAST RHR HEAT EXCHGR RM     |
| 19          | 2    | 1-NTR-110      | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP 1 HOT LEG WIDE RANGE TEMP RECORDER THERMAL SENSOR   | CONTAINMENT | 598.00     | LOWER CONT, QUAD1           |
| 19          | 1    | 1-NTR-120      | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP 2 HOT LEG WIDE RANGE TEMP RECORDER THERMAL SENSOR   | CONTAINMENT | 617.00     | LOWER CONT, QUAD2           |
| 19          | 1    | 1-NTR-130      | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP 3 HOT LEG WIDE RANGE TEMP RECORDER THERMAL SENSOR   | CONTAINMENT | 625.00     | LOWER CONT, QUAD3           |
| 19          | 2    | 1-NTR-140      | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP 4 HOT LEG WIDE RANGE TEMP RECORDER THERMAL SENSOR   | CONTAINMENT | 598.00     | LOWER CONT, QUAD4           |
| 19          | 2    | 1-NTR-210      | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP 1 COLD LEG WIDE RANGE TEMP RECORDER THERMAL SENSOR  | CONTAINMENT | 598.00     | LOWER CONT, QUAD1           |
| 19          | 1    | 1-NTR-220      | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP 2 COLD LEG WIDE RANGE TEMP RECORDER THERMAL SENSOR  | CONTAINMENT | 617.00     | LOWER CONT, QUAD2           |
| 19          | 1    | 1-NTR-230      | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP 3 COLD LEG WIDE RANGE TEMP RECORDER THERMAL SENSOR  | CONTAINMENT | 617.00     | LOWER CONT, QUAD3           |
| 19          | 2    | 1-NTR-240      | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP 4 COLD LEG WIDE RANGE TEMP RECORDER THERMAL SENSOR  | CONTAINMENT | 617.00     | LOWER CONT, QUAD4           |
| 19          | 12   | 1-VTS-201      | 0      | TURBINE BUILDING VENTILATION / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP ROOM EXHAUST FAN HV-AFP-M1 THERMAL SENSOR                | TURBINE     | 591.00     | E MOTOR DRIVEN AUX FDWTR PU |
| 19          | 2    | 1-VTS-203      | 0      | TURBINE BUILDING VENTILATION / TURBINE DRIVEN AUXILIARY FEED PUMP ROOM NORTH EXHAUST FAN HV-AFP-T1 THERMAL SENSOR                  | TURBINE     | 591.00     | TB DRIVEN AUX FDWTR PMP     |
| 19          | 1    | 1-VTS-204      | 0      | TURBINE BUILDING VENTILATION / TURBINE DRIVEN AUXILIARY FEED PUMP ROOM SOUTH EXHAUST FAN HV-AFP-T2 THERMAL SENSOR                  | TURBINE     | 591.00     | TB DRIVEN AUX FDWTR PMP     |
| 19          | 12   | 1-VTS-206      | 0      | TURBINE BUILDING VENTILATION / WEST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP ROOM WEST EXHAUST FAN HV-AFP-X2 THERMAL SENSOR           | TURBINE     | 591.00     | W MOTOR DRIVEN AUX FDWTR PU |
| 19          | 1    | 1-VTS-340      | 0      | DIESEL BUILDING VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION FANS OUTSIDE AIR THERMOSTAT                           | AUXILIARY   | 598.00     | RCTR CABLE TUNNEL, QUAD3    |
| 19          | 1    | 1-VTS-341      | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION FANS HV-DGX-1 AND HV-DGS-1 THERMOSTAT                     | AUXILIARY   | 587.00     | AB EMER DSL GEN RM          |
| 19          | 2    | 1-VTS-345      | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION FANS OUTSIDE AIR THERMOSTAT                               | GROUND      | 609.00     | INNER PLANT GROUND          |
| 19          | 2    | 1-VTS-346      | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION FANS HV-DGX-2 AND HV-DGS-2 THERMOSTAT                     | AUXILIARY   | 587.00     | CD EMER DSL GEN RM          |
| 19          | 12   | 1-VTS-350      | 0      | AUXILIARY BUILDING VENTILATION / CONTROL ROD DRIVE EQUIP ROOM AND INV AREA VENT SOUTH SUPPLY FAN HV-SGRA-1A TEMPERATURE SWITCH     | AUXILIARY   | 609.00     | INVERTER AREA               |
| 19          | 12   | 1-VTS-351      | 0      | AUXILIARY BUILDING VENTILATION / CONTROL ROD DRIVE EQUIPMENT ROOM AND INV AREA VENT SOUTH SUPPLY FAN HV-SGRS-1A TEMPERATURE SWITCH | AUXILIARY   | 609.00     | CRD EQUIP RM                |
| 19          | 2    | 1-VTS-352      | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600 VOLT SWGR XFRMS TR11B AND TR11D AREA VENT SUPPLY FAN HV-SGRS-7 TEMP SWITCH           | AUXILIARY   | 609.00     | 4KV RM - 600V SWGR          |
| 19          | 12   | 1-VTS-353      | 0      | AUXILIARY BUILDING VENTILATION / 600VAC MOTOR CONTROL CENTER MEZZANINE AREA VENT SUPPLY FAN SGRS-9 TEMPERATURE SWITCH              | AUXILIARY   | 613.00     | 4KV RM - MEZZANINE          |



**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description  | Building      | Floor Elev | Room or Row Col          |
|-------------|-------|--------------|--------|---|---------------|------------|--------------------------|
| 19          | 12    | 1-VTS-354    | 0      | AUXILIARY BUILDING VENTILATION / CONT ROD DRIVE EQUIP ROOM AND INV AREA OUTSIDE AIR INLET DAMPER HV-SGR-MD-1 AND 2 TEMP SWITCH TO OVERRIDE PNEUMATIC CONTROLLER | AUXILIARY     | 609.00     | INVERTER AREA            |
| 19          | 12    | 1-VTS-355    | 0      | AUXILIARY BUILDING VENTILATION / CRID AND CROM INV AREA VENT AIR INLET DAMPER HV-SGR-MD-1 AND 2 TEMP SWITCH TO OVERRIDE PNEUMATIC CONTROLLER                    | AUXILIARY     | 609.00     | INVERTER AREA            |
| 19          | 12    | 1-VTS-356    | 0      | AUXILIARY BUILDING VENTILATION / CNTRL ROD DRIVE EQUIP ROOM AND INV AREA VENT NORTH SUPPLY FAN HV-SGRS-4A TEMP SWITCH   | AUXILIARY     | 609.00     | INVERTER AREA            |
| 19          | 12    | 1-VTS-357    | 0      | AUXILIARY BUILDING VENTILATION / CONTROL ROD DRIVE EQUIPMENT ROOM AND INV AREA VENT NORTH SUPPLY FAN HV-SGRS-4A TEMPERATURE SWITCH                              | AUXILIARY     | 609.00     | CRD EQUIP RM             |
| 19          | 1     | 1-VTS-802    | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM AB 4KV SWITCHGEAR AREA VENTILATION SUPPLY FAN HV-SGRS-2 THERMAL SENSOR  | AUXILIARY     | 609.00     | 4KV RM - AB 4KV SWGR     |
| 19          | 2     | 1-VTS-803    | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM CD 4KV SWITCHGEAR AREA VENTILATION SUPPLY FAN HV-SGRS-3 THERMAL SENSOR  | AUXILIARY     | 609.00     | 4KV RM - CD 4KV SWGR     |
| 19          | 12    | 1-VTS-805    | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600V SWGR XFMRs TR11B AND TR11D AREA VENT EXHAUST FAN HV-SGRS-7 TEMP SWITCH THERMAL SENSOR                            | AUXILIARY     | 613.00     | 4KV RM - MEZZANINE       |
| 19          | 1     | 1-VTS-808    | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600VAC SWGR XFMRs TR11A AND TR11C AREA VENT SUPPLY FAN HV-SGRS-8 TEMP SWITCH THERMAL SENSOR                           | AUXILIARY     | 609.00     | 4KV RM - 600V SWGR       |
| 19          | 12    | 12-RTI-500   | 0      | SPENT FUEL PIT COOLING/CLEANUP / SPENT FUEL PIT TEMPERATURE INDICATOR THERMAL SENSOR  | U#1 AUXILIARY | 650.00     | SPENT FUEL PIT           |
| 19          | 1     | 12-VTS-708   | 0      | SCREEN HOUSE VENTILATION / UNIT 1 WEST ESSTIAL SERVICE WATER PUMP ROOM TEMPERATURE SWITCH THERMAL SENSOR  | SCREEN HOUSE  | 591.00     | W ESSNTL SERV WTR PMP RM |
| 19          | 2     | 12-VTS-708   | 0      | SCREEN HOUSE VENTILATION / UNIT 1 EAST ESSENTIAL SERVICE WATER PUMP ROOM TEMPERATURE SWITCH THERMAL SENSOR  | SCREEN HOUSE  | 591.00     | E ESSNTL SERV WTR PMP RM |
| 20          | NA    | 1-A11        | 0      | EQUIP CTRL AND INDICATION STN / AUXILIARY RELAY PANEL A11   | AUXILIARY     | 633.00     | CONTROL RM               |
| 20          |       | 1-A13        | 0      | EQUIP CTRL AND INDICATION STN / AUXILIARY RELAY PANEL A13   | AUXILIARY     | 633.00     | CONTROL RM               |
| 20          | 2     | 1-ACRA-1     | 0      | EQUIP CTRL AND INDICATION STN / CONTROL ROOM AIR HANDLING SUBPANEL #1   | AUXILIARY     | 650.00     | CTRL RM AIR COND RM      |
| 20          | 1     | 1-ACRA-2     | 0      | EQUIP CTRL AND INDICATION STN / CONTROL ROOM AIR HANDLING SUBPANEL #2   | AUXILIARY     | 650.00     | CTRL RM AIR COND RM      |
| 20          | 2     | 1-ARA-2      | 0      | 120V/220 CONTROL AND INSTRUMENTATION / REACTOR PROTECTION TRAIN A AUX RELAY CABINET #2  | AUXILIARY     | 633.00     | CONTROL RM               |
| 20          | 1     | 1-ARB-2      | 0      | 120V/220 CONTROL AND INSTRUMENTATION / REACTOR PROTECTION TRAIN 'B' AUXILIARY RELAY CABINET #2  | AUXILIARY     | 633.00     | CONTROL RM               |
| 20          | 12    | 1-BA         | 0      | BORON MAKEUP (CVCS) / BORIC ACID CHARGING & LETDOWN CONTROL PANEL   | AUXILIARY     | 633.00     | CONTROL RM               |
| 20          | 2     | 1-BC-A-PNL   | 0      | 120/220V CONTROL AND INSTRUMENTATION / TRAIN 'N' BATTERY DISTR TRAIN 'A' BATTERY CHARGER BC-A CONTROL BOX   | AUXILIARY     | 633.00     | 633 HALLWAY              |
| 20          | 1     | 1-BC-B-PNL   | 0      | 120/220V CONTROL INSTRUMENTATION / TRAIN 'N' BATTERY DISTR TRAIN 'B' BATTERY CHARGER BC-B CONTROL BOX   | AUXILIARY     | 633.00     | 633 HALLWAY              |
| 20          | 12    | 1-CAS        | 0      | CONTAINMENT VENTILATION / CONTAINMENT AUXILIARIES SUBPANEL (VENTILATION)  | AUXILIARY     | 633.00     | 633 HALLWAY              |
| 20          | NA    | 1-CCW        | 0      | COMPONENT COOLING WATER / COMPONENT COOLING WATER CONTROL PANEL   | AUXILIARY     | 633.00     | CONTROL ROOM             |
| 20          | NA    | 1-CG1        | 0      | EQUIP CTRL AND INDICATION STN / REACTOR PROTECTION CONTROL GROUP #1 CABINET #14, #15, AND #16 (Rack# 14, 15, 16)  | AUXILIARY     | 633.00     | CONTROL RM               |
| 20          | 12    | 1-CG2        | 0      | EQUIP CTRL AND INDICATION STN / REACTOR PROTECTION CONTROL GROUP #2 CABINETS #17, #18, AND #19 (Rack# 17, 18, 19)   | AUXILIARY     | 633.00     | CONTROL RM               |
| 20          | A     | 1-CG3        | 0      | EQUIP CTRL AND INDICATION STN / REACTOR PROTECTION CONTROL GROUP #3, CABINET #20 AND #21 (Rack# 20, 21)   | AUXILIARY     | 633.00     | CONTROL RM               |
| 20          | NA    | 1-CG4        | 0      | EQUIP CTRL AND INDICATION STN / REACTOR PROTECTION CONTROL GROUP #4, CABINET #22, #23, #24, & #25 (Rack# 22, 23, 24, 25)  | AUXILIARY     | 633.00     | CONTROL RM               |



**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID   | Rev No | System / Equipment Description  | Building      | Floor Elev | Room or Row Col               |
|-------------|-------|----------------|--------|---|---------------|------------|-------------------------------|
| 20          | NA    | 1-CI-26        | 0      | EQUIP CTRL AND INDICATION STN / REACTOR PROTECTION CONTROL INPUT CABINET #26                                    | AUXILIARY     | 633.00     | CONTROL RM                    |
| 20          | NA    | 1-CI-27        | 0      | EQUIP CTRL AND INDICATION STN / REACTOR PROTECTION CONTROL INPUT CABINET #27                                    | AUXILIARY     | 633.00     | CONTROL RM                    |
| 20          | NA    | 1-CP           | 0      | CONDENSATE / CONDENSATE PUMP CONTROL PANEL  | AUXILIARY     | 633.00     | CONTROL RM                    |
| 20          | NA    | 1-CR           | 0      | MISC. EQUIP SUPPORT / CONDENSATE PANEL REAR INST/RELAY RACK   | AUXILIARY     | 633.00     | CONTROL RM                    |
| 20          | 1     | 1-DGAB         | 0      | EQUIP CTRL AND INDICATION STN / AB EMERGENCY DIESEL GENERATOR OME-150-AB CONTROL SUBPANEL                       | AUXILIARY     | 587.00     | AB EMER DSL GEN RM            |
| 20          | 1     | 1-DGAB-X       | 0      | EQUIP CTRL AND INDICATION STN / AB EMERGENCY DIESEL GENERATOR OME-150-AB AUXILIARY PANEL                        | AUXILIARY     | 587.00     | AB EMER DSL GEN RM            |
| 20          | 2     | 1-DGCD         | 0      | EQUIP CTRL AND INDICATION STN / CD EMERGENCY DIESEL GENERATOR OME-150-CD CONTROL SUBPANEL                       | AUXILIARY     | 587.00     | CD EMER DSL GEN RM            |
| 20          | 2     | 1-DGCD-X       | 0      | EQUIP CTRL AND INDICATION STN / CD EMERGENCY DIESEL GENERATOR OME-150-CD AUXILIARY SUBPANEL                     | U#1 AUXILIARY | 587.00     | CD EMER DSL GEN RM            |
| 20          | NA    | 1-DTU          | 0      | TURBINE INST. AND CONTROL / DELTA T AND UNIT CONTROL PANEL  | AUXILIARY     | 633.00     | CONTROL RM                    |
| 20          | NA    | 1-EFR          | 0      | MISC EQUIPMENT SUPPORTS / EMERGENCY FIRE PANEL INSTRUMENT/RELAY RACK  | AUXILIARY     | 633.00     | CONTROL RM                    |
| 20          | NA    | 1-ERR          | 0      | MISC EQUIPMENT SUPPORTS / CONTROL ROOM EAST REAR INSTRUMENT/RELAY RACK  | AUXILIARY     | 633.00     | CONTROL RM                    |
| 20          | NA    | 1-ESW          | 0      | ESSENTIAL SERVICE WATER / ESSENTIAL SERVICE WATER CONTROL PANEL   | AUXILIARY     | 633.00     | CONTROL ROOM                  |
| 20          | NA    | 1-FLX          | 0      | NUCLEAR INSTRUMENTATION / FLUX CONTROL PANEL  | AUXILIARY     | 633.00     | CONTROL ROOM                  |
| 20          | 12    | 1-GR-1         | 0      | MISC EQUIPMENT SUPPORTS / GENERATOR PANEL REAR INSTRUMENT/RELAY RACK #1   | AUXILIARY     | 633.00     | CONTROL RM                    |
| 20          | NA    | 1-GR-2         | 0      | MISC EQUIPMENT SUPPORTS / GENERATOR PANEL REAR INSTRUMENT/RELAY RACK #2   | AUXILIARY     | 633.00     | CONTROL RM                    |
| 20          | NA    | 1-GRB          | 0      | MISC EQUIPMENT SUPPORTS / GENERATOR PANEL REAR INSTRUMENT/RELAY RACK B  | AUXILIARY     | 633.00     | CONTROL RM                    |
| 20          | NA    | 1-GRC          | 0      | MISC. EQUIPMENT SUPPORTS / GENERATOR PANEL REAR INST/RELAY RACK 'C'   | AUXILIARY     | 633.00     | CONTROL RM                    |
| 20          | NA    | 1-HSD1         | 0      | SAFETY INJECTION / UNIT 1 HOT SHUTDOWN PANEL  | AUXILIARY     | 633.00     | CONTROL RM                    |
| 20          | NA    | 1-IV           | 0      | CONTAINMENT SPRAY / CONTAINMENT ISOLATION VALVE CONTROL PANEL   | AUXILIARY     | 633.00     | CONTROL ROOM                  |
| 20          | NA    | 1-LSI-1        | 0      | STEAM GENERATING / STEAM GENERATORS #1 AND #4 LOCAL SHUTDOWN STATION  | AUXILIARY     | 612.00     | E MAIN STM STOP ENCL          |
| 20          | NA    | 1-LSI-2        | 0      | STEAM GENERATING / STEAM GENERATORS #2 AND #3 LOCAL SHUTDOWN STATION  | AUXILIARY     | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 20          | NA    | 1-LSI-3        | 0      | PRESSURIZER / REACTOR COOLANT SYSTEM CHARGING AND LETDOWN LOCAL SHUTDOWN STATION                                | AUXILIARY     | 587.00     | 587 HALLWAY                   |
| 20          | NA    | 1-LSI-4        | 0      | EQUIP CTRL AND INDICATION STN / REACTOR COOLANT SYSTEM TEMPERATURES AND STEAM GENERATORS LOCAL SHUTDOWN STATION | AUXILIARY     | 587.00     | 587 HALLWAY                   |
| 20          | NA    | 1-LSI-5        | 0      | EQUIP CTRL AND INDICATION STN / RC LOOPS #1 & 4 TEMPS, SG'S #1 & 4 PRESS LOCAL SHUTDOWN STATION                 | AUXILIARY     | 612.00     | E MAIN STM STOP ENCL          |
| 20          | NA    | 1-LSI-5X       | 0      | EQUIP CTRL AND INDICATION STN / LOCAL SHUTDOWN STATION #5X  | AUXILIARY     | 621.00     | E MAIN STM STOP ENCL          |
| 20          | NA    | 1-LSI-6        | 0      | EQUIP CTRL AND INDICATION STN / RC LOOPS 2 & 3 TEMPS, SG'S #2 & 3 PRESS LOCAL SHUTDOWN STATION                  | AUXILIARY     | 591.00     | STARTUP BLOWDOWN FLASHTANK RM |
| 20          | NA    | 1-LSI-6X       | 0      | EQUIP CTRL AND INDICATION STN / LOCAL SHUTDOWN STATION #6X  | AUXILIARY     | 633.00     | NORM BLOWDOWN FLASHTANK RM    |
| 20          | NA    | 1-NIS-I        | 0      | EQUIP CTRL AND INDICATION STN / NUCLEAR INSTRUMENTATION SYSTEM PROT CH. 1 CONTROL PANEL                         | AUXILIARY     | 633.00     | CONTROL RM                    |
| 20          | NA    | 1-NIS-III      | 0      | EQUIP CTRL AND INDICATION STN / NUCLEAR INSTRUMENTATION SYSTEM PROT CH. III CONTROL PANEL                       | AUXILIARY     | 633.00     | CONTROL RM                    |
| 20          | NA    | 1-NRI-21-AMP   | 0      | NUCLEAR INSTRUMENTATION / NI WIDE RANGE RADIATION AMPLIFIER CABINET   | AUXILIARY     | 596.00     | RCTR CABLE TUNNEL, QUAD1      |
| 20          | NA    | 1-NRI-21-PRCSR | 0      | NUCLEAR INSTRUMENTATION / NI WIDE RANGE SIGNAL PROCESSOR CABINET  | AUXILIARY     | 633.00     | CONTROL ROOM                  |
| 20          | NA    | 1-NRI-23-AMP   | 0      | NUCLEAR INSTRUMENTATION / NI SOURCE RANGE RADIATION DETECTOR NRI-23 AMPLIFIER CABINET                           | AUXILIARY     | 596.00     | RCTR CABLE TUNNEL, QUAD1      |
| 20          | NA    | 1-NRI-23-ISOL  | 0      | NUCLEAR INSTRUMENTATION / NI SOURCE RANGE SIGNAL ISOLATOR CABINET   | AUXILIARY     | 596.00     | RCTR CABLE TUNNEL, QUAD1      |
| 20          | NA    | 1-NRI-23-PRCSR | 0      | NUCLEAR INSTRUMENTATION / NUCLEAR INSTRUMENTATION SOURCE RANGE SIGNAL PROCESSOR CABINET                         | AUXILIARY     | 596.00     | REACTOR CABLE TUNNEL QUAD #1  |





**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description  | Building    | Floor Elev | Room or Row Col              |
|-------------|-------|--------------|--------|---|-------------|------------|------------------------------|
| 20          | NA    | 1-NSR        | 0      | MISC EQUIPMENT SUPPORTS / NUCLEAR INSTRUMENTATION SYSTEM REAR INSTRUMENT/RELAY RACK         | AUXILIARY   | 633.00     | CONTROL RM                   |
| 20          | NA    | 1-PRZ        | 0      | PRESSURIZER / PRESSURIZER CONTROL PANEL   | AUXILIARY   | 633.00     | CONTROL RM                   |
| 20          | NA    | 1-RC         | 0      | ROD CONTROL AND INSTRUMENTATION / REACTOR CONTROL RODS CONTROL PANEL                        | AUXILIARY   | 633.00     | CONTROL RM                   |
| 20          | NA    | 1-RCP        | 0      | REACTOR COOLANT / REACTOR COOLANT PUMP CONTROL PANEL  | AUXILIARY   | 633.00     | CONTROL RM                   |
| 20          | 12    | 1-RHR        | 0      | RESIDUAL HEAT REMOVAL / RESIDUAL HEAT REMOVAL CONTROL PANEL                                 | AUXILIARY   | 633.00     | CONTROL RM                   |
| 20          | NA    | 1-RPC-I      | 0      | REACTOR PROTECTION / REACTOR PROTECTION CHANNEL I CABINET #1,2,3 AND #4 (Rack#1,2,3,4)      | AUXILIARY   | 633.00     | CONTROL RM                   |
| 20          | NA    | 1-RPC-II     | 0      | REACTOR PROTECTION / REACTOR PROTECTION CHANNEL II CABINETS #5,6,7 AND 8 (Rack#5,6,7,8)     | AUXILIARY   | 633.00     | CONTROL RM                   |
| 20          | NA    | 1-RPC-III    | 0      | REACTOR PROTECTION / REACTOR PROTECTION CHANNEL III CABINET #9,10, AND #11 (Rack#9,10,11)   | AUXILIARY   | 633.00     | CONTROL RM                   |
| 20          | NA    | 1-RPC-IV     | 0      | REACTOR PROTECTION / REACTOR PROTECTION CHANNEL IV CABINET #12 AND #13 (Rack#12,13)         | AUXILIARY   | 633.00     | CONTROL RM                   |
| 20          | 2     | 1-RPS-A      | 0      | REACTOR PROTECTION / REACTOR PROTECTION AND SAFEGUARD ACTUATION TRAIN 'A'                   | AUXILIARY   | 633.00     | CONTROL RM                   |
| 20          | 1     | 1-RPS-B      | 0      | REACTOR PROTECTION / REACTOR PROTECTION AND SAFEGUARD ACTUATION TRAIN 'B' CABINET           | AUXILIARY   | 633.00     | CONTROL RM                   |
| 20          | 2     | 1-RPSX-A     | 0      | REACTOR PROTECTION / REACTOR PROTECTION AND SAFEGUARD ACTUATION TRAIN 'A' AUXILIARY CABINET | AUXILIARY   | 633.00     | CONTROL RM                   |
| 20          | 1     | 1-RPSX-B     | 0      | REACTOR PROTECTION / REACTOR PROTECTION AND SAFEGUARD ACTUATION TRAIN 'B' AUXILIARY CABINET | AUXILIARY   | 633.00     | CONTROL RM                   |
| 20          | NA    | 1-SA         | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC / STATION AUXILIARIES CONTROL PANEL                       | AUXILIARY   | 633.00     | CONTROL RM                   |
| 20          | NA    | 1-SCP        | 0      | NUCLEAR SAMPLING / NUCLEAR SAMPLING SYSTEM CONTROL PANEL                                    | AUXILIARY   | 587.00     | NUCLEAR SAMPLING RM          |
| 20          | NA    | 1-SG         | 0      | STEAM GENERATION / S.G. AND AFW PUMP CONTROL PANEL  | AUXILIARY   | 633.00     | CONTROL RM                   |
| 20          | 12    | 1-SIS        | 0      | SAFETY INJECTION / SAFETY INJECTION CONTROL PANEL   | AUXILIARY   | 633.00     | CONTROL RM                   |
| 20          | 12    | 1-SPY        | 0      | CONTAINMENT SPRAY / CONTAINMENT SPRAY CONTROL PANEL   | AUXILIARY   | 633.00     | CONTROL RM                   |
| 20          | 12    | 1-SR1        | 0      | MISC EQUIPMENT SUPPORTS / STATION AUXILIARIES REAR INSTRUMENT/RELAY RACK #1                 | AUXILIARY   | 633.00     | CONTROL RM                   |
| 20          | NA    | 1-SR2        | 0      | MISC EQUIPMENT SUPPORTS / STATION AUXILIARIES REAR INSTRUMENT/RELAY RACK #2                 | AUXILIARY   | 633.00     | CONTROL RM                   |
| 20          | NA    | 1-SR3        | 0      | MISC EQUIPMENT SUPPORTS / STATION AUXILIARIES REAR INSTRUMENT/RELAY RACK #3                 | AUXILIARY   | 633.00     | CONTROL RM                   |
| 20          | NA    | 1-SR4        | 0      | MISC EQUIPMENT SUPPORTS / STATION AUXILIARIES REAR INSTRUMENT/RELAY RACK #4                 | AUXILIARY   | 633.00     | CONTROL RM                   |
| 20          | 12    | 1-SSR        | 0      | MISC EQUIPMENT SUPPORTS / ENGINEER SAFETY SYSTEM REAR INSTRUMENT/RELAY RACK                 | AUXILIARY   | 633.00     | CONTROL RM                   |
| 20          | NA    | 1-SWR        | 0      | MISC EQUIPMENT SUPPORTS / NUCLEAR INSTRUMENTAL SOURCE RANGE N21 INSTRUMENT/RELAY RACK       | AUXILIARY   | 633.00     | CONTROL RM                   |
| 20          | NA    | 1-TFP        | 0      | EQUIP CTRL AND INDICATION STN / TURBINE DRIVEN AUXILIARY FEED PUMP SUBPANEL                 | TURBINE     | 591.00     | TB DRIVEN AUX FDWTR PMP      |
| 20          | NA    | 1-TRB        | 0      | MISC EQUIPMENT SUPPORTS / TURBINE PANEL REAR INSTRUMENT/RELAY RACK 'B'                      | AUXILIARY   | 633.00     | CONTROL RM                   |
| 20          | NA    | 1-TRD        | 0      | MISC EQUIPMENT SUPPORTS / TURBINE PANEL REAR INSTRUMENT/RELAY RACK 'D'                      | AUXILIARY   | 633.00     | CONTROL RM                   |
| 20          | NA    | 1-TRE        | 0      | MISC EQUIPMENT SUPPORTS / TURBINE PANEL REAR INSTRUMENT/RELAY RACK 'E'                      | AUXILIARY   | 633.00     | CONTROL RM                   |
| 20          | NA    | 1-TSC-VO-07  | 0      | NONE / TSC COMPUTER INPUT/OUTPUT CABINET #07  | AUXILIARY   | 633.00     | 633 HALLWAY                  |
| 20          | NA    | 1-TSC-VO-09  | 0      | NONE / TSC COMPUTER INPUT/OUTPUT CABINET #9   | AUXILIARY   | 633.00     | 633 HALLWAY                  |
| 20          | NA    | 1-TSC-VO-13  | 0      | NONE / TSC COMPUTER INPUT/OUTPUT CABINET #13  | AUXILIARY   | 633.00     | 633 HALLWAY                  |
| 20          | NA    | 1-TSC-VO-15  | 0      | COMPUTER SUPPORT SYSTEMS / TSC COMPUTER INPUT/OUTPUT CABINET #15                            | AUXILIARY   | 633.00     | 633 HALLWAY                  |
| 20          | NA    | 1-VS         | 0      | CONTAINMENT VENTILATION / VENTILATION CONTROL PANEL   | AUXILIARY   | 633.00     | CONTROL ROOM                 |
| 20          | 12    | 1-WRR        | 0      | MISC EQUIPMENT SUPPORTS / WEST RELAY RACK   | AUXILIARY   | 633.00     | CONTROL RM                   |
| 20          | 12    | 12-SFP-12    | 0      | EQUIP CTRL AND INDICATION STN / SPENT FUEL PIT SUBPANEL                                     | UNIT #2 AUX | 609.00     | SPENT FUEL PIT HEAT XCHGR RM |
| 21          | 12    | 1-HE-11      | 0      | RCTR COOLANT PMP SEAL WTR IN/LEAKOFF / REACTOR COOLANT PUMP SEAL WATER HEAT EXCHANGER       | AUXILIARY   | 609.00     | SEAL WTR HEAT XCHGR RM       |

**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description  | Building    | Floor Elev | Room or Row Col            |
|-------------|-------|--------------|--------|---|-------------|------------|----------------------------|
| 21          | 12    | 1-HE-13      | 0      | CVCS / EXCESS LETDOWN HEAT EXCHANGER  | CONTAINMENT | 612.00     | REGEN HEAT XCHGR RM        |
| 21          | 12    | 1-HE-14      | 0      | CVCS / LETDOWN HEAT EXCHANGER   | AUXILIARY   | 633.00     | LETDOWN HEAT EXCHGR RM     |
| 21          | 2     | 1-HE-15E     | 0      | CCW / EAST CCW HEAT EXCHANGER   | AUXILIARY   | 609.00     | 609 HALLWAY                |
| 21          | 2     | 1-HE-15W     | 0      | CCW / WEST CCW HEAT EXCHANGER   | AUXILIARY   | 609.00     | 609 HALLWAY                |
| 21          | 2     | 1-HE-17E     | 0      | RHR / EAST RHR HEAT EXCHANGER   | AUXILIARY   | 609.00     | EAST RHR HEAT EXCHGR RM    |
| 21          | 1     | 1-HE-17W     | 0      | RHR / WEST RHR HEAT EXCHANGER   | AUXILIARY   | 609.00     | W RHR HEAT XCHGR RM        |
| 21          | 2     | 1-HE-18E     | 0      | CONTAINMENT SPRAY / EAST CONTAINMENT SPRAY HEAT EXCHANGER                           | AUXILIARY   | 609.00     | E CONT SPRAY HEAT XCHGR RM |
| 21          | 1     | 1-HE-18W     | 0      | CONTAINMENT SPRAY / WEST CONTAINMENT SPRAY HEAT EXCHANGER                           | AUXILIARY   | 609.00     | W CONT SPRAY HEAT XCHGR RM |
| 21          | 2     | 1-HE-32E     | 0      | RHR / EAST RHR PUMP PP-35E MECHANICAL SEAL HEAT EXCHANGER                           | AUXILIARY   | 573.00     | EAST RHR PUMP ROOM         |
| 21          | 2     | 1-HE-32W     | 0      | RHR / WEST RHR PUMP PP-35W MECHANICAL SEAL HEAT EXCHANGER                           | AUXILIARY   | 573.00     | WEST RHR PUMP ROOM         |
| 21          | 2     | 1-HE-33E     | 0      | CCW / EAST CONTAINMENT SPRAY PUMP PP-9E MECHANICAL SEAL HEAT EXCHANGER              | AUXILIARY   | 573.00     | E CONT SPRAY PMP RM        |
| 21          | 1     | 1-HE-33W     | 0      | CCW / WEST CONTAINMENT SPRAY PUMP PP-9W MECHANICAL SEAL HEAT EXCHANGER              | AUXILIARY   | 573.00     | W CONT SPRAY PMP RM        |
| 21          | 2     | 1-HE-34-NE   | 0      | CCW / NORTH SAFETY INJECTION PUMP PP-26N OUTBOARD MECHANICAL SEAL HEAT EXCHANGER    | AUXILIARY   | 587.00     | N SAFETY INJ PMP RM        |
| 21          | 2     | 1-HE-34-NW   | 0      | CCW / NORTH SAFETY INJECTION PUMP PP-26N INBOARD MECHANICAL SEAL HEAT EXCHANGER     | AUXILIARY   | 587.00     | N SAFETY INJ PMP RM        |
| 21          | 2     | 1-HE-34-SE   | 0      | CCW / SOUTH SAFETY INJECTION PUMP PP-26S OUTBOARD MECHANICAL SEAL HEAT EXCHANGER    | AUXILIARY   | 587.00     | S SAFETY INJ PMP RM        |
| 21          | 2     | 1-HE-34-SW   | 0      | CCW / SOUTH SAFETY INJECTION PUMP PP-26S INBOARD MECHANICAL SEAL HEAT EXCHANGER     | AUXILIARY   | 587.00     | S SAFETY INJ PMP RM        |
| 21          | 2     | 1-HE-35N     | 0      | CCW / NORTH SAFETY INJECTION PUMP PP-28N LUBE OIL COOLER                            | AUXILIARY   | 587.00     | N SAFETY INJ PMP RM        |
| 21          | 1     | 1-HE-35S     | 0      | CCW / SOUTH SAFETY INJECTION PUMP PP-28S LUBE OIL COOLER                            | AUXILIARY   | 587.00     | S SAFETY INJ PMP RM        |
| 21          | 2     | 1-HE-36-EN   | 0      | CCW / EAST CENTRIFUGAL CHARGING PUMP PP-50E INBOARD MECHANICAL SEAL HEAT EXCHANGER  | AUXILIARY   | 587.00     | E CNTRFGL CHARG PMP RM     |
| 21          | 2     | 1-HE-36-ES   | 0      | CCW / EAST CENTRIFUGAL CHARGING PUMP PP-50E OUTBOARD MECHANICAL SEAL HEAT EXCHANGER | AUXILIARY   | 587.00     | E CNTRFGL CHARG PMP RM     |
| 21          | 2     | 1-HE-36-WN   | 0      | CCW / WEST CENTRIFUGAL CHARGING PUMP PP-50W INBOARD MECHANICAL SEAL HEAT EXCHANGER  | AUXILIARY   | 587.00     | W CENTRIFUGAL CHRG PMP RM  |
| 21          | 2     | 1-HE-36-WS   | 0      | CCW / WEST CENTRIFUGAL CHARGING PUMP PP-50W OUTBOARD MECHANICAL SEAL HEAT EXCHANGER | AUXILIARY   | 587.00     | W CENTRIFUGAL CHRG PMP RM  |
| 21          | 2     | 1-HE-37E     | 0      | CCW / EAST CENTRIFUGAL CHARGING PUMP PP-50E GEAR OIL COOLER                         | AUXILIARY   | 587.00     | E CNTRFGL CHARG PMP RM     |
| 21          | 2     | 1-HE-37W     | 0      | CCW / WEST CENTRIFUGAL CHARGING PUMP PP-50W GEAR OIL COOLER                         | AUXILIARY   | 587.00     | W CENTRIFUGAL CHRG PMP RM  |
| 21          | 2     | 1-HE-38E     | 0      | CCW / EAST CENTRIFUGAL CHARGING PUMP BEARING LUBE OIL COOLER                        | AUXILIARY   | 587.00     | E CNTRFGL CHARG PMP RM     |
| 21          | 2     | 1-HE-38W     | 0      | CCW / WEST CENTRIFUGAL CHARGING PUMP PP-50W BEARING LUBE OIL COOLER                 | AUXILIARY   | 587.00     | W CENTRIFUGAL CHRG PMP RM  |
| 21          | 1     | 1-HE-47-ABN  | 0      | DIESEL COMBUSTION AIR / AB EMERG DIESEL NORTH COMBUSTION AIR AFTERCOOLER            | AUXILIARY   | 587.00     | AB EMER DSL GEN RM         |
| 21          | 1     | 1-HE-47-ABS  | 0      | DIESEL COMBUSTION AIR / AB EMERG DIESEL SOUTH COMBUSTION AIR AFTERCOOLER            | AUXILIARY   | 587.00     | AB EMER DSL GEN RM         |
| 21          | 2     | 1-HE-47-CDN  | 0      | DIESEL COMBUSTION AIR / CD EMERG DIESEL NORTH COMBUSTION AIR AFTERCOOLER            | AUXILIARY   | 587.00     | CD EMER DSL GEN RM         |
| 21          | 2     | 1-HE-47-CDS  | 0      | DIESEL COMBUSTION AIR / CD EMERG DIESEL SOUTH COMBUSTION AIR AFTERCOOLER            | AUXILIARY   | 587.00     | CD EMER DSL GEN RM         |
| 21          | 12    | 1-QP-21      | 0      | CVCS (BORON MAKEUP) / NORTH BORIC ACID BLENDER (MIXING TEE)                         | AUXILIARY   | 587.00     | BORIC ACID STOR TANK       |
| 21          | 1     | 1-QT-107-AB  | 0      | DIESEL FUEL OIL / AB EMERG DIESEL FUEL OIL DAY TANK                                 | AUXILIARY   | 587.00     | AB EMER DSL GEN RM         |
| 21          | 2     | 1-QT-107-CD  | 0      | DIESEL FUEL OIL / CD EMERG DIESEL FUEL OIL DAY TANK                                 | AUXILIARY   | 587.00     | CD EMER DSL GEN RM         |
| 21          | 1     | 1-QT-110-AB  | 0      | DIESEL LUBE OIL / AB EMERG DIESEL LUBE OIL COOLER                                   | AUXILIARY   | 587.00     | AB EMER DSL GEN RM         |
| 21          | 2     | 1-QT-110-CD  | 0      | DIESEL LUBE OIL / CD EMERG DIESEL LUBE OIL COOLER                                   | AUXILIARY   | 587.00     | CD EMER DSL GEN RM         |
| 21          | 1     | 1-QT-115-AB  | 0      | DIESEL LUBE OIL / AB EMERG DIESEL LUBE OIL SUMP TANK                                | AUXILIARY   | 579.00     | AB EMER DSL LUBE OIL PIT   |
| 21          | 2     | 1-QT-115-CD  | 0      | DIESEL LUBE OIL / CD EMERG DIESEL LUBE OIL SUMP TANK                                | AUXILIARY   | 579.00     | CD EMER DSL LUBE OIL PIT   |
| 21          | 1     | 1-QT-131-AB  | 0      | DIESEL JACKET WATER / AB EMERG DIESEL JACKET WATER COOLER                           | AUXILIARY   | 587.00     | AB EMER DSL GEN RM         |
| 21          | 2     | 1-QT-131-CD  | 0      | DIESEL JACKET WATER / CD EMERG DIESEL JACKET WATER COOLER                           | AUXILIARY   | 587.00     | CD EMER DSL GEN RM         |

**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)  
FOR SEISMIC WALKDOWN**

| Equip Class | Train | Equipment ID | Rev No | System / Equipment Description   | Building      | Floor Elev | Room or Row Col                 |
|-------------|-------|--------------|--------|--|---------------|------------|---------------------------------|
| 21          | 1     | 1-QT-133-AB  | 0      | DIESEL JACKET WATER / AB EMERG<br>DIESEL JACKET WATER SURGE TANK                             | AUXILIARY     | 587.00     | AB EMER DSL GEN<br>RM           |
| 21          | 2     | 1-QT-133-CD  | 0      | DIESEL JACKET WATER / CD EMERG<br>DIESEL JACKET WATER SUREG TANK                             | AUXILIARY     | 587.00     | CD EMER DSL GEN<br>RM           |
| 21          | 1     | 1-QT-134-AB  | 0      | DIESEL JACKET WATER / AB EMERG<br>DIESEL AUX JACKET WATER HEATER(TANK)                       | AUXILIARY     | 587.00     | AB EMER DSL GEN<br>RM           |
| 21          | 2     | 1-QT-134-CD  | 0      | DIESEL JACKET WATER / CD EMERG<br>DIESEL AUX JACKET WATER HEATER(TANK)                       | AUXILIARY     | 587.00     | CD EMER DSL GEN<br>RM           |
| 21          | 1     | 1-QT-141-AB1 | 0      | DIESEL STARTING AIR / AB EMERG DIESEL<br>STARTING AIR RECEIVER 1                             | AUXILIARY     | 587.00     | AB EMER DSL GEN<br>RM           |
| 21          | 1     | 1-QT-141-AB2 | 0      | DIESEL STARTING AIR / AB EMERG DIESEL<br>STARTING AIR RECEIVER 2                             | AUXILIARY     | 587.00     | AB EMER DSL GEN<br>RM           |
| 21          | 2     | 1-QT-141-CD1 | 0      | DIESEL STARTING AIR / CD EMERG DIESEL<br>STARTING AIR RECEIVER 1                             | AUXILIARY     | 587.00     | CD EMER DSL GEN<br>RM           |
| 21          | 2     | 1-QT-141-CD2 | 0      | DIESEL STARTING AIR / CD EMERG DIESEL<br>STARTING AIR RECEIVER 2                             | AUXILIARY     | 587.00     | CD EMER DSL GEN<br>RM           |
| 21          | 12    | 1-TK-10      | 0      | CVCS / REACTOR COOLANT LETDOWN<br>VOLUME CONTROL TANK  | AUXILIARY     | 609.00     | VOL CONTROL TANK<br>RM          |
| 21          | 12    | 1-TK-11      | 0      | BORON INJECTION / BORON INJECTION<br>TANK  | AUXILIARY     | 612.00     | BORON INJ TANK RM               |
| 21          | 12    | 1-TK-200     | 0      | STEAM LINE DRAINS / MAIN STEAM LEADS<br>CONDENSATION DRAIN TANK (POT)                        | AUXILIARY     | 621.00     | W MAIN STM STOP<br>ENCL         |
| 21          | 12    | 1-TK-32      | 0      | CONDENSATE STORAGE SUPPLY /<br>CONDENSATE SOTRAGE TANK                                       | GROUND        | 609.00     | COND STOR TANK                  |
| 21          | 12    | 1-TK-33      | 0      | REFUELING WATER STORAGE TANK<br>SUPPLY / REFUELING WATER STORAGE<br>TANK                     | GROUND        | 609.00     | REFUELING WTR<br>STOR TANK AREA |
| 21          | 12    | 1-TK-37      | 0      | CCW / COMPONENT COOLING WATER<br>SURGE TANK  | AUXILIARY     | 650.00     | 650 HALLWAY                     |
| 21          | 2     | 1-TK-76N     | 0      | CONTROL ROOM A/C CHILL WATER /<br>CONTRL ROOM A/C NORTH CHILL WATER<br>EXPANSION TANK        | AUXILIARY     | 650.00     | CTRL RM AIR COND<br>RM          |
| 21          | 1     | 1-TK-76S     | 0      | CONTROL ROOM A/C CHILL WATER /<br>CONTROL ROOM A/C SOUTH CHILL WATER<br>EXPANSION TANK       | AUXILIARY     | 650.00     | CTRL RM AIR COND<br>RM          |
| 21          | 12    | 1-TK12-N     | 0      | CVCS (BORON MAKEUP) / NORTH BORIC<br>ACID STORAGE TANK                                       | AUXILIARY     | 587.00     | BORIC ACID STOR<br>TANK         |
| 21          | 12    | 12-HE-16N    | 0      | SPENT FUEL PIT COOLING & CCW / NORTH<br>SPENT FUEL PIT HEAT EXCHANGER                        | U-1 AUXILIARY | 609.00     | SPENT FUEL PIT<br>HEAT XCHGR RM |
| 21          | 2     | 12-OME-44N-2 | 0      | WASTE GAS / NORTH RADIOACTIVE WASTE<br>GAS COMPRESSOR OME-44N-2 SEAL<br>WATER HEAT EXCHANGER | AUXILIARY     | 609.00     | N WASTE GAS<br>COMPRESSOR RM    |
| 21          | 1     | 12-OME-44S-2 | 0      | WASTE GAS / SOUTH RADIOACTIVE WASTE<br>GAS COMPRESSOR OME-44S-1 SEAL<br>WATER HEAT EXCHANGER | AUXILIARY     | 609.00     | S WASTE GAS<br>COMPRESSOR RM    |
| 21          | 1     | 12-TK-47-AB  | 0      | DIESEL FUEL OIL / AB EMERG DIESEL FUEL<br>OIL STORAGE TANK (BURIED IN THE YARD)              | GROUND        | 609.00     | INNER PLANT<br>GROUND           |
| 21          | 2     | 12-TK-47-CD  | 0      | DIESEL FUEL OIL / CD EMERG DIESEL FUEL<br>OIL STORAGE TANK (BURIED IN THE YARD)              | GROUND        | 609.00     | INNER PLANT<br>GROUND           |
| 21          | 12    | 12-TK12-M    | 0      | CVCS (BORON MAKEUP) / MIDDLE BORIC<br>ACID STORAGE TANK                                      | AUXILIARY     | 587.00     | BORIC ACID STOR<br>TANK         |

**APPENDIX A**

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

**COMPOSITE SAFE SHUTDOWN  
EQUIPMENT LIST (SSEL)**



## Donald C. Cook Nuclear Plant - Unit 1

### SSEL Certification:

The information identifying the equipment required to bring the plant to a safe shutdown condition on this safe shutdown equipment list is, to be the best of our knowledge and belief, correct and accurate.

| <u>Name</u>                            | <u>Signature</u>           | <u>Date</u>        |
|--|----------------------------|--------------------|
| B. A. Svensson<br>Operations           | <u>B. A. Svensson</u>      | <u>1/21/96</u>     |
| G. P. Arent<br>Operations              | <u>G. P. Arent</u>         | <u>12-15-95</u>    |
| J. V. Ruparel<br>Systems               | <u>J. V. Ruparel</u>       | <u>Dec 15, 95.</u> |
| H. W. Young<br>Systems                 | <u>H. W. Young III</u>     | <u>12/15/95</u>    |
| R. C. Steele<br>Electrical             | <u>R. C. Steele</u>        | <u>12-15-95</u>    |
| T. R. Satyan Sharma<br>Project Manager | <u>T. R. Satyan Sharma</u> | <u>12/15/95</u>    |

DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID        | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.         | FIEL | Rm or Rm/CL                        | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|---------------|--------|---|----------------------|---------------|------|------------------------------------|-----------|----------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 1        | 12    | 0      | 1-HV-ACFD-1   | 0      | CONTROL ROOM VENTILATION / PLANT PROCESS COMPUTER ROOM VENTILATION EXHAUST NORTH FIRE DAMPER                          | 1-5149               | U-1 AUXILIARY | 650  | PLANT PROCESS CMPTR RM             | S         | HVAC     | Relay Only        |              |               |             |                                 |   |
| 2        | 12    | 0      | 1-HV-ACFD-2   | 0      | CONTROL ROOM VENTILATION / PLANT PROCESS COMPUTER ROOM VENTILATION EXHAUST SOUTH FIRE DAMPER                          | 1-5149               | U-1 AUXILIARY | 650  | PLANT PROCESS CMPTR RM             | S         | HVAC     | Relay Only        |              |               |             |                                 |   |
| 3        | 12    | 0      | 1-HV-ACFD-3   | 0      | CONTROL ROOM VENTILATION / CONTROL ROOM VENT UNITS HV-ACRA-1 AND HV-ACRA-2 TO PLANT PROCESS COMPUTER ROOM FIRE DAMPER | 1-5149               | U-1 AUXILIARY | 650  | PLANT PROCESS CMPTR RM             | S         | HVAC     | Relay Only        |              |               |             |                                 |   |
| 4        | 1     | 0      | 1-HV-DGS-FD-1 | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FIRE DAMPER                           | 1-5148C              | U-1 AUXILIARY | 587  | AB EMER DSL GEN RM                 | S         | HVAC     | Relay Only        |              |               |             |                                 |   |
| 5        | 2     | 0      | 1-HV-DGS-FD-2 | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FIRE DAMPER                           | 1-5148C              | U-1 AUXILIARY | 587  | CD EMER DSL GEN RM                 | S         | HVAC     | Relay Only        |              |               |             |                                 |   |
| 6        | 1     | 0      | 1-HV-DGX-FD-1 | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FIRE DAMPER                          | 1-5148C              | U-1 AUXILIARY | 587  | AB EMERGENCY DIESEL GENERATOR ROOM | S         | HVAC     | Relay Only        |              |               |             |                                 |   |
| 7        | 2     | 0      | 1-HV-DGX-FD-2 | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FIRE DAMPER                          | 1-5148C              | U-1 AUXILIARY | 587  | CD EMER DSL GEN RM                 | S         | HVAC     | Relay Only        |              |               |             |                                 |   |
| 8        | 2     | 0      | 1-MRV-210     | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 STOP VALVE   | 1-5105D              | AUXILIARY     | 633  | E MAIN STM STOP ENCL               | P         | D        | Seismic Only      | OP           | CL            | Y           | 1-12041 1-98538                 | BOP 1-EZC-CN-68                           |
| 9        | 1     | 0      | 1-MRV-220     | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2 STOP VALVE   | 1-5105D              | AUXILIARY     | 633  | W MAIN STM STOP ENCL               | P         | D        | Seismic Only      | OP           | CL            | Y           | 1-12020 1-98538                 | BOP 1-AM-B-R3C                            |
| 10       | 1     | 0      | 1-MRV-230     | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3 STOP VALVE   | 1-5105D              | AUXILIARY     | 633  | W MAIN STM STOP ENCL               | P         | D        | Seismic Only      | OP           | CL            | Y           | 1-12041 1-98538                 | BOP 1-EZC-CS-R3D                          |
| 11       | 2     | 0      | 1-MRV-240     | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 STOP VALVE   | 1-5105D              | AUXILIARY     | 633  | E MAIN STM STOP ENCL               | P         | D        | Seismic Only      | OP           | CL            | Y           | 1-12021 1-98538                 | BOP 1-EZC-BN-6C                           |
| 12       | 2     | 0      | 1-OME-34E     | 0      | ESW / EAST ESW PUMP PP-7E DISCHARGE STRAINER  | 1-5113               | SCREENHOUSE   | 591  | E ESSNTL SERV WTR PMP RM           | S         | ESW      | Seismic and Relay |              |               |             | 1-12033 1-98415                 | 1-PS-D-3C                                 |
| 13       | 1     | 0      | 1-OME-34W     | 0      | ESW / WEST ESW PUMP PP-7W DISCHARGE STRAINER  | 1-5113               | SCREENHOUSE   | 591  | W ESSNTL SERV WTR PMP RM           | S         | ESW      | Seismic and Relay |              |               |             | 1-12014 1-98415                 | 1-PS-A-1C                                 |
| 14       | 12    | 0      | 1-OME-39      | 0      | MAIN STEAM / AUXILIARY FEED PUMP TURBINE AND GOVERNOR VALVE   | 1-5105E              | AUX           | 591  | TB DRIVEN AUX FOWTR PMP            | P         | D        | Seismic Only      |              |               |             |                                 |   |
| 15       | 1     | 0      | 1-POV-1-AB    | 0      | STARTING AIR SYST / PILOT OPERATED 4 WAY VALVE FOR AIR START XRV'S FOR DIESEL ENGINE                                  | 12-MM-253            | AUXILIARY     | 587  | AB EMER DSL GEN RM                 | S         | EDG      | Seismic Only      |              |               |             |                                 |   |
| 16       | 2     | 0      | 1-POV-1-CD    | 0      | STARTING AIR SYST / PILOT OPERATED 4 WAY VALVE FOR AIR START XRV'S FOR DIESEL ENGINE                                  | 12-MM-253            | AUXILIARY     | 587  | CD EMER DSL GEN RM                 | S         | EDG      | Seismic Only      |              |               |             |                                 |   |
| 17       | 1     | 0      | 1-POV-2-AB    | 0      | STARTING AIR SYSTEM / PILOT OPERATED 4-WAY VALVE FOR AIR START XRV'S FOR DIESEL ENGINE                                | 12-MM-253            | AUXILIARY     | 587  | AB DIESEL GENERATOR ROOM           | S         | EDG      | Seismic Only      |              |               |             |                                 |   |
| 18       | 2     | 0      | 1-POV-2-CD    | 0      | STARTING AIR SYSTEM / PILOT OPERATED 4-WAY VALVE FOR START XRV'S FOR DIESEL ENGINE                                    | 12-MM-253, 1-5120Y   | AUXILIARY     | 587  | CD EMERGENCY DIESEL GENERATOR ROOM | S         | EDG      | Seismic Only      |              |               |             |                                 |   |
| 19       | 12    | 0      | 1-QC-12       | 0      | BORON MAKEUP (CVCS) / NORTH BORIC ACID FILTER   | 12-5131              | AUXILIARY     | 587  | BORIC ACID STOR TANK               | P         | RI       | Seismic Only      |              |               |             |                                 |   |
| 20       | 1     | 0      | 1-QT-100-AB   | 0      | DIESEL COMBUSTION AIR / AB EMERG DIESEL AIR INTAKE FILTER   | 1-51518              | FOUNDINGS     | 609  | INNER PLANT FOUNDINGS              | S         | EDG      | Seismic and Relay |              |               |             | 1-12010                         |   |





DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID       | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.       | FIEL | Rm or RwrCl                      | Flow Path | Function    | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|--------------|--------|--|----------------------|-------------|------|----------------------------------|-----------|-------------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 21       | 2     | 0      | 1-QT-100-CD  | 0      | DIESEL COMBUSTION AIR / CD EMERG DIESEL AIR INTAKE FILTER                            | 1-5151D              | GROUND      | 609  | INNER PLANT GROUND               | S         | EDG         | Seismic and Relay |              |               |             |                                 |   |
| 22       | 1     | 0      | 1-QT-101-AB  | 0      | DIESEL COMBUSTION AIR / AB EMERG DIESEL AIR INTAKE SILENCER                          | 1-5151B              | AUXILIARY   | 587  | AB EMER DSL GEN RM               | S         | EDG         | Seismic Only      |              |               |             | N                               |   |
| 23       | 2     | 0      | 1-QT-101-CD  | 0      | DIESEL COMBUSTION AIR / CD EMERG DIESEL AIR INTAKE SILENCER                          | 1-5151D              | AUXILIARY   | 587  | CD EMER DSL GEN RM               | S         | EDG         | Seismic Only      |              |               | N           |                                 |   |
| 24       | 1     | 0      | 1-QT-104-AB  | 0      | DIESEL COMBUSTION AIR / AB EMERG DIESEL EXHAUST SILENCER                             | 1-5151B              | GROUND      | 609  | INNER PLANT GROUND               | S         | EDG         | Seismic Only      |              |               | N           |                                 |   |
| 25       | 2     | 0      | 1-QT-104-CD  | 0      | DIESEL COMBUSTION AIR / CD EMERG DIESEL EXHAUST SILENCER                             | 1-5151D              | GROUND      | 609  | INNER PLANT GROUND               | S         | EDG         | Seismic Only      |              |               | N           |                                 |   |
| 26       | 1     | 0      | 1-QT-112-AB  | 0      | DIESEL LUBE OIL / AB EMERG DIESEL FULL FLOW LUBE OIL FILTER                          | 1-5151A              | AUXILIARY   | 579  | AB EMER DSL LUBE OIL PIT         | S         | EDG         | Seismic Only      |              |               | N           |                                 |   |
| 27       | 2     | 0      | 1-QT-112-CD  | 0      | DIESEL LUBE OIL / CD EMERG DIESEL FULL FLOW LUBE OIL FILTER                          | 1-5151C              | AUXILIARY   | 579  | CD EMER DSL LUBE OIL PIT         | S         | EDG         | Seismic Only      |              |               | N           |                                 |   |
| 28       | 1     | 0      | 1-QT-113-AB1 | 0      | DIESEL LUBE OIL / AB EMERG DIESEL FULL FLOW LUBE OIL STRAINER 1                      | 1-5151A              | AUXILIARY   | 579  | AB EMER DSL LUBE OIL PIT         | S         | EDG         | Seismic Only      |              |               | N           |                                 |   |
| 29       | 1     | 0      | 1-QT-113-AB2 | 0      | DIESEL LUBE OIL / AB EMERG DIESEL FULL FLOW LUBE OIL STRAINER 2                      | 1-5151A              | AUXILIARY   | 579  | AB EMER DSL LUBE OIL PIT         | S         | EDG         | Seismic Only      |              |               | N           |                                 |   |
| 30       | 2     | 0      | 1-QT-113-CD1 | 0      | DIESEL LUBE OIL / CD EMERG DIESEL LUBE OIL FULL FLOW STRAINER 1                      | 1-5151C              | AUXILIARY   | 579  | CD EMERGENCY DIESEL LUBE OIL PIT | S         | EDG         | Seismic Only      |              |               | N           |                                 |   |
| 31       | 2     | 0      | 1-QT-113-CD2 | 0      | DIESEL LUBE OIL / CD EMERG DIESEL FULL FLOW LUBE OIL STRAINER 2                      | 1-5151C              | AUXILIARY   | 579  | CD EMER DSL LUBE OIL PIT         | S         | EDG         | Seismic Only      |              |               | N           |                                 |   |
| 32       | 1     | 0      | 1-QT-116-AB  | 0      | DIESEL LUBE OIL / AB EMERG DIESEL LUBE OIL HEATER (TANK)                             | 1-5151A              | AUXILIARY   | 579  | AB EMER DSL LUBE OIL PIT         | S         | EDG         | Seismic Only      |              |               | Y           | 1-12010 1-98013                 | 1-ABD-B-2B                                |
| 33       | 2     | 0      | 1-QT-116-CD  | 0      | DIESEL LUBE OIL / CD EMERG DIESEL LUBE OIL HEATER (TANK)                             | 1-5151C              | AUXILIARY   | 579  | CD EMER DSL LUBE OIL PIT         | S         | EDG         | Seismic Only      |              |               | Y           | 1-12030 1-98014                 | 1-ABD-C-2B                                |
| 34       | 1     | 0      | 1-QT-118-AB  | 0      | DIESEL LUBE OIL / AB EMERG DIESEL BYPASS LUBE OIL FILTER                             | 1-5151A              | AUXILIARY   | 579  | AB EMER DSL LUBE OIL PIT         | S         | EDG         | Seismic and Relay |              |               |             |                                 |   |
| 35       | 2     | 0      | 1-QT-118-CD  | 0      | DIESEL LUBE OIL / CD EMERG DIESEL BYPASS LUBE OIL FILTER                             | 1-5151C              | AUXILIARY   | 579  | CD EMER DSL LUBE OIL PIT         | S         | EDG         | Seismic and Relay |              |               |             |                                 |   |
| 36       | 1     | 0      | 1-QT-143-AB1 | 0      | DIESEL STARTING AIR / AB EMERG DIESEL CONTROL AIR DRYER 1                            | 1-5151B              | AUXILIARY   | 587  | AB EMER DSL GEN RM               | S         | EDG         | Seismic Only      |              |               | N           |                                 |   |
| 37       | 1     | 0      | 1-QT-143-AB2 | 0      | DIESEL STARTING AIR / AB EMERG DIESEL CONTROL AIR DRYER 2                            | 1-5151B              | AUXILIARY   | 587  | AB EMER DSL GEN RM               | S         | EDG         | Seismic Only      |              |               | N           |                                 |   |
| 38       | 2     | 0      | 1-QT-143-CD1 | 0      | DIESEL STARTING AIR / CD EMERG DIESEL CONTROL AIR DRYER 1                            | 1-5151D              | AUXILIARY   | 587  | CD EMER DSL GEN RM               | S         | EDG         | Seismic Only      |              |               | N           |                                 |   |
| 39       | 2     | 0      | 1-QT-143-CD2 | 0      | DIESEL STARTING AIR / CD EMERG DIESEL CONTROL AIR DRYER 2                            | 1-5151D              | AUXILIARY   | 587  | CD EMER DSL GEN RM               | S         | EDG         | Seismic Only      |              |               | N           |                                 |   |
| 40       | 1     | 0      | 1-QT-144-AB  | 0      | DIESEL FUEL OIL / AB EMERG DIESEL FUEL OIL TRANSFER FILTER                           | 1-5151A              | AUXILIARY   | 587  | AB EMER DSL GEN RM               | S         | EDG         | Seismic Only      |              |               | N           |                                 |   |
| 41       | 2     | 0      | 1-QT-144-CD  | 0      | DIESEL FUEL OIL / CD EMERG DIESEL FUEL OIL TRANSFER FILTER                           | 1-5151C              | AUXILIARY   | 587  | CD EMER DSL GEN RM               | S         | EDG         | Seismic Only      |              |               | N           |                                 |   |
| 42       | 12    | 0      | 1-TK-253-1   | 0      | CONTROL AIR / PRZ TR A B PRESS RELIEF VLV NRV-152 RESERVE CONTROL AIR BOTTLE RACK    | 1-51200              | CONTAINMENT | 612  | LOWER CONT, QUAD4                | S         | SUPPORT AIR | Seismic Only      |              |               | N           |                                 |   |
| 43       | 12    | 0      | 1-TK-253-2   | 0      | CONTROL AIR / PRZ TR A PRESSURE RELIEF VALVE NRV-153 RESERVE CONTROL AIR BOTTLE RACK | 1-51200              | CONTAINMENT | 612  | LOWER CONT, QUAD4                | S         | SUPPORT AIR | Seismic Only      |              |               |             |                                 |   |
| 44       | 12    | 0      | 1-TK-253-3   | 0      | CONTROL AIR / PRESSURIZER TR B PRESSURE RELIEF VALVE NRV-152 EMERG. AIR BOTTLE RACK  | 1-51200              | CONTAINMENT | 650  | UPPER CONT, QUAD3                | S         | SUPPORT AIR | Seismic Only      |              |               |             |                                 |   |
| 45       | 12    | 0      | 1-TK-253-4   | 0      | CONTROL AIR / PRESSURIZER TR A PRESSURE RELIEF VALVE NRV-153 EMERG AIR BOTTLE RACK   | 1-51200              | CONTAINMENT | 650  | UPPER CONT, QUAD4                | S         | SUPPORT AIR | Seismic Only      |              |               |             |                                 |   |
| 46       | 1     | 0      | 1-TT-DGAB    | 0      | STARTING AIR / 1 AB DIESEL GEN TUBE TRACK  | NONE                 | AUXILIARY   | 587  | AB EMER DSL GEN RM               | S         | EDG         | Seismic Only      |              |               |             |                                 |   |
| 47       | 2     | 0      | 1-TT-DGCD    | 0      | STARTING AIR / 1 CD DIESEL GEN TUBE TRACK  | NONE                 | AUXILIARY   | 587  | CD EMER DSL GEN RM               | S         | EDG         | Seismic Only      |              |               |             |                                 |   |

DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. Cl. | Eq. ID    | Rev No | Sys/Eq. Desc  | Drawing No. RevZone | Bldg.         | Fl. El. | Rm or Rm/Cl                     | Flow Path | Function               | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|---------|-----------|--------|---|---------------------|---------------|---------|---------------------------------|-----------|------------------------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 48       | 12    | 0       | 12-HE-19N | 0      | CVCS (BORON RECOVERY) / NORTH BORIC ACID EVAPORATOR SKID  | 1-5135, 12-5133     | AUXILIARY     | 587     | N BORIC ACID EVAPORATOR RM      | S         | CCW                    | Seismic Only      |              |               |             |                                 |   |
| 49       | 12    | 0       | 12-QC-3   | 0      | SPENT FUEL PIT COOLING/CLEANUP / SPENT FUEL PIT FILTER  | 12-5136             | U#2 AUXILIARY | 609     | SPENT FUEL PIT FILTER RM        | S         | SPENT FUEL PIT COOLING | Seismic Only      |              |               |             |                                 |   |
| 50       | 02    | 0       | 12-TK-207 | 0      | NITROGEN (REACTOR PLANT SERVICE) / REACTOR PLANT NITROGEN BULK STORAGE TANKS #3,4,5,6,7,8 (8 BOTTLES) | 12-5118B            | GROUND        | 609     | REACTOR GAS BOTTLE STORAGE AREA | S         | CONTROL AIR/N2         | Seismic Only      |              |               |             |                                 |   |
| 51       | 1     | 1       | 1-AB-A    | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC AB-A  | 1-12001 1-12010     | AUXILIARY     | 587     | 587 HALLWAY                     | E         | 600 VAC SYSTEM         | Seismic and Relay |              |               |             |                                 |   |
| 52       | 2     | 1       | 1-AB-D    | 0      | ELECTRICAL DISTRIBUTER, 600VAC / 600 VAC MCC 1-AB-D   | 1-12002             | AUXILIARY     | 587     | 587 HALLWAY                     | E         | 600 VAC SYSTEM         | Seismic and Relay |              |               |             |                                 |   |
| 53       | 12    | 1       | 1-AB-N    | 0      | 250 VDC CONTROL AND INSTRUMENTATION / CONTROL CENTER VALVE  | 1-12003, 1-12065    | AUXILIARY     | 587     | 587 HALLWAY                     | E         | 250 VDC SYSTEM         | Seismic Only      |              |               | Y           |                                 |   |
| 54       | 1     | 1       | 1-ABD-A   | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC ABD-A   | 1-12001 1-12010     | AUXILIARY     | 587     | AB EMER DSL GEN RM              | E         | 600 VAC SYSTEM         | Seismic and Relay |              |               |             |                                 |   |
| 55       | 1     | 1       | 1-ABD-B   | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC ABD-B   | 1-12001 1-12010     | AUXILIARY     | 587     | AB EMER DSL GEN RM              | E         | 600 VAC SYSTEM         | Seismic and Relay |              |               |             |                                 |   |
| 56       | 2     | 1       | 1-ABD-C   | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC ABD-C   | 1-12002 1-12030     | AUXILIARY     | 587     | CD EMER DSL GEN RM              | E         | 600 VAC SYSTEM         | Seismic and Relay |              |               |             |                                 |   |
| 57       | 2     | 1       | 1-ABD-D   | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC ABD-D   | 1-12002 1-12030     | AUXILIARY     | 609     | 4KV RM - 600V SWGR              | E         | 600 VAC SYSTEM         | Seismic and Relay |              |               |             |                                 |   |
| 58       | 1     | 1       | 1-ABV-A   | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC VCC ABV-A   | 1-12001 1-12011     | AUXILIARY     | 587     | 587 HALLWAY                     | E         | 600 VAC SYSTEM         | Seismic and Relay |              |               |             |                                 |   |
| 59       | 2     | 1       | 1-ABV-D   | 0      | 600V AC DISTR / MCC 1-ABV-D   | 1-12002, 1-12031    | AUXILIARY     | 587     | 587 HALLWAY                     | E         | 600 VAC SYSTEM         | Seismic and Relay |              |               |             |                                 |   |
| 60       | 1     | 1       | 1-AM-A    | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC AM-A  | 1-12001 1-12011     | AUXILIARY     | 633     | 633 HALLWAY                     | E         | 600 VAC SYSTEM         | Seismic and Relay |              |               |             |                                 |   |
| 61       | 2     | 1       | 1-AM-D    | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC AM-D  | 1-12002 1-12031     | AUXILIARY     | 633     | 633 HALLWAY                     | E         | 600 VAC SYSTEM         | Seismic and Relay |              |               |             |                                 |   |
| 62       | 1     | 1       | 1-AZ-BC   | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC AZ-BC   | 1-12001 1-12012     | AUXILIARY     | 609     | 609 HALLWAY                     | E         | 600 VAC SYSTEM         | Seismic and Relay |              |               |             |                                 |   |
| 63       | 1     | 1       | 1-AZV-A   | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC VCC AZV-A   | 1-12001 1-12012     | AUXILIARY     | 587     | 609 HALLWAY                     | E         | 600 VAC SYSTEM         | Seismic and Relay |              |               |             |                                 |   |
| 64       | 1     | 1       | 1-EZC-A   | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC EZC-A   | 1-12001 1-12013     | AUXILIARY     | 613     | 4KV RM - MEZZANINE              | E         | 600 VAC SYSTEM         | Seismic and Relay |              |               |             |                                 |   |
| 65       | 1     | 1       | 1-EZC-B   | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC EZC-B   | 1-12001 1-12013     | AUXILIARY     | 613     | 4KV RM - MEZZANINE              | E         | 600 VAC SYSTEM         | Seismic and Relay |              |               |             |                                 |   |
| 66       | 2     | 1       | 1-EZC-C   | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC EZC-C   | 1-12002 1-12032     | AUXILIARY     | 613     | 4KV RM - MEZZANINE              | E         | 600 VAC SYSTEM         | Seismic and Relay |              |               |             |                                 |   |
| 67       | 2     | 1       | 1-EZC-D   | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC EZC-D   | 1-12002 1-12033     | AUXILIARY     | 613     | 4KV RM - MEZZANINE              | E         | 600 VAC SYSTEM         | Seismic and Relay |              |               |             |                                 |   |
| 68       | 1     | 1       | 1-PS-A    | 0      | ELECTRICAL DISTRIBUTION, 600 VAC / 600 VAC MCC 1-PS-A   | 1-12001             | SCREEN HOUSE  | 594     | TRAVELING SCRNM MCC UPPER RM    | E         | 600 VAC SYSTEM         | Seismic and Relay |              |               |             |                                 |   |



DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL  | Eq. ID  | Rev No   | Sys/Eq. Desc  | Drawing No. RevZone | Bldg.         | FIEL               | Rm or Rm/Cl                  | Flow Path      | Function          | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|---------|---------|--|---|---------------------|---------------|--------------------|------------------------------|----------------|-------------------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 69       | 2     | 1       | 1-PS-D  | 0  | ELECTRICAL DISTRIBUTER, 600VAC / 600 VAC MCC 1-PS-D   | 1-12002             | SCREENHOUSE   | 594                | TRAVELING SCRNM MCC UPPER RM | E              | 600 VAC SYSTEM    | Seismic and Relay |              |               |             |                                 |   |
| 70       | 2     | 1-11A   | 0       | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC BUS 11A SWITCHGEAR    | 1-12001, 1-12063  | AUXILIARY           | 609           | 4KV RM - 600V SWGR | E                            | SUPPORT        | Seismic Only      |                   |              |               |             |                                 |   |
| 71       | 1     | 2       | 1-11A1  | 0  | ELECTRICAL DISTRIBUTION, 600VAC / REACTOR ROD CONTROL SOUTH MOTOR-GENERATOR SET CRDMG-1S SUPPLY BREAKER                               | 1-12001             | AUXILIARY     | 609                | 4KV RM - 600V SWGR           | E              | EDG               | Seismic and Relay |              |               |             |                                 |   |
| 72       | 1     | 2       | 1-11A10 | 0  | ELECTRICAL DISTRIBUTION, 600VAC / WEST TURBINE AUXILIARY COOLING WATER PUMP PP-14V SUPPLY BREAKER                                     | 1-12001, 1-12063    | AUXILIARY     | 609                | 4KV RM - 600V SWGR           | E              | EDG               | Seismic and Relay |              |               |             |                                 |   |
| 73       | 2     | 1-11A11 | 0       | ELECTRICAL DISTRIBUTION 600VAC / 600VAC BUS 11A SUPPLY BREAKER | 1-12001 1-12063   | AUXILIARY           | 609           | 4KV RM - 600V SWGR | E                            | 600 VAC SYSTEM | Seismic and Relay |                   |              |               |             |                                 |   |
| 74       | 1     | 2       | 1-11A12 | 0  | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC BUS 11A SPARE CIRCUIT BREAKER  | 1-12001             | AUXILIARY     | 609                | 4KV RM - 600V SWGR           | E              | EDG               | Seismic Only      |              |               | Y           |                                 |   |
| 75       | 1     | 2       | 1-11A13 | 0  | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER AM-A1 SUPPLY BREAKER  | 1-12001             | AUXILIARY     | 609                | 4KV RM - 600V SWGR           | E              | EDG               | Seismic and Relay |              |               | Y           |                                 |   |
| 76       | 1     | 2       | 1-11A2  | 0  | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC AM-A SUPPLY BREAKER   | 1-12001             | AUXILIARY     | 609                | 4KV RM - 600V SWGR           | E              | 600 VAC SYSTEM    | Seismic Only      |              |               | Y           |                                 |   |
| 77       | 1     | 2       | 1-11A3  | 0  | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC EZC-A SUPPLY BREAKER  | 1-12001             | AUXILIARY     | 609                | 4KV RM - 600V SWGR           | E              | 600 VAC SYSTEM    | Seismic Only      |              |               | Y           |                                 |   |
| 78       | 1     | 2       | 1-11A4  | 0  | ELECTRICAL DISTRIBUTION, 600VAC / SOUTH PLANT LIGHTING TRANSFORMER TR-LTG-6S SUPPLY BREAKER   | 1-12001, 1-12063    | U-1 AUXILIARY | 609                | 4KV RM - 600V SWGR           | E              | EDG               | Seismic and Relay |              |               | Y           |                                 |   |
| 79       | 1     | 2       | 1-11A5  | 0  | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC ABD-A SUPPLY BREAKER  | 1-12001             | AUXILIARY     | 609                | 4KV RM - 600V SWGR           | E              | 600 VAC SYSTEM    | Seismic Only      |              |               | Y           |                                 |   |
| 80       | 1     | 2       | 1-11A6  | 0  | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCCS AB-A, PS-A, TPP-A, AND VCCS ABV-A, AZV-A SUPPLY BREAKER                                  | 1-12001             | AUXILIARY     | 609                | 4KV RM - 600V SWGR           | E              | 600 VAC SYSTEM    | Seismic Only      |              |               | Y           |                                 |   |
| 81       | 1     | 2       | 1-11A7  | 0  | ELECTRICAL DISTRIBUTION, 600VAC / SERVICE BUILDING LIGHTING TRANSFORMER 12-TR-LTG-14 SUPPLY BREAKER                                   | 1-12001, 1-12063    | AUXILIARY     | 609                | 4KV RM - 600V SWGR           | E              | EDG               | Seismic and Relay |              |               | Y           |                                 |   |
| 82       | 1     | 2       | 1-11A8  | 0  | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC BORIC ACID HEAT TRACE CONTROL CENTER BHT-A SUPPLY BREAKER                                    | 1-12001             | AUXILIARY     | 609                | 4KV RM - 600V SWGR           | E              | EDG               | Seismic Only      |              |               | Y           |                                 |   |
| 83       | 1     | 2       | 1-11A9  | 0  | ELECTRICAL DISTRIBUTION, 600VAC / TSC UNINTERRUPTABLE PWR SOURCE EMER FEED CONSTANT VOLTAGE TRANSFORMER 12-TSC-UPS-CVT SUPPLY BREAKER | 1-12001             | AUXILIARY     | 609                | 4KV RM - 600V SWGR           | E              | EDG               | Seismic and Relay |              |               |             |                                 |   |
| 84       | 12    | 2       | 1-11AC  | 0  | ELECTRICAL DISTRIBUTION, 600 VAC. / 600 VAC. BUS 11A TO 600VAC. BUS 11C TIE BREAKER   | 1-12001             | AUXILIARY     | 609                | 4KV RM - 600V SWGR           | E              | 600 VAC SYSTEM    | Seismic Only      |              |               | Y           |                                 |   |
| 85       | 1     | 2       | 1-11B   | 0  | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC BUS 11B SWITCHGEAR   | 1-12001, 1-12063    | AUXILIARY     | 609                | 4KV RM - 600V SWGR           | E              | SUPPORT           | Seismic Only      |              |               |             |                                 |   |
| 86       | 1     | 2       | 1-11B1  | 0  | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC ABD-B SUPPLY BREAKER (1-ELSC)   | 1-12001             | AUXILIARY     | 609                | 4KV RM - 600V SWGR           | E              | 600 VAC SYSTEM    | Seismic Only      |              |               | Y           |                                 |   |
| 87       | 1     | 2       | 1-11B10 | 0  | ELECTRICAL DISTRIBUTION, 600VAC / PLANT AIR COMPRESSOR OME-41 SUPPLY BREAKER  | 1-12001             | AUXILIARY     | 609                | 4KV RM - 600V SWGR           | E              | EDG               | Seismic and Relay |              |               |             |                                 |   |
| 88       | 1     | 2       | 1-11B11 | 0  | ELECTRICAL DISTRIBUTION 600VAC / 600VAC BUS 11B SUPPLY BREAKER  | 1-12001 1-12063     | AUXILIARY     | 609                | 4KV RM - 600V SWGR           | E              | 600 VAC SYSTEM    | Seismic and Relay |              |               |             |                                 |   |
| 89       | 1     | 2       | 1-11B12 | 0  | ELECTRICAL DISTRIBUTION, 600VAC / SOUTH NON-ESSENTIAL SERVICE WATER PUMP PP-8S SUPPLY BREAKER   | 1-12001, 1-12063    | AUXILIARY     | 609                | 4KV RM - 600V SWGR           | E              | EDG               | Seismic and Relay |              |               |             |                                 |   |

DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Trasn | Eq. Cl. | Eq. ID  | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.     | F I EL | Rm or Rm/CI        | Flow Path | Function       | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|---------|---------|--------|---|----------------------|-----------|--------|--------------------|-----------|----------------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 90       | 1     | 2       | 1-11B13 | 0      | ELECTRICAL DISTRIBUTION, 600VAC / TURBINE ROOM INDUCTION HEATING, STRESS RELIEF AND BOLT HEATERS SUPPLY BREAKER | 1-12001, 1-12063     | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | EDG            | Seismic and Relay |              |               | Y           |                                 |   |
| 91       | 1     | 2       | 1-11B2  | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC ETC-B SUPPLY BREAKER  | 1-12001              | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | 600 VAC SYSTEM | Seismic Only      |              |               | Y           |                                 |   |
| 92       | 1     | 2       | 1-11B3  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / EAST AND WEST AUXILIARY BUILDING CRANES 12-QM-3E AND 12-QM-3W SUPPLY BREAKER  | 1-12001, 1-12063     | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | EDG            | Seismic and Relay |              |               | Y           |                                 |   |
| 93       | 1     | 2       | 1-11B4  | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC AZ-BC SUPPLY BREAKER  | 1-12001              | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | 600 VAC SYSTEM | Seismic and Relay |              |               |             |                                 |   |
| 94       | 1     | 2       | 1-11B5  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTERS TBG-BE AND TBP-BW SUPPLY BREAKER                 | 1-12001, 1-12063     | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | EDG            | Seismic and Relay |              |               | Y           |                                 |   |
| 95       | 1     | 2       | 1-11B6  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / EAST TURBINE AUXILIARY COOLING WATER PUMP PP-14E SUPPLY BREAKER               | 1-12001, 1-12063     | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | EDG            | Seismic and Relay |              |               |             |                                 |   |
| 96       | 1     | 2       | 1-11B7  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / PLANT HEATING BOILER FORCED DRAFT FAN 12-OME-10-FAN SUPPLY BREAKER            | 1-12001              | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | EDG            | Seismic and Relay |              |               |             |                                 |   |
| 97       | 1     | 2       | 1-11B8  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / MAKEUP PLANT VACUUM DEGASIFIER 2ND STAGE VACUUM PUMP 12-PP-44M SUPPLY BREAKER | 1-12001              | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | EDG            | Seismic and Relay |              |               |             |                                 |   |
| 98       | 1     | 2       | 1-11B9  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC BUS 11B SPARE CIRCUIT BREAKER  | 1-12001              | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | EDG            | Seismic Only      |              |               | Y           |                                 |   |
| 99       | 12    | 2       | 1-11B0  | 0      | ELECTRICAL DISTRIBUTION, 600VAC. / TIE CIRCUIT BREAKER BETWEEN BUS 11B AND 11D                                  | 1-12001              | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | 600 VAC SYSTEM | Seismic Only      |              |               | Y           |                                 |   |
| 100      | 2     | 2       | 1-11C   | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 11C SWITCHGEAR   | 1-12002, 1-12072     | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | SUPPORT        | Seismic Only      |              |               |             |                                 |   |
| 101      | 2     | 2       | 1-11C1  | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC BUS 11C SUPPLY BREAKER  | 1-12002, 1-12072     | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | 600 VAC SYSTEM | Seismic and Relay |              |               |             |                                 |   |
| 102      | 2     | 2       | 1-11C10 | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCCS ABD-C AND TSC-S SUPPLY BREAKER                                     | 1-12002, 1-12072     | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | 600 VAC SYSTEM | Seismic Only      |              |               | Y           |                                 |   |
| 103      | 2     | 2       | 1-11C11 | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC BUS 11C SPARE CIRCUIT BREAKER  | 1-12002, 1-12072     | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | EDG            | Seismic Only      |              |               |             |                                 |   |
| 104      | 2     | 2       | 1-11C12 | 0      | ELECTRICAL DISTRIBUTION, 600VAC / NORTH SPENT FUEL PIT PUMP 12-PP-31N SUPPLY BREAKER                            | 1-12002, 1-12072     | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | EDG            | Seismic and Relay |              |               | Y           |                                 |   |
| 105      | 2     | 2       | 1-11C13 | 0      | ELECTRICAL DISTRIBUTION 600 VAC / CIRCUIT BREAKER-600V FOR RECIPROCATING CHARGING PUMP 1-PP-49                  | 1-12002              | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | 600 VAC SYSTEM | Seismic and Relay |              |               |             |                                 |   |
| 106      | 2     | 2       | 1-11C14 | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC BUS 11C SPARE CIRCUIT BREAKER  | 1-12002, 1-12072     | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | EDG            | Seismic and Relay |              |               | Y           | 2                               |   |
| 107      | 2     | 2       | 1-11C15 | 0      | ELECTRICAL DISTRIBUTION, 600VAC / TECHNICAL SUPPORT CENTER UNINTERRUPTABLE POWER SUPPLY NORMAL SUPPLY BREAKER   | 1-12002              | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | EDG            | Seismic and Relay |              |               | Y           |                                 |   |
| 108      | 2     | 2       | 1-11C16 | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTERS TBG-CS AND TBG-CW SUPPLY BREAKER                 | 1-12002, 1-12072     | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | EDG            | Seismic and Relay |              |               | Y           |                                 |   |
| 109      | 2     | 2       | 1-11C17 | 0      | ELECTRICAL DISTRIBUTION, 600VAC / NORTH NON-ESSENTIAL SERVICE WATER PUMP PP-8N SUPPLY BREAKER                   | 1-12002, 1-12072     | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | EDG            | Seismic and Relay |              |               |             |                                 |   |



DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. Cl. | Eq. ID  | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.     | F I EL | Rm or Rm/Cl        | Flow Path | Function       | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No./Rev. | Required Supporting Systems or Components |
|----------|-------|---------|---------|--------|--|----------------------|-----------|--------|--------------------|-----------|----------------|-------------------|--------------|---------------|-------------|-------------------------------|---|
| 110      | 2     | 2       | 1-11C18 | 0      | ELECTRICAL DISTRIBUTION, 600VAC / TURBINE BUILDING 24050 TON OVERHEAD CRANE 12-QM-1 SUPPLY BREAKER                       | 1-12002, 1-12072     | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | EDG            | Seismic and Relay |              |               | Y           |                               |   |
| 111      | 2     | 2       | 1-11C2  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / CONTAINMENT POLAR CRANE QM-4 SUPPLY BREAKER  | 1-12002, 1-12072     | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | EDG            | Seismic and Relay |              |               | Y           |                               |   |
| 112      | 2     | 2       | 1-11C3  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER AM-C1 SUPPLY BREAKER                                       | 1-12002, 1-12072     | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | EDG            | Seismic and Relay |              |               | Y           |                               |   |
| 113      | 2     | 2       | 1-11C4  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / CIRCULATING WATER TRAVELING SCREENS NORTH WASH PUMP 12-PP-15N SUPPLY BREAKER           | 1-12002, 1-12072     | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | EDG            | Seismic and Relay |              |               |             |                               |   |
| 114      | 2     | 2       | 1-11C5  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / MAKEUP PLANT VACUUM DEGASIFIER STANDBY VACUUM PUMP 12-PP-44W SUPPLY BREAKER            | 1-12002, 1-12072     | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | EDG            | Seismic and Relay |              |               |             |                               |   |
| 115      | 2     | 2       | 1-11C6  | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC EZC-C SUPPLY BREAKER   | 1-12002, 1-12072     | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | 600 VAC SYSTEM | Seismic Only      |              |               | Y           |                               |   |
| 116      | 2     | 2       | 1-11C7  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC BUS 11C SPARE CIRCUIT BREAKER   | 1-12002, 1-12072     | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | EDG            | Seismic and Relay |              |               |             |                               |   |
| 117      | 2     | 2       | 1-11C8  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / SERVICE BUILDING AND CONTAINMENT STANDBY LIGHTING TRANSFORMER TR-LTG-8 SUPPLY BREAKER  | 1-12002, 1-12072     | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | EDG            | Seismic and Relay |              |               | Y           |                               |   |
| 118      | 2     | 2       | 1-11C9  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / MAIN AND SPARE TRANSFORMER AUXILIARIES NORMAL DISTRIBUTION CABINET TCSN SUPPLY BREAKER | 1-12002, 1-12072     | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | EDG            | Seismic and Relay |              |               | Y           |                               |   |
| 119      | 2     | 2       | 1-11D   | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC BUS 11D SWITCHGEAR  | 1-12002, 1-12072     | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | SUPPORT        | Seismic Only      |              |               |             |                               |   |
| 120      | 2     | 2       | 1-11D1  | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC BUS 11D SUPPLY BREAKER   | 1-12002, 1-12072     | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | 600 VAC SYSTEM | Seismic and Relay |              |               |             |                               |   |
| 121      | 2     | 2       | 1-11D10 | 0      | ELECTRICAL DISTRIBUTION, 600VAC / NORTH PLANT LIGHTING TRANSFORMER TR-LTG-9N SUPPLY BREAKER                              | 1-12002, 1-12072     | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | EDG            | Seismic and Relay |              |               | Y           |                               |   |
| 122      | 2     | 2       | 1-11D11 | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC BORIC ACID HEAT TRACE CONTROL CENTER BHT-D SUPPLY BREAKER                       | 1-12002, 1-12072     | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | EDG            | Seismic Only      |              |               | Y           |                               |   |
| 123      | 2     | 2       | 1-11D13 | 0      | ELECTRICAL DISTRIBUTION, 600VAC / REACTOR ROD CONTROL NORTH MOTOR-GENERATOR SET CRDMG-1N SUPPLY BREAKER                  | 1-12002, 1-12072     | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | EDG            | Seismic and Relay |              |               | Y           |                               |   |
| 124      | 2     | 2       | 1-11D14 | 0      | 600V AC DISTR / 600VAC MCC 1-AB-D, VCC 1-ABV-D, MCC 1-PS-D SUPPLY BREAKER  | 1-12002, 1-12072     | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | 600 VAC SYSTEM | Seismic Only      |              |               | Y           |                               |   |
| 125      | 2     | 2       | 1-11D3  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / CONTAINMENT LIGHTING TRANSFORMER TR-LTG-10 SUPPLY BREAKER                              | 1-12002, 1-12072     | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | EDG            | Seismic and Relay |              |               | Y           |                               |   |
| 126      | 2     | 2       | 1-11D4  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC BUS 11D SPARE CIRCUIT BREAKER   | 1-12002              | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | EDG            | Seismic Only      |              |               |             |                               |   |
| 127      | 2     | 2       | 1-11D5  | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC ABD-D SUPPLY BREAKER   | 1-12002, 1-12072     | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | 600 VAC SYSTEM | Seismic Only      |              |               | Y           |                               |   |
| 128      | 2     | 2       | 1-11D6  | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC EZC-D SUPPLY BREAKER   | 1-12002, 1-12072     | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | 600 VAC SYSTEM | Seismic Only      |              |               | Y           |                               |   |
| 129      | 2     | 2       | 1-11D8  | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC MCC AM-D SUPPLY BREAKER  | 1-12002, 1-12072     | AUXILIARY | 609    | 4KV RM - 600V SWGR | E         | 600 VAC SYSTEM | Seismic Only      |              |               | Y           |                               |   |



DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID   | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.     | FIEL | Rm or Rwr/CI         | Flow Path | Function         | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|----------|--------|---|----------------------|-----------|------|----------------------|-----------|------------------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 130      | 2     | 2      | 1-11D9   | 0      | ELECTRICAL DISTRIBUTION, 600VAC / MAIN AND SPARE TRANSFORMER AUXILIARIES EMERGENCY DISTRIBUTION CABINET TCSE SUPPLY BREAKER | 1-12002, 1-12072     | AUXILIARY | 609  | 4KV RM - 600V SWGR   | E         | EDG              | Seismic and Relay |              |               |             |                                 |   |
| 131      | 2     | 2      | 1-52-BYA | 0      | REACTOR TRIP BREAKER / REACTOR ROD CONTROL TRAIN 'A' REACTOR TRIP BYPASS CIRCUIT BREAKER                                    |                      | AUXILIARY | 609  | CRD EQUIP RM         | E         | SUPPORT          | Seismic and Relay |              |               |             | 1-12070                         |   |
| 132      | 1     | 2      | 1-52-BYB | 0      | ROD CONTROL AND INSTRUMENTATION / REACTOR ROD CONTROL TRAIN 'B' REACTOR TRIP BYPASS CIRCUIT BREAKER                         |                      | AUXILIARY | 609  | CRD EQUIP RM         | E         | SUPPORT          | Seismic and Relay |              |               |             | 1-12060                         |   |
| 133      | 2     | 2      | 1-52-RTA | 0      | ROD CONTROL AND INSTRUMENTATION / REACTOR ROD CONTROL TRAIN 'A' REACTOR TRIP CIRCUIT BREAKER                                |                      | AUXILIARY | 609  | CRD EQUIP RM         | E         | SUPPORT          | Seismic and Relay |              |               |             |                                 |   |
| 134      | 1     | 2      | 1-52-RTB | 0      | ROD CONTROL AND INSTRUMENTATION / REACTOR ROD CONTROL TRAIN 'B' REACTOR TRIP CIRCUIT BREAKER                                |                      | AUXILIARY | 609  | CRD EQUIP RM         | E         | SUPPORT          | Seismic and Relay |              |               |             | 1-12060                         |   |
| 135      | 1     | 3      | 1-T11A   | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 4KV BUS T11A SWITCHGEAR  | 1-12001              | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR | E         | SUPPORT          | Seismic Only      |              |               |             |                                 |   |
| 136      | 1     | 3      | 1-T11A1  | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC / SOUTH SAFETY INJECTION PUMP PP-26S SUPPLY BREAKER                                       | 1-12001, 1-12063     | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR | E         | 4KV DISTRIBUTION | Seismic and Relay |              |               |             |                                 |   |
| 137      | 1     | 3      | 1-T11A10 | 0      | ELECTRICAL DISTRIBUTION 4160VAC / 600V BUS 11A SUPPLY TRANSFORMER TR11A SUPPLY BREAKER                                      | 1-12001 1-12063      | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR | E         | 4 KV SYSTEM      | Seismic and Relay |              |               | Y           |                                 |   |
| 138      | 1     | 3      | 1-T11A11 | 0      | ELECTRICAL DISTRIBUTION 4160VAC / AB EMERG DIESEL GENERATOR TO 4KV BUS T11A SUPPLY BREAKER                                  | 1-12001 1-12063      | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR | E         | 4 KV SYSTEM      | Seismic and Relay |              |               | Y           |                                 |   |
| 139      | 1     | 3      | 1-T11A12 | 0      | ELECTRICAL DISTRIBUTION 4160 VAC / CIRCUIT BREAKER FROM 69KV TO BUS T11A  | 1-12001              | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR | E         | 4 KV SYSTEM      | Seismic and Relay |              |               | Y           |                                 |   |
| 140      | 1     | 3      | 1-T11A2  | 0      | ELECTRICAL DISTRIBUTION 4160 VAC / WEST MOTOR DRIV AUX FEEDWATER PUMP PP-3W SUPPLY BREAKER                                  | 1-12001 1-12063      | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR | E         | 4 KV SYSTEM      | Seismic Only      |              |               | Y           |                                 |   |
| 141      | 1     | 3      | 1-T11A3  | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC / WEST CONTAINMENT SPRAY PUMP PP-9W SUPPLY BREAKER  | 1-12001              | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR | E         | 4KV DISTRIBUTION | Seismic and Relay |              |               | Y           |                                 |   |
| 142      | 1     | 3      | 1-T11A4  | 0      | ELECTRICAL DISTRIBUTION 4160 VAC / WEST RHR PUMP PP-35W SUPPLY BREAKER  | 1-12001              | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR | E         | 4 KV SYSTEM      | Seismic Only      |              |               | Y           |                                 |   |
| 143      | 1     | 3      | 1-T11A5  | 0      | ELECTRICAL DISTRIBUTION 4160VAC / WEST ESW PUMP PP-7W SUPPLY BREAKER  | 1-12001 1-12063      | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR | E         | 4 KV SYSTEM      | Seismic Only      |              |               | Y           |                                 |   |
| 144      | 1     | 3      | 1-T11A6  | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC / 4KV BUS T11A TO 480V PRESSURIZER HEATER BUS SUPPLY XFMR TR11A PHA SUPPLY BRKR           | 1-12001              | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR | E         | 4KV DISTRIBUTION | Seismic and Relay |              |               |             |                                 |   |
| 145      | 1     | 3      | 1-T11A7  | 0      | ELECTRICAL DISTRIBUTION 4160VAC / WEST CCW PUMP PP-10W SUPPLY BREAKER   | 1-12001              | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR | E         | 4 KV SYSTEM      | Seismic Only      |              |               | Y           |                                 |   |
| 146      | 1     | 3      | 1-T11A8  | 0      | ELECTRICAL DISTRIBUTION 4160VAC / WEST CENTRIFUGAL CHARGING PUMP PP-50W SUPPLY BREAKER                                      | 1-12001              | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR | E         | 4 KV SYSTEM      | Seismic Only      |              |               | Y           |                                 |   |
| 147      | 1     | 3      | 1-T11A9  | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 4KV BUS 1A TO 4KV BUS T11A TIE BREAKER   | 1-12001, 1-12063     | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR | E         | 4KV DISTRIBUTION | Seismic and Relay | CL           | OP            | Y           |                                 |   |
| 148      | 1     | 3      | 1-T11B   | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 4KV BUS T11B SWITCHGEAR  | 1-12001              | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR | E         | SUPPORT          | Seismic Only      |              |               |             |                                 |   |
| 149      | 1     | 3      | 1-T11B1  | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 4KV BUS 1B TO 4KV BUS T11B TIE BREAKER   | 1-12001, 1-12063     | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR | E         | 4KV DISTRIBUTION | Seismic and Relay | CL           | OP            | Y           |                                 |   |
| 150      | 1     | 3      | 1-T11B2  | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / CIRCUIT BREAKER FROM 69KV BUS TO BUS T11B  | 1-12001              | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR | E         | 4 KV SYSTEM      | Seismic and Relay |              |               |             |                                 |   |



**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**

| Line No. | Train | Eq. CL | Eq. ID         | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.     | FIEL | Rm or Rwr/CI         | Flow Path | Function         | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|----------------|--------|---|----------------------|-----------|------|----------------------|-----------|------------------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 151      | 1     | 3      | 1-T11B4        | 0      | ELECTRICAL DISTRIBUTION 4160VAC / AB EMERG DIESEL GENERATOR TO 4KV BUS T11 SUPPLY BREAKER                       | 1-12001 1-12003      | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR | E         | 4 KV SYSTEM      | Seismic and Relay |              |               |             |                                 |   |
| 152      | 2     | 3      | 1-T11C         | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 4KV BUS T11C SWITCHGEAR  | 1-12002              | AUXILIARY | 609  | 4KV RM - CD 4KV SWGR | E         | SUPPORT          | Seismic Only      |              |               |             |                                 |   |
| 153      | 2     | 3      | 1-T11C1        | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 4KV BUS 1C TO 4KV BUS T11C TIE BREAKER                                       | 1-12002, 1-12072     | AUXILIARY | 609  | 4KV RM - CD 4KV SWGR | E         | 4KV DISTRIBUTION | Seismic and Relay | CL           | OP            | Y           |                                 |   |
| 154      | 2     | 3      | 1-T11C2        | 0      | ELECTRICAL DISTRIBUTION 4160 VOLTS / CIRCUIT BREAKER-4KV FROM 69KV TO BUS T11C                                  | 1-12002              | AUXILIARY | 609  | 4KV RM - CD 4KV SWGR | E         | 4 KV SYSTEM      | Seismic and Relay |              |               |             |                                 |   |
| 155      | 2     | 3      | 1-T11C3        | 0      | ELECTRICAL DISTRIBUTION 4160VAC / CD EMERG DIESEL GENERATOR TO 4KV BUS T11C SUPPLY BREAKER                      | 1-12002 1-12072      | AUXILIARY | 609  | 4KV RM - CD 4KV SWGR | E         | 4 KV SYSTEM      | Seismic and Relay |              |               |             |                                 |   |
| 156      | 2     | 3      | 1-T11D         | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 4KV BUS T11D SWITCHGEAR  | 1-12002              | AUXILIARY | 609  | 4KV RM - CD 4KV SWGR | E         | SUPPORT          | Seismic Only      |              |               | Y           |                                 |   |
| 157      | 2     | 3      | 1-T11D1        | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC. / CIRCUIT BREAKER 4KV FROM 69KV FEED TO BUS T11D                             | 1-12002              | AUXILIARY | 609  | 4KV RM - CD 4KV SWGR | E         | 4 KV SYSTEM      | Seismic and Relay |              |               |             |                                 |   |
| 158      | 2     | 3      | 1-T11D10       | 0      | ELECTRICAL DISTRIBUTION 4160 VAC / EAST ESS SERVICE WATER PUMP 1-PP. 7E SUPPLY BREAKER                          | 1-12002              | AUXILIARY | 609  | 4KV RM - CD 4KV SWGR | E         | 4 KV SYSTEM      | Seismic Only      |              |               | Y           |                                 |   |
| 159      | 2     | 3      | 1-T11D11       | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC. / EAST MOTOR DRIVEN AUXILIARY FEED WATER PUMP PP-3E SUPPLY BREAKER           | 1-12002              | AUXILIARY | 609  | 4KV RM - CD 4KV SWGR | E         | 4 KV SYSTEM      | Seismic Only      |              |               | Y           |                                 |   |
| 160      | 2     | 3      | 1-T11D12       | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 4KV BUS 1D TO 4KV BUS T11D TIE BREAKER                                       | 1-12002, 1-12072     | AUXILIARY | 609  | 4KV RM - CD 4KV SWGR | E         | 4KV DISTRIBUTION | Seismic and Relay | CL           | OP            | Y           |                                 |   |
| 161      | 2     | 3      | 1-T11D2        | 0      | ELECTRICAL DISTRIBUTION 4160VAC / 600V BUS 11D SUPPLY TRANSFORMER TR11D SUPPLY BREAKER                          | 1-12002 1-12072      | AUXILIARY | 609  | 4KV RM - CD 4KV SWGR | E         | 4 KV SYSTEM      | Seismic and Relay |              |               |             |                                 |   |
| 162      | 2     | 3      | 1-T11D3        | 0      | ELECTRICAL DISTRIBUTION 4160 VAC / CIRCUIT BREAKER-4KV EAST CCW PUMP-1E SUPPLY BREAKER                          | 1-12002              | AUXILIARY | 609  | 4KV RM - CD 4KV SWGR | E         | 4 KV SYSTEM      | Seismic Only      |              |               | Y           |                                 |   |
| 163      | 2     | 3      | 1-T11D4        | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC / EAST CONTAINMENT SPRAY PUMP PP-9E SUPPLY BREAKER                            | 1-12002, 1-12072     | AUXILIARY | 609  | 4KV RM - CD 4KV SWGR | E         | 4KV DISTRIBUTION | Seismic and Relay |              |               | Y           |                                 |   |
| 164      | 2     | 3      | 1-T11D5        | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC / NORTH SAFETY INJECTION PUMP PP-26N SUPPLY BREAKER                           | 1-12002, 1-12063     | AUXILIARY | 609  | 4KV RM - CD 4KV SWGR | E         | 4KV DISTRIBUTION | Seismic and Relay |              |               | Y           |                                 |   |
| 165      | 2     | 3      | 1-T11D6        | 0      | ELECTRICAL DISTRIBUTION 4160 VAC / EAST RHR PUMP PP-35E SUPPLY BKR  | 1-12002, 1-12072     | AUXILIARY | 609  | 4KV RM - CD 4KV SWGR | E         | 4 KV SYSTEM      | Seismic Only      |              |               | Y           |                                 | MCCD-4                                    |
| 166      | 2     | 3      | 1-T11D7        | 0      | ELECTRICAL DISTRIBUTION 4160 VAC / EAST CENTRIFUGAL CHARGING PUMP 1-PP-50E SUPPLY BREAKER                       | 1-12002              | AUXILIARY | 609  | 4KV RM - CD 4KV SWGR | E         | 4 KV SYSTEM      | Seismic Only      |              |               |             |                                 |   |
| 167      | 2     | 3      | 1-T11D8        | 0      | ELECTRICAL DISTRIBUTION 4160VAC / CD EMERG DIESEL GENERATOR TO 4KV BUS T11D SUPPLY BREAKER                      | 1-12002 1-12072      | AUXILIARY | 609  | 4KV RM - CD 4KV SWGR | E         | 4 KV SYSTEM      | Seismic and Relay |              |               |             |                                 |   |
| 168      | 2     | 3      | 1-T11D9        | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC / 4KV BUS T11D TO 480V PRESSURIZER HEATER BUS SUPPLY XFMR TR11PHC SUPPLY BRKR | 1-12002, 1-12072     | AUXILIARY | 609  | 4KV RM - CD 4KV SWGR | E         | 4KV DISTRIBUTION | Seismic and Relay |              |               |             |                                 |   |
| 169      | 2     | 4      | 1-CRID-I-CVT   | 0      | 120V CTRL RM INSTRUMENTATION DISTR / 10KVA TRANSFORMER-CONSTANT VOLTAGE   | 1-12050              | AUXILIARY | 609  | 4KV RM - 600V SWGR   | E         | 120 VAC SYSTEM   | Seismic and Relay |              |               |             |                                 |   |
| 170      | 2     | 4      | 1-CRID-II-CVT  | 0      | 120VAC DISTRIBUTION / 120V AC CR INST DISTR CH-II ISOL. CONT. VOLT TRANSF                                       | 1-12050              | AUXILIARY | 609  | 4KV RM - 600V SWGR   | E         | 120 VAC SYSTEM   | Seismic and Relay |              |               |             |                                 | 1-EZC-D-AL                                |
| 171      | 1     | 4      | 1-CRID-III-CVT | 0      | 120V CTRL RM INSTRUMENTATION DISTR / 10KVA ISOLIMETER-CONSTANT VOLTAGE-TRANSFORMER                              | 1-12050              | AUXILIARY | 609  | 4KV RM - 600V SWGR   | E         | 120 VAC SYSTEM   | Seismic and Relay |              |               |             |                                 | 1-EZC-A-SAR                               |
| 172      | 1     | 4      | 1-CRID-IV-CVT  | 0      | 120V CTRL RM INSTRUMENTATION DISTR / 10KVA ISOLIMETER-CONSTANT VOLTAGE-TRANSFORMER                              | 1-12050              | AUXILIARY | 609  | 4KV RM - 600V SWGR   | E         | 120 VAC SYSTEM   | Seismic and Relay |              |               |             |                                 | 1-EZC-B-1AL, 1-MCAB-12                    |

DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID       | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.     | FIEL | Rm or Rm/CL                 | Flow Path | Function       | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|--------------|--------|---|----------------------|-----------|------|-----------------------------|-----------|----------------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 173      | 1     | 4      | 1-DGAB-FFCKT | 0      | DIESEL GENERATION, CONTROL AND INSTRUMEN / AB EMERGENCY DIESEL GENERATOR OME-150-AB FIELD FLASH CIRCUIT TRANSFORMER | 1-12001              | AUXILIARY | 587  | AB EMER DSL GEN RM          | E         | EDG            | Seismic and Relay |              |               | Y           |                                 |   |
| 174      | 2     | 4      | 1-OGCD-FFCKT | 0      | DIESEL GENERATION, CONTROL AND INSTRUMEN / CD EMERGENCY DIESEL GENERATOR OME-150-CD FIELD FLASH CKT TRANSFORMER     | 1-12002              | AUXILIARY | 587  | CD EMER DSL GEN RM          | E         | EDG            | Seismic and Relay |              |               | Y           |                                 |   |
| 175      | 2     | 4      | 1-TR-AFW     | 0      | 120V/220V CONTROL AND INSTRUMENTATION / AUXILIARY FEEDWATER 120/208VAC DIST PNL AFW SUPPLY TRANSFORMER              | 1-12035, 1-12030     | AUXILIARY | 587  | CD EMER DSL GEN RM          | E         | 120 VAC SYSTEM | Seismic Only      |              |               | Y           |                                 |   |
| 176      | 1     | 4      | 1-TR-ELSC    | 0      | 120V/220 CONTROL AND INSTRUMENTATION / 120/208 VAC EMERGENCY LOCAL SHUTDOWN DISTRIBUTION TRANSFORMER                | 1-12015, 1-12010     | AUXILIARY | 587  | AB EMER DSL GEN RM          | E         | 120 VAC SYSTEM | Seismic Only      |              |               | Y           |                                 |   |
| 177      | 1     | 4      | 1-TR11A      | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC BUS 11A SUPPLY TRANSFORMER  | 1-12001              | AUXILIARY | 609  | 4KV RM - 600V SWGR          | E         | 600 VAC SYSTEM | Seismic and Relay |              |               |             |                                 |   |
| 178      | 1     | 4      | 1-TR11B      | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC BUS 11B SUPPLY TRANSFORMER  | 1-12001              | AUXILIARY | 609  | 4KV RM - 600V SWGR          | E         | 600 VAC SYSTEM | Seismic and Relay |              |               |             |                                 |   |
| 179      | 2     | 4      | 1-TR11C      | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC BUS 11C SUPPLY TRANSFORMER  | 1-12002 1-12072      | AUXILIARY | 609  | 4KV RM - CD 4KV SWGR        | E         | 600 VAC SYSTEM | Seismic and Relay |              |               |             |                                 |   |
| 180      | 2     | 4      | 1-TR11D      | 0      | ELECTRICAL DISTRIBUTION 600VAC / 600VAC BUS 11D SUPPLY TRANSFORMER  | 1-12002              | AUXILIARY | 609  | 4KV RM - 600V SWGR          | E         | 600 VAC SYSTEM | Seismic and Relay |              |               |             |                                 |   |
| 181      | 2     | 5      | 1-PP-10E     | 0      | CCW / EAST CCW PUMP   | 1-5135A              | AUXILIARY | 609  | 609 HALLWAY                 | S         | CCW            | Seismic and Relay | NR/R         | R             | Y           | 1-12002, 1-12070, 1-98405       | 1-T11D3, 1-MCCD-4                         |
| 182      | 2     | 5      | 1-PP-10W     | 0      | CCW / WEST CCW PUMP   | 1-5135A              | AUXILIARY | 609  | 609 HALLWAY                 | S         | CCW            | Seismic and Relay | R/NR         | R             | Y           | 1-12001 1-12060 1-98405         | 1-T11A7 1-MCAB-3                          |
| 183      | 2     | 5      | 1-PP-26N     | 0      | SAFETY INJECTION / NORTH SAFETY INJECTION PUMP  | 1-5142 1-5135A       | AUXILIARY | 587  | N SAFETY INJ PMP RM         | P         | RI             | Seismic and Relay | NR           | NR            | N           | 1-12002, 1-12070, 1-98281       | 1-T11D5 MCCD-4                            |
| 184      | 1     | 5      | 1-PP-26S     | 0      | SAFETY INJECTION / SOUTH SAFETY INJECTION PUMP  | 1-5142 1-5135A       | AUXILIARY | 587  | S SAFETY INJ PMP RM         | P         | RI             | Seismic and Relay | NR           | NR            | N           | 1-12001 1-12060 1-98281         | 1-T11A1 MCAB-3                            |
| 185      | 2     | 5      | 1-PP-3E      | 0      | AUX FEEDWATER / EAST MOTOR DRIV AUX FEEDWATER PUMP  | 1-5106A              | TURBINE   | 591  | E MOTOR DRIVEN AUX FDWTR PU | P         | D              | Seismic and Relay | NR/R         | R             | Y           | 1-1202 1-12070 1-98214          | 1-T11D11 1-MCCD-4                         |
| 186      | 1     | 5      | 1-PP-3W      | 0      | AUX FEEDWATER / WEST MOTOR DRIVEN AUX FEEDWATER PUMP  | 1-5106A              | TURBINE   | 591  | W MOTOR DRIVEN AUX FDWTR PU | P         | D              | Seismic and Relay | R/NR         | R             | Y           | 1-12001 1-98218 1-12060         | 1-T11A2 1-MCAB-3                          |
| 187      | 12    | 5      | 1-PP-4       | 0      | AUX FEEDWATER / TURBINE DRIV AUX FEEDWATER PUMP   | 1-5106A              | TURBINE   | 591  | TB DRIVEN AUX FDWTR PMP     | P         | D              | Seismic and Relay | NR           | R             | Y           | 1-12003 1-12065 1-98215         | 1-DCN-6                                   |
| 188      | 2     | 5      | 1-PP-46-1    | 0      | CVCS / BORIC ACID STORAGE TANKS TRANSFER PUMP 1   | 12-5131              | AUXILIARY | 587  | BORIC ACID STOR TANK        | P         | RI             | Seismic and Relay | NR           | R             | Y           | 1-12030 1-98282                 | 1-AB-D-1D                                 |
| 189      | 1     | 5      | 1-PP-46-2    | 0      | CVCS / BORIC ACID STORAGE TANKS TRANSFER PUMP 2   | 12-5131              | AUXILIARY | 587  | BORIC ACID STOR TANK        | P         | RI             | Seismic and Relay | NR           | R             | Y           | 1-12010 1-98272                 | 1-AB-A-1D                                 |
| 190      | 12    | 5      | 1-PP-49      | 0      | CVCS / RECIPROCATING CHARGING PUMP  | 1-5129 1-5135        | AUXILIARY | 587  | RECIPROCATIN G CHRG PMP RM  | P         | RIP            | Seismic and Relay | NR           | NR            | N           | 1-98273                         | 1-11C13                                   |
| 191      | 2     | 5      | 1-PP-50E     | 0      | CVCS / EAST CENTRIFUGAL CHARGING PUMP   | 1-5129 1-5135A       | AUXILIARY | 587  | E CNTRFGL CHARG PMP RM      | P         | RIP            | Seismic and Relay | NR/R         | R             | Y           | 1-12002 1-12070 1-98273         | 1-T11D7 1-MCCD-4                          |
| 192      | 1     | 5      | 1-PP-50W     | 0      | CVCS / WEST CENTRIFUGAL CHARGING PUMP   | 1-5129 1-5135A       | AUXILIARY | 587  | W CNTRIFUGAL CHRG PMP RM    | P         | RIP            | Seismic and Relay | R/NR         | R             | Y           | 1-12001 1-12060 1-98273         | 1-T11A8, MCAB-3                           |

DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID       | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.       | FIEL | Rm or Rm/CL                  | Flow Path | Function               | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. No. / Rev. | Dwg. No. | Required Supporting Systems or Components |
|----------|-------|--------|--------------|--------|--|----------------------|-------------|------|------------------------------|-----------|------------------------|-------------------|--------------|---------------|-------------|----------------------------|----------|---|
| 193      | 2     | 5      | 1-PP-82N     | 0      | CONTROL ROOM A/C CHILL WATER / CONTROL ROOM NORTH CHILL WATER CIRCULATION PUMP | 1-5149               | AUXILIARY   | 650  | CTRL RM AIR COND RM          | S         | HVAC                   | Seismic and Relay | R/R          | R             | Y           | 1-12030 1-98742            |          | BOP 1-AB-D-2D                             |
| 194      | 1     | 5      | 1-PP-82S     | 0      | CONTROL ROOM A/C CHILL WATER / CONTROL A/C SOUTH CHILL WATER CIRCULATION PUMP  | 1-5149               | AUXILIARY   | 650  | CTRL RM AIR COND RM          | S         | HVAC                   | Seismic and Relay | R/R          | R             | Y           | 1-12011 1-98742            |          | BOP 1-AM-A-5D                             |
| 195      | 1     | 5      | 1-QT-106-AB1 | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL TRANSFER PUMP #1                | 2-5151A              | AUXILIARY   | 587  | AB EMER DSL FUEL OIL XFR PMP | S         | EDG                    | Seismic and Relay | NR           | R             | Y           | 1-12010 1-98013            |          | 1-ABD-B-3D                                |
| 196      | 1     | 5      | 1-QT-106-AB2 | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL TRANSFER PUMP #2                | 2-5151A              | AUXILIARY   | 587  | AB EMER DSL FUEL OIL XFR PMP | S         | EDG                    | Seismic and Relay | NR           | R             | Y           | 1-12010 1-98013            |          | 1-ABD-A-2D                                |
| 197      | 2     | 5      | 1-QT-106-CD1 | 0      | DIESEL FUEL OIL / CD EMERG DIESEL FUEL OIL TRANSFER PUMP 1                     | 1-5151C              | AUXILIARY   | 587  | CD EMER DSL FUEL OIL XFR PMP | S         | EDG                    | Seismic and Relay | NR           | R             | Y           | 1-12030 1-98014            |          | 1-ABD-C-3D                                |
| 198      | 2     | 5      | 1-QT-106-CD2 | 0      | DIESEL FUEL OIL / CD EMERG DIESEL FUEL OIL TRANSFER PUMP 2                     | 1-5151C              | AUXILIARY   | 587  | CD EMER DSL FUEL OIL XFR PMP | S         | EDG                    | Seismic and Relay | NR           | R             | Y           | 1-12030 1-98014            |          | 1-ABD-D-2D                                |
| 199      | 1     | 5      | 1-QT-111-AB  | 0      | DIESEL LUBE OIL / AB EMERG DIESEL LUBE OIL BEFORE AND AFTER PUMP               | 1-5151A              | AUXILIARY   | 579  | AB EMER DSL LUBE OIL PIT     | S         | EDG                    | Seismic and Relay | R            | NR            | Y           | 1-12010 1-98013            |          | 1-ABD-B-3C                                |
| 200      | 2     | 5      | 1-QT-111-CD  | 0      | DIESEL LUBE OIL / CD EMERG DIESEL LUBE OIL BEFORE AND AFTER PUMP               | 1-5151C              | AUXILIARY   | 579  | CD EMER DSL LUBE OIL PIT     | S         | EDG                    | Seismic and Relay | R            | NR            | Y           | 1-12030 1-98014            |          | 1-ABD-C-3C                                |
| 201      | 1     | 5      | 1-QT-117-AB  | 0      | DIESEL LUBE OIL / AB EMERG DIESEL LUBE OIL HEATER QT-116-AB PUMP               | 1-5151A              | AUXILIARY   | 579  | AB EMER DSL LUBE OIL PIT     | S         | EDG                    | Seismic and Relay | NR           | R             | Y           | 1-12010 1-98013            |          | 1-ABD-B-3E                                |
| 202      | 2     | 5      | 1-QT-117-CD  | 0      | DIESEL LUBE OIL / CD EMERG DIESEL LUBE OIL HEATER QT-116-CD PUMP               | 1-5151C              | AUXILIARY   | 579  | CD EMER DSL LUBE OIL PIT     | S         | EDG                    | Seismic and Relay | NR           | R             | Y           | 1-12030                    |          | 1-ABD-C-3E                                |
| 203      | 1     | 5      | 1-QT-119-AB  | 0      | DIESEL LUBE OIL / AB EMERG DIESEL LUBE OIL FILTER (QT-118-AB) PUMP             | 1-5151A              | AUXILIARY   | 579  | AB EMER DSL LUBE OIL PIT     | S         | EDG                    | Seismic and Relay | NR           | R             | Y           | 1-12010 1-98013            |          | 1-ABD-A-2A                                |
| 204      | 2     | 5      | 1-QT-119-CD  | 0      | DIESEL LUBE OIL / CD EMERG DIESEL BYPASS LUBE OIL FILTER (QT-118-CD) PUMP      | 1-5151C              | AUXILIARY   | 579  | CD EMER DSL LUBE OIL PIT     | S         | EDG                    | Seismic and Relay | NR           | R             | Y           | 1-12030 1-98014            |          | 1-ABD-D-2A                                |
| 205      | 1     | 5      | 1-QT-130-AB1 | 0      | DIESEL JACKET WATER / AB EMERG DIESEL JACKET WATER PUMP 1                      | 1-5151B              | AUXILIARY   | 587  | AB EMER DSL GEN RM           | S         | EDG                    | Seismic and Relay | R/R          | R             | Y           | 1-12010 1-98013            |          | 1-ABD-A-2C                                |
| 206      | 1     | 5      | 1-QT-130-AB2 | 0      | DIESEL JACKET WATER / AB EMERG DIESEL JACKET WATER PUMP 2                      | 1-5151B              | AUXILIARY   | 587  | AB EMER DSL GEN RM           | S         | EDG                    | Seismic and Relay | R/R          | R             | Y           | 1-12010 1-98013            |          | 1-ABD-B-2C                                |
| 207      | 2     | 5      | 1-QT-130-CD1 | 0      | DIESEL JACKET WATER / CD EMERG DIESEL JACKET WATER PUMP 1                      | 1-5151D              | AUXILIARY   | 587  | CD EMER DSL GEN RM           | S         | EDG                    | Seismic and Relay | R/R          | R             | Y           | 1-12030 1-98014            |          | 1-ABD-D-2C                                |
| 208      | 2     | 5      | 1-QT-130-CD2 | 0      | DIESEL JACKET WATER / CD EMERG DIESEL JACKET WATER PUMP 2                      | 1-5151D              | AUXILIARY   | 587  | CD EMER DSL GEN RM           | S         | EDG                    | Seismic and Relay | R/R          | R             | Y           | 1-12030 1-98014            |          | 1-ABD-C-2C                                |
| 209      | 1     | 5      | 1-QT-135-AB  | 0      | DIESEL JACKET WATER / AB EMERG DIESEL AUX JACKET WATER PUMP                    | 1-5151B              | AUXILIARY   | 587  | AB EMER DSL GEN RM           | S         | EDG                    | Seismic and Relay | NR           | R             | Y           | 1-12010 1-98013            |          | 1-ABD-B-1B                                |
| 210      | 2     | 5      | 1-QT-135-CD  | 0      | DIESEL JACKET WATER / CD EMERG DIESEL AUX JACKET WATER PUMP                    | 1-5151D              | AUXILIARY   | 587  | CD EMER DSL GEN RM           | S         | EDG                    | Seismic and Relay | NR           | R             | Y           | 1-12030 1-98014            |          | 1-ABD-C-1B                                |
| 211      | 12    | 5      | 12-PP-10     | 0      | CCW / SPARE CCW PUMP   | 1-5135A              | AUXILIARY   | 609  | 609 HALLWAY                  | S         | CCW                    | Seismic and Relay | NR           | R             | Y           |                            |          |   |
| 212      | 12    | 5      | 12-PP-31N    | 0      | SPENT FUEL PIT COOLING/CLEANUP / NORTH SPENT FUEL PIT PUMP                     | 12-5138              | UNIT #1 AUX | 609  | SPENT FUEL PIT HEAT XCHGR RM | S         | SPENT FUEL PIT COOLING | Seismic and Relay |              |               | Y           |                            |          |   |
| 213      | 2     | 6      | 1-PP-35E     | 0      | RHR / EAST RHR PUMP  | 1-5143               | AUXILIARY   | 573  | EAST RHR PUMP RM             | P         | DRIP                   | Seismic and Relay | R/R          | R             | Y           | 1-12002 1-12070 1-98284    |          | 1-T11D6 1-MCCD-4                          |
| 214      | 1     | 6      | 1-PP-35W     | 0      | RHR / WEST RHR PUMP  | 1-5143               | AUXILIARY   | 573  | W RHR PUMP RM                | P         | DRIP                   | Seismic and Relay | R/R          | R             | Y           | 1-12001 1-12060 1-98284    |          | 1-T11A4 MCAB-3                            |

**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**

| Line No. | Train | Eq. CL | Eq. ID    | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.        | FIEL | Rm or RwrCl                   | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|-----------|--------|--|----------------------|--------------|------|-------------------------------|-----------|----------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 215      | 2     | 6      | 1-PP-7E   | 0      | ESW / EAST ESW PUMP  | 1-5113               | SCREENHOU SE | 591  | E ESSNTL SERV WTR PMP RM      | S         | ESW      | Seismic and Relay | N/R          | R             | Y           | 1-12002, 1-12070, 1-98415       | 1-T11D10 1-MCCD-4                         |
| 216      | 1     | 6      | 1-PP-7W   | 0      | ESW / WEST ESW PUMP  | 1-5113 12-5118A      | SCREENHOU SE | 591  | W ESSNTL SERV WTR PMP RM      | S         | ESW      | Seismic and Relay | R/NR         | R             | Y           | 1-12001 1-12060 1-98415         | 1-11TA5 1-MCAB-3                          |
| 217      | 2     | 6      | 1-PP-9E   | 0      | CONTAINMENT SPRAY / EAST CONTAINMENT SPRAY PUMP  | 1-5144               | AUXILIARY    | 573  | E CONT SPRAY PMP RM           | P         | DRI      | Seismic and Relay | NR           | NR            | N           | 1-12002 1-12070 1-98285         | 1-T11D4 1-MCCD-4                          |
| 218      | 1     | 6      | 1-PP-9W   | 0      | CONTAINMENT SPRAY / WEST CONTAINMENT SPRAY PUMP  | 1-5144               | AUXILIARY    | 573  | W CONT SPRAY PMP RM           | P         | DRI      | Seismic and Relay | NR           | NR            | N           | 1-12001 1-12060 1-98285         | 1-T11A3 MCAB-3                            |
| 219      | 2     | 7      | 1-CRV-410 | 0      | CCW / DEMINERALIZED MAKEUP WATER TO CCW SURGE TANK 'A' 1.5 in AIR OPERATED SHUTOFF VALVE             | 1-5135A              | AUXILIARY    | 650  | 650 HALLWAY                   | S         | CCW      | Seismic and Relay | CL           | CL            | N           | 1-12071, 1-98405                | 1-CCV-CD-49                               |
| 220      | 1     | 7      | 1-CRV-411 | 0      | CCW / DEMINERALIZED MAKEUP WATER TO CCW SURGE TANK 'B' 1.5 in AIR OPERATED SHUTOFF VALVE             | 1-5135A              | AUXILIARY    | 650  | 650 HALLWAY                   | S         | CCW      | Seismic and Relay | CL           | CL            | N           | 1-12061, 1-98405                | 1-CCV-AB-49                               |
| 221      | 2     | 7      | 1-DCR-301 | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 1 BLOWDOWN SAMPLE DSR-301 CONTAINMENT ISOLATION VALVE             | 1-5141A              | AUXILIARY    | 591  | VESTIBULE                     | P         | D        | Seismic and Relay | OP           | CL            | A           | 1-98464 1-12071                 | 1-SSV-A1-14                               |
| 222      | 1     | 7      | 1-DCR-302 | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 2 BLOWDOWN SAMPLE DSR-302 CONTAINMENT ISOLATION VALVE             | 1-5141A              | AUXILIARY    | 591  | VESTIBULE                     | P         | D        | Seismic and Relay | OP           | CL            | A           | 1-98464 1-12071                 | 1-SSV-A1-20                               |
| 223      | 1     | 7      | 1-DCR-303 | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 3 BLOWDOWN SAMPLE DSR-303 CONTAINMENT ISOLATION VALVE             | 1-5141A              | AUXILIARY    | 591  | VESTIBULE                     | P         | D        | Seismic and Relay | OP           | CL            | A           | 1-12071 1-98464                 | 1-SSV-A1-13                               |
| 224      | 2     | 7      | 1-DCR-304 | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 4 BLOWDOWN SAMPLE DSR-304 CONTAINMENT ISOLATION VALVE             | 1-5141A              | AUXILIARY    | 591  | VESTIBULE                     | P         | D        | Seismic and Relay | OP           | CL            | A           | 1-12071 1-98464                 | 1-SSV-A1-15                               |
| 225      | 2     | 7      | 1-DCR-310 | 0      | BLOWDOWN / STEAM GENERATOR OME-3-1 BLOWDOWN CONTAINMENT ISOLATION VALVE                              | 1-5105               | AUXILIARY    | 591  | STARTUP BLOWDOWN FLASHTANK RM | P         | D        | Seismic and Relay | OP           | CL            | A           | 1-12071 1-98208                 | 1-CCV-CD-42                               |
| 226      | 1     | 7      | 1-DCR-320 | 0      | BLOWDOWN / STEAM GENERATOR OME-3-2 BLOWDOWN CONTAINMENT ISOLATION VALVE                              | 1-5105               | AUXILIARY    | 591  | STARTUP BLOWDOWN FLASHTANK RM | P         | D        | Seismic and Relay | OP           | CL            | A           | 1-12061 1-98208                 | 1-CCV-AB-42                               |
| 227      | 1     | 7      | 1-DCR-330 | 0      | BLOWDOWN / STEAM GENERATOR OME-3-3 BLOWDOWN CONTAINMENT ISOLATION VALVE                              | 1-5105               | AUXILIARY    | 591  | STARTUP BLOWDOWN FLASHTANK RM | P         | D        | Seismic and Relay | OP           | CL            | A           | 1-12061 1-98208                 | 1-CCV-AB-44                               |
| 228      | 2     | 7      | 1-DCR-340 | 0      | BLOWDOWN / STEAM GENERATOR OME-3-4 BLOWDOWN CONTAINMENT ISOLATION VALVE                              | 1-5105               | AUXILIARY    | 591  | STARTUP BLOWDOWN FLASHTANK RM | P         | D        | Seismic and Relay | OP           | CL            | A           | 1-12071 1-98208                 | 1-CCV-CD-44                               |
| 229      | 12    | 7      | 1-DRV-407 | 0      | STEAM LINE DRAINS / MAIN STEAM LEADS CONDENSATION DRAIN TANK TK-200, OUTLET SHUTOFF VALVE            | 1-5110B              | AUXILIARY    | 621  | W MAIN STM STOP ENCL          | P         | D        | Seismic and Relay | OP           | CL            | A           | 1-12073 1-98538                 | 1-VDCD-1-14                               |
| 230      | 1     | 7      | 1-FRV-245 | 0      | AUX FEEDWATER / WEST MOTOR DRIV AUX FEEDWATER PUMP PP-3W 2 in AIR OPERATED TEST VALVE                | 1-5106A              | TURBINE      | 591  | W MOTOR DRIVEN AUX FDWTR PU   | P         | D        | Seismic Only      | CL           | CL            | N           | 1-12061 1-98218                 | CCV-AB-40 CCV-AB-83                       |
| 231      | 1     | 7      | 1-FRV-247 | 0      | AUX FEEDWATER / WEST MOTOR DRIV AUX FEEDWATER PUMP PP-3W EMERG 1 in AIR OPERATED LEAKOFF GLOBE VALVE | 1-5106A              | TURBINE      | 591  | W MOTOR DRIVEN AUX FDWTR PU   | P         | D        | Seismic and Relay | OP           | OP            | N           | 1-12015 1-98218                 | 1-ELSC-4                                  |
| 232      | 2     | 7      | 1-FRV-255 | 0      | AUX FEEDWATER / EAST MOTOR DRIV AUX FEEDWATER PUMP PP-3E 2 in AIR OPERATED TEST VALVE                | 1-5106A              | TURBINE      | 591  | E MOTOR DRIVEN AUX FDWTR PU   | P         | D        | Seismic Only      | CL           | CL            | N           | 1-12071 1-98214                 | 1-CCV-CD-6 1-SSV-A1-23                    |
| 233      | 12    | 7      | 1-FRV-256 | 0      | AUX FEEDWATER / TURBINE DRIV AUX FEED PUMP PP-4 2 in AIR OPERATED TEST VALVE                         | 1-5106A              | TURBINE      | 591  | TB DRIVEN AUX FDWTR PMP       | P         | D        | Seismic Only      | CL           | CL            | N           | 1-12065 1-98215                 | 1-DCN-8                                   |
| 234      | 2     | 7      | 1-FRV-257 | 0      | AUX FEEDWATER / EAST MOTOR DRIV AUX FEEDWATER PUMP PP-3E EMERG 1 in AIR OPERATED LEAKOFF VALVE       | 1-5106A              | TURBINE      | 591  | E MOTOR DRIVEN AUX FDWTR PU   | P         | D        | Seismic and Relay | OP           | OP            | N           | 1-12035 1-98214                 | 1-AFW-1                                   |

**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**

| Line No. | Train | Eq. CL | Eq. ID        | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.        | FIEL | Rm or Rm/CL                   | Flow Path | Function   | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|---------------|--------|---|----------------------|--------------|------|-------------------------------|-----------|------------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 235      | 12    | 7      | 1-FRV-258     | 0      | AUX FEEDWATER / TURBINE DRIV AUX FEED PUMP EMERG 1 in AIR OPERATED LEAKOFF GLOBE VALVE  | 1-5106A              | TURBINE      | 591  | TB DRIVEN AUX FDWTR PMP       | P         | D          | Seismic and Relay | OP           | OP            | N           | 1-12065 1-98215                 | 1-DCN-6                                   |
| 236      | 12    | 7      | 1-GCR-314     | 0      | NITROGEN (REACTOR PLANT SERVICE) / NITROGEN SUPPLY TO ACCUMULATOR TANKS CONTAINMENT ISOLATION VALVE                           | 1-5143               | AUXILIARY    | 591  | STARTUP BLOWDOWN FLASHTANK RM | S         | SUPPORT N2 | Seismic and Relay | CL           | CL            | N           | 1-98283                         | 2-CCV-CD-14                               |
| 237      | 12    | 7      | 1-GRV-341     | 0      | NITROGEN (REACTOR PLANT SERVICE) / NITROGEN SUPPLY TO ACCUMULATOR TANKS VENT TO ATMOS. VALVE                                  | 1-5143, 1-5120D      | CONTAINME NT | 598  | ANNULUS, QUAD2                | S         | SUPPORT N2 | Seismic and Relay | CL           | CL            |             |                                 |   |
| 238      | 12    | 7      | 1-HV-SGR-MD-1 | 0      | AUX BUILDING VENTILATION / CONTROL ROD DRIVE EQUIP ROOM AND INVERTER AREA VENTILATION RECIRCULATING AIR INLET DAMPER          | 1-5148C              | AUXILIARY    | 609  | 4KV RM - 600V SWGR            | S         | HVAC       | Seismic and Relay | CL           | NA            | N           |                                 |   |
| 239      | 12    | 7      | 1-HV-SGR-MD-2 | 0      | AUX BUILDING VENTILATION / CONTROL ROD DRIVE EQUIP ROOM AND INVERTER AREA VENTILATION RECIRCULATING AIR INLET DAMPER          | 1-5148C              | AUXILIARY    | 609  | 4KV RM - 600V SWGR            | S         | HVAC       | Seismic and Relay | OP           | NA            | N           |                                 | 1-XSO-390, 1-XSO-391                      |
| 240      | 2     | 7      | 1-IRV-112     | 0      | NITROGEN (REACTOR PLANT SERVICES) / ACCUMULATOR TANK OME-6-1 NITROGEN SUPPLY VENT VALVE                                       | 1-5143, 1-5120D      | CONTAINME NT | 612  | ACCUM TANK1 AREA              | S         | SUPPORT N2 | Seismic and Relay | CL           | CL            |             |                                 |   |
| 241      | 2     | 7      | 1-IRV-116     | 0      | RHR / ACCUMULATOR TANK OME-6-1 0.75 in AIR OPERATED OUTLET TO REACTOR COOLANT LOOP #1 COLD LEG TEST VALVE                     | 1-5143               | CONTAINME NT | 598  | ANNULUS, QUAD1                | P         | DRIP       | Seismic and Relay | CL           | CL            | N           | 1-12073 1-98283                 | BOP 1-VDCCD-1-17                          |
| 242      | 1     | 7      | 1-IRV-122     | 0      | NITROGEN (REACTOR PLANT SERVICES) / ACCUMULATOR TANK OME-6-2 NITROGEN SUPPLY VENT VALVE                                       | 1-5143, 1-5120D      | CONTAINME NT | 612  | ACCUM TANK2 AREA              | S         | SUPPORT N2 | Seismic and Relay | CL           | CL            |             |                                 |   |
| 243      | 1     | 7      | 1-IRV-126     | 0      | RHR / ACCUMULATOR TANK OME-6-2 0.75 in AIR OPERATED OUTLET AND SAFETY INJECTION TO REACTOR COOLANT LOOP 2 COLD LEG TEST VALVE | 1-5143               | CONTAINME NT | 598  | ANNULUS, QUAD2                | P         | DRIP       | Seismic and Relay | CL           | CL            | N           | 1-12062 1-98283                 | BOP 1-VDAB-1-18                           |
| 244      | 2     | 7      | 1-IRV-132     | 0      | NITROGEN (REACTOR PLANT SERVICES) / ACCUMULATOR TANK OME-6-3 NITROGEN SUPPLY VENT VALVE                                       | 1-5143, 1-5120D      | CONTAINME NT | 612  | ACCUM TANK3 AREA              | S         | SUPPORT N2 | Seismic and Relay | CL           | CL            |             |                                 |   |
| 245      | 2     | 7      | 1-IRV-136     | 0      | RHR / ACCUMULATOR TANK OME-6-3 OUTLET AND SAFETY INJECTION TO REACTOR COOLANT LOOP 3 COLD LEG 0.75 in AIR OPERATED TEST VALVE | 1-5143               | CONTAINME NT | 598  | ANNULUS, QUAD3                | P         | DRIP       | Seismic and Relay | CL           | CL            | N           | 1-12073 1-98283                 | BOP 1-VDCCD-1-21                          |
| 246      | 1     | 7      | 1-IRV-142     | 0      | NITROGEN (REACTOR PLANT SERVICES) / ACCUMULATOR TANK OME-6-4 NITROGEN SUPPLY VENT VALVE                                       | 1-5143, 1-5120D      | CONTAINME NT | 612  | ACCUM TANK4 AREA              | S         | SUPPORT N2 | Seismic and Relay | CL           | CL            |             |                                 |   |
| 247      | 1     | 7      | 1-IRV-146     | 0      | RHR / ACCUMULATOR TANK OME-6-4 1 in AIR OPERATED OUTLET AND SAFETY INJECTION TO REACTOR COOLANT LOOP 4 COLD LEG TEST VALVE    | 1-5143               | CONTAINME NT | 598  | ANNULUS, QUAD4                | P         | DRIP       | Seismic and Relay | CL           | CL            | N           | 1-12062 1-98283                 | BOP 1-VDAB-1-22                           |
| 248      | 1     | 7      | 1-IRV-147     | 0      | RHR / WEST RHR AND SOUTH SAFETY INJECTION TO REACTOR COOLANT LOOPS 2 AND 3 0.75 in AIR OPERATED TEST VALVE                    | 1-5143               | CONTAINME NT | 612  | HV-CEQ-1 FAN RM               | P         | DRIP       | Seismic and Relay | CL           | CL            | N           | 1-12062 1-98281                 | BOP 1-VDAB-2-1                            |
| 249      | 2     | 7      | 1-IRV-148     | 0      | RHR / EAST RHR AND NORTH SAFETY INJECTION TO REACTOR COOLANT LOOPS 1 AND 4 0.75 in AIR OPERATED TEST VALVE                    | 1-5143               | CONTAINME NT | 612  | HV-CEQ-1 FAN RM               | P         | DRIP       | Seismic and Relay | CL           | CL            | N           | 1-12073 1-98281                 | BOP 1-VDCCD-1-23                          |
| 250      | 1     | 7      | 1-IRV-149     | 0      | RHR / WEST RHR TO REACTOR COOLANT LOOPS 2 AND 3 0.75 in AIR OPERATED TEST VALVE   | 1-5143               | CONTAINME NT | 612  | HV-CEQ-1 FAN RM               | P         | DRIP       | Seismic and Relay | CL           | CL            | N           | 1-12062 1-98281                 | 1-VDAB-2-3                                |
| 251      | 2     | 7      | 1-IRV-150     | 0      | RHR / EAST RHR TO REACTOR COOLANT LOOPS 1 AND 4 0.75 in AIR OPERATED TEST VALVE   | 1-5143               | CONTAINME NT | 612  | HV-CEQ-1 FAN RM               | P         | DRIP       | Seismic and Relay | CL           | CL            | N           | 1-12073 1-98281                 | 1-VDCCD-2-1                               |
| 252      | 12    | 7      | 1-IRV-260     | 0      | SAFETY INJECTION / SAFETY INJECTION TEST LINE SHUTOFF 0.75 in AIR OPERATED VALVE  | 1-5142               | AUXILIARY    | 587  | N SAFETY INJ PMP RM           | P         | RI         | Seismic and Relay | CL           | CL            | N           | 1-12061, 1-98281                | 1-VDAB-1-24                               |

DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. Cl. | Eq. ID    | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.       | F I EL | Rm or RwfCl             | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|---------|-----------|--------|---|----------------------|-------------|--------|-------------------------|-----------|----------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 253      | 2     | 7       | 1-RV-310  | 0      | RHR / EAST RHR HEAT EXCHANGER HE-17E 8 In AIR OPERATED OUTLET FLOW CONTROL VALVE                          | 1-5143               | AUXILIARY   | 609    | EAST RHR HEAT EXCHGR RM | P         | DRIP     | Seismic and Relay | OP           | OP            | N           | 1-12050 1-98566                 | 1-CRID-II-12                              |
| 254      | 12    | 7       | 1-RV-311  | 0      | RHR / RHR HEAT EXCHANGERS BYPASS FLOW 8 In AIR OPERATED CONTROL VALVE                                     | 1-5143               | AUXILIARY   | 609    | EAST RHR HEAT EXCHGR RM | P         | DRIP     | Seismic and Relay | OP           | OP            | N           | 1-12050 1-98566                 | 1-CRID-II-12                              |
| 255      | 1     | 7       | 1-RV-320  | 0      | RHR / WEST RHR HEAT EXCHANGER HE-17W 8 In AIR OPERATED OUTLET FLOW CONTROL VALVE                          | 1-5143               | AUXILIARY   | 609    | W RHR HEAT EXCHGR RM    | P         | DRIP     | Seismic and Relay | OP           | OP            | N           | 1-12050 1-98566                 | 1-CRID-III-12                             |
| 256      | 12    | 7       | 1-RV-50   | 0      | BORON INJECTION / BORON INJECTION TO ACCUMULATOR FILL LINE 1 In AIR OPERATED CONTROL VALVE                | 1-5142               | CONTAINMENT | 598    | ANNULUS, QUAD2          | P         | RI       | Seismic and Relay | CL           | CL            | N           | 1-12062 1-98281                 | BOP 1-VDAB-2-2                            |
| 257      | 12    | 7       | 1-RV-60   | 0      | SAFETY INJECTION / SAFETY INJECTION TO ACCUMULATOR FILL LINE 1 In AIR OPERATED CONTROL VALVE              | 1-5142               | CONTAINMENT | 598    | ANNULUS, QUAD2          | P         | RI       | Seismic and Relay | CL           | CL            | N           | 1-12061, 1-98281                | 1-VDAB-2-4                                |
| 258      | 2     | 7       | 1-MCR-251 | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 1 STEAM SAMPLE MSX-101 0.5 In AIR OPERATED CONTAINMENT ISOLATION VALVE | 1-5141A              | AUXILIARY   | 591    | VESTIBULE               | P         | D        | Seismic and Relay | CL           | CL            | A           | 1-12071 1-98464                 | 1-SSV-A1-10                               |
| 259      | 1     | 7       | 1-MCR-252 | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 2 STEAM SAMPLE MSX-102 0.5 In AIR OPERATED CONTAINMENT ISOLATION VALVE | 1-5141A              | AUXILIARY   | 591    | VESTIBULE               | P         | D        | Seismic and Relay | CL           | CL            | N           | 1-12071 1-98464                 | 1-SSV-A1-7                                |
| 260      | 1     | 7       | 1-MCR-253 | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 3 STEAM SAMPLE MSX-103 0.5 In AIR OPERATED CONTAINMENT ISOLATION VALVE | 1-5141A              | AUXILIARY   | 591    | VESTIBULE               | P         | D        | Seismic and Relay | CL           | CL            | N           | 1-12071 1-98464                 | 1-SSV-A1-9                                |
| 261      | 2     | 7       | 1-MCR-254 | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 4 STEAM SAMPLE MSX-104 0.5 In AIR OPERATED CONTAINMENT ISOLATION VALVE | 1-5141A              | AUXILIARY   | 591    | VESTIBULE               | P         | D        | Seismic and Relay | CL           | CL            | N           | 1-12071 1-98464                 | 1-SSV-A1-11                               |
| 262      | 2     | 7       | 1-MRV-151 | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 1 STEAM SAMPLE MSX-101 0.5 In AIR OPERATED CONTAINMENT ISOLATION VALVE | 1-5141A              | CONTAINMENT | 612    | E CONT LWR VENT RM      | P         | D        | Seismic and Relay | CL           | CL            | N           | 1-12071 1-98464                 | 1-SSV-A2-6                                |
| 263      | 1     | 7       | 1-MRV-152 | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 2 STEAM SAMPLE MSX-102 0.5 In AIR OPERATED CONTAINMENT ISOLATION VALVE | 1-5141A              | CONTAINMENT | 612    | W CONT LOWER VENT RM    | P         | D        | Seismic and Relay | CL           | CL            | N           | 1-12071 1-98464                 | 1-SSV-A2-7                                |
| 264      | 1     | 7       | 1-MRV-153 | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 3 STEAM SAMPLE MSX-103 0.5 In AIR OPERATED CONTAINMENT ISOLATION VALVE | 1-5141A              | CONTAINMENT | 612    | W CONT LOWER VENT RM    | P         | D        | Seismic and Relay | CL           | CL            | N           | 1-12071 1-98464                 | 1-SSV-A1-6                                |
| 265      | 2     | 7       | 1-MRV-154 | 0      | NUCLEAR SAMPLING / STEAM GENERATOR 4 STEAM SAMPLE MSX-104 0.5 In AIR OPERATED CONTAINMENT ISOLATION VALVE | 1-5141A              | CONTAINMENT | 591    | E CONT LWR VENT RM      | P         | D        | Seismic and Relay | CL           | CL            | N           | 1-12071 1-98464                 | 1-SSV-A2-5                                |
| 266      | 2     | 7       | 1-MRV-211 | 0      | MAIN STEAM / STEAM GENERATOR 1 STOP VALVE MRV-210 STEAM CYLINDER 'A' DUMP VALVE                           | 1-5105D              | AUXILIARY   | 633    | E MAIN STM STOP ENCL    | P         | D        | Seismic and Relay | CL           | CL            | Y           | 1-12071 1-98393 1-98538         | 1-CCV-CD-1                                |
| 267      | 2     | 7       | 1-MRV-212 | 0      | MAIN STEAM / STEAM GENERATOR 1 STOP VALVE MRV-210 STEAM CYLINDER 'B' DUMP VALVE                           | 1-5105D              | AUXILIARY   | 633    | E MAIN STM STOP ENCL    | P         | D        | Seismic and Relay | CL           | CL            | Y           | 1-12061 1-98393 1-98538         | 1-CCV-AB-1                                |
| 268      | 2     | 7       | 1-MRV-213 | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 PORV   | 1-5105D              | AUXILIARY   | 633    | E MAIN STM STOP ENCL    | P         | D        | Seismic Only      | CL           | MAN C         | N           | 1-98584                         |   |
| 269      | 1     | 7       | 1-MRV-221 | 0      | MAIN STEAM / STEAM GENERATOR 2 STOP VALVE MRV-220 STEAM CYLINDER 'A' DUMP VALVE                           | 1-5105D              | AUXILIARY   | 633    | W MAIN STM STOP ENCL    | P         | D        | Seismic and Relay | CL           | CL            | Y           | 1-12071 1-98393                 | 1-CCV-CD-3                                |
| 270      | 1     | 7       | 1-MRV-222 | 0      | MAIN STEAM / STEAM GENERATOR 2 STOP VALVE MRV-220 STEAM CYLINDER 'B' DUMP VALVE                           | 1-5105D              | AUXILIARY   | 633    | W MAIN STM STOP ENCL    | P         | D        | Seismic and Relay | CL           | CL            | Y           | 1-12061 1-98393 1-98538         | 1-CCV-AB-3                                |
| 271      | 1     | 7       | 1-MRV-223 | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2 PORV   | 1-5105D              | AUXILIARY   | 633    | W MAIN STM STOP ENCL    | P         | D        | Seismic Only      | CL           | MAN C         | N           | 1-98584                         |   |
| 272      | 1     | 7       | 1-MRV-231 | 0      | MAIN STEAM / STEAM GENERATOR 3 STOP VALVE MRV-230 STEAM CYLINDER 'A' DUMP VALVE                           | 1-5105D              | AUXILIARY   | 633    | W MAIN STM STOP ENCL    | P         | D        | Seismic and Relay | CL           | CL            | Y           | 1-12071 1-98538 1-98393         | 1-CCV-CD-5                                |



DONALD C. COOK NUCLEAR PLANT UNIT #1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID    | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.       | FIEL | Rm or Rwl                  | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|-----------|--------|--|----------------------|-------------|------|----------------------------|-----------|----------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 273      | 1     | 7      | 1-MRV-232 | 0      | MAIN STEAM / STEAM GENERATOR 3 STOP VALVE MRV-230 STEAM CYLINDER 'B' DUMP VALVE  | 1-5105D              | AUXILIARY   | 633  | W MAIN STM                 | P         | D        | Seismic and Relay | CL           | CL            | Y           | 1-12061 1-98538 1-98595         | 1-CCV-AB-5                                |
| 274      | 1     | 7      | 1-MRV-233 | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3 PORV  | 1-5105D              | AUXILIARY   | 633  | W MAIN STM                 | P         | D        | Seismic Only      | CL           | MAN C         | N           | 1-98584                         |   |
| 275      | 2     | 7      | 1-MRV-241 | 0      | MAIN STEAM / STEAM GENERATOR 4 STOP VALVE MRV-240 STEAM CYLINDER 'A' DUMP VALVE  | 1-5105D              | AUXILIARY   | 633  | E MAIN STM                 | P         | D        | Seismic and Relay | CL           | CL            | Y           | 1-12071 1-98393 1-98538         | 1-CCV-CD-7                                |
| 276      | 2     | 7      | 1-MRV-242 | 0      | MAIN STEAM / STEAM GENERATOR 4 STOP VALVE MRV-240 STEAM CYLINDER 'B' DUMP VALVE  | 1-5105D              | AUXILIARY   | 633  | E MAIN STM                 | P         | D        | Seismic and Relay | CL           | CL            | Y           | 1-12061 1-98393 1-98538         | 1-CCV-AB-7                                |
| 277      | 2     | 7      | 1-MRV-243 | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 PORV  | 1-5105D              | AUXILIARY   | 633  | E MAIN STM                 | P         | D        | Seismic Only      | CL           | MAN C         | N           | 1-98584                         |   |
| 278      | 2     | 7      | 1-NRV-101 | 0      | NUCLEAR SAMPLING / REACTOR COOLANT LOOP 1 HOT LEG SAMPLE NSX-101 SHUTOFF VALVE   | 1-5141               | CONTAINMENT | 598  | ANNULUS, QUAD1             | P         | I        | Seismic and Relay | CL           | CL            | A           | 1-12071 1-98463                 | BOP 1-SSV-A1-4                            |
| 279      | 12    | 7      | 1-NRV-102 | 0      | NUCLEAR SAMPLING / PRESSURIZER LIQUID SPACE SAMPLE NSX-102 0.5 in AIR OPERATED SHUTOFF VALVE   | 1-5141               | CONTAINMENT | 612  | INSTRUMENTATION RM         | P         | I        | Seismic and Relay | CL           | CL            | A           | 1-12071 1-98463                 | 1-SSV-A2-1                                |
| 280      | 1     | 7      | 1-NRV-103 | 0      | NUCLEAR SAMPLING / REACTOR COOLANT LOOP 3 HOT LEG SAMPLE NSV-103 SHUTOFF VALVE   | 1-5141               | CONTAINMENT | 598  | ANNULUS, QUAD3             | P         | I        | Seismic and Relay | CL           | CL            | A           | 1-12061 1-98463                 | 1-SSV-B-17                                |
| 281      | 12    | 7      | 1-NRV-104 | 0      | NUCLEAR SAMPLING / PRESSURIZER STEAM SPACE SAMPLE NSX-104 0.5 in AIR OPERATED SHUTOFF VALVE  | 1-5141               | CONTAINMENT | 612  | INSTRUMENTATION RM         | P         | I        | Seismic and Relay | CL           | CL            | N           | 1-12071 1-98463                 | 1-SSV-A2-3                                |
| 282      | 1     | 7      | 1-NRV-151 | 0      | PRESSURIZER / PRESSURIZER 'B' PRESSURE RELIEF VALVE  | 1-5128A              | CONTAINMENT | 650  | PRESSURIZER ENCL, INTERIOR | P         | RIP      | Seismic and Relay | CL           | MAN C         | A           | 1-12061 1-98204                 | 1-CCV-AB-79                               |
| 283      | 1     | 7      | 1-NRV-152 | 0      | PRESSURIZER / PRESSURIZER 'B' PRESSURE RELIEF VALVE  | 1-5128A              | CONTAINMENT | 650  | PRESSURIZER ENCL, INTERIOR | P         | RIP      | Seismic and Relay | CL           | MAN C         | A           | 1-12061 1-98204                 | 1-CCV-AB-80                               |
| 284      | 2     | 7      | 1-NRV-153 | 0      | PRESSURIZER / PRESSURIZER 'A' PRESSURE RELIEF VALVE  | 1-5128A              | CONTAINMENT | 650  | PRESSURIZER ENCL, INTERIOR | P         | RIP      | Seismic and Relay | CL           | MAN C         | A           | 1-12071 1-98204                 | 1-CCV-CD-79                               |
| 285      | 1     | 7      | 1-NRV-163 | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP 3 TO PRESSURIZER 4 in AIR OPERATED VALVE  | 1-5128A              | CONTAINMENT | 612  | LOWER CONT, QUAD3          | P         | RIP      | Seismic Only      | OP/CL        | CL            | N           | 1-12062 1-98553                 | BOP 1-VDAB-2-23                           |
| 286      | 2     | 7      | 1-NRV-164 | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP 4 TO PRESSURIZER SPRAY 4 in AIR OPERATED CONTROL VALVE  | 1-5128A              | CONTAINMENT | 612  | LOWER CONT, QUAD3          | P         | RIP      | Seismic Only      | OP/CL        | CL            | N           | 1-12073 1-98553                 | BOP 1-VDAB-2-2                            |
| 287      | 12    | 7      | 1-QRV-10  | 0      | RCTR COOLANT PMP SEAL WTR INJ LEAKOFF / RCP 1 SEAL 1 LEAKOFF TO RCP SEAL WATER RETURN FILTER QC-109 2 in AIR OPERATED SHUTOFF VALVE                            | 1-5128A              | CONTAINMENT | 617  | LOWER CONT, QUAD1          | P         | RIP      | Seismic and Relay | OP           | OP            | N           | 1-98201 1-12073                 | BOP 1-VDAB-1-4                            |
| 288      | 2     | 7      | 1-QRV-111 | 0      | CVCS / REACTOR COOLANT NORMAL LETDOWN TRAIN 'A' SHUTOFF VALVE  | 1-5129               | CONTAINMENT | 612  | LOWER CONT, QUAD4          | P         | RIP      | Seismic and Relay | OP           | CL            | A           | 1-12071 1-98274                 | 1-CCV-CD-74                               |
| 289      | 1     | 7      | 1-QRV-112 | 0      | CVCS / REACTOR COOLANT NORMAL LETDOWN TRAIN 'B' SHUTOFF VALVE  | 1-5129               | CONTAINMENT | 612  | LOWER CONT, QUAD4          | P         | RIP      | Seismic and Relay | OP           | CL            | A           | 1-12061 1-98274                 | 1-CCV-AB-75                               |
| 290      | 1     | 7      | 1-QRV-113 | 0      | CVCS / REACTOR COOLANT EXCESS LETDOWN TO EXCESS LETDOWN HEAT EXCHANGER HE-13 1 in AIR OPERATED 'B' SHUTOFF VALVE   | 1-5129A              | CONTAINMENT | 612  | LOWER CONT, QUAD4          | P         | RI       | Seismic and Relay | CL           | CL            | N           | 1-12062 1-98274                 | BOP 1-VDAB-2-16                           |
| 291      | 2     | 7      | 1-QRV-114 | 0      | CVCS / REACTOR COOLANT EXCESS LETDOWN TO EXCESS LETDOWN HEAT EXCHANGER HE-13 1 in AIR OPERATED 'A' SHUTOFF VALVE   | 1-5129A              | CONTAINMENT | 612  | LOWER CONT, QUAD4          | P         | RI       | Seismic and Relay | CL           | CL            | N           | 1-12073 1-98274                 | BOP 1-VDAB-2-18                           |
| 292      | 12    | 7      | 1-QRV-150 | 0      | RCTR COOLANT PMP SEAL WTR INJ LEAKOFF / REACTOR COOLANT PUMPS STARTUP SEAL SYSTEM BYPASS TO SEAL WATER RETURN FILTER QC-109 0.75 in AIR OPERATED SHUTOFF VALVE | 1-5128A              | CONTAINMENT | 598  | ANNULUS, QUAD2             | P         | RIP      | Seismic and Relay | CL           | CL            | N           | 1-12062 1-98201                 | BOP 1-VDAB-1-5                            |



DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID      | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.       | FIEL | Rm or Rm/CL                   | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|-------------|--------|--|----------------------|-------------|------|-------------------------------|-----------|----------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 293      | 12    | 7      | 1-QRV-170   | 0      | CVCS / EXCESS LETDOWN HEAT EXCHANGER HE-13 1 In AIR OPERATED OUTLET PRESSURE CONTROL VALVE   | 1-5129A              | CONTAINMENT | 612  | REGEN HEAT XCHGR RM           | P         | RI       | Seismic and Relay | CL           | CL            | N           | 1-12050 1-98561                 | 1-CRID-B-12                               |
| 294      | 12    | 7      | 1-QRV-171   | 0      | CVCS / EXCESS LETDOWN HEAT EXCHANGER HE-13 1 In AIR OPERATED OUTLET DIVERSION VALVE  | 1-5129A              | CONTAINMENT | 612  | REGEN HEAT XCHGR RM           | P         | RI       | Seismic and Relay | MAN C        | CL            | N           | 1-12062 1-98274                 | BOP 1-VDAB-2-18                           |
| 295      | 12    | 7      | 1-QRV-20    | 0      | RCTR COOLANT PMP SEAL WTR INJ/LEAKOFF / RCP 2 SEAL 1 LEAKOFF TO RCP SEAL WATER RETURN FILTER QC-109 2 In AIR OPERATED SHUTOFF VALVE    | 1-5128A              | CONTAINMENT | 617  | LOWER CONT, QUAD2             | P         | RIP      | Seismic and Relay | OP           | OP            | N           | 1-98201 1-12073                 | BOP 1-VDCD-1-6                            |
| 296      | 12    | 7      | 1-QRV-251   | 0      | CVCS / SEAL INJECTION WATER FLOW 3 In AIR OPERATED CONTROL VALVE   | 1-5129               | AUXILIARY   | 587  | RECIPROCATING CHRG PMP RM     | P         | RIP      | Seismic and Relay | OP           | OP            | N           | 1-98514 1-98554                 |   |
| 297      | 12    | 7      | 1-QRV-30    | 0      | RCTR COOLANT PMP SEAL WTR INJ/LEAKOFF / RCP 3 SEAL 1 LEAKOFF TO RCP SEAL WATER RETURN FILTER QC-109 2 In AIR OPERATED SHUTOFF VALVE    | 1-5128A              | CONTAINMENT | 612  | LOWER CONT, QUAD3             | P         | RIP      | Seismic and Relay | OP           | OP            | N           | 1-98201 1-12073                 | BOP 1-VDCD-1-7                            |
| 298      | 12    | 7      | 1-QRV-40    | 0      | RCTR COOLANT PMP SEAL WTR INJ/LEAKOFF / RCP 4 SEAL 1 LEAKOFF TO RCP RETURN FILTER QC-109 2 In AIR OPERATED SHUTOFF VALVE               | 1-5128A              | CONTAINMENT | 612  | LOWER CONT, QUAD4             | P         | RIP      | Seismic and Relay | OP           | OP            | N           | 1-98201 1-12062                 | BOP 1-VDAB-1-8                            |
| 299      | 12    | 7      | 1-QRV-400   | 0      | CVCS / NORTH BORIC ACID BLENDER QP-21 2 In AIR OPERATED TO CVCS CHARGING PUMP SUCTION SHUTOFF VALVE                                    | 1-5129A              | AUXILIARY   | 609  | VOL CONTROL TANK E HALLWAY    | P         | RI       | Seismic and Relay | MAN C        | CL            | N           | 1-12071 1-98271                 | 1-CCV-CD-85                               |
| 300      | 12    | 7      | 1-QRV-411   | 0      | CVCS (BORON MAKEUP) / NORTH BORIC ACID FILTER TO CVCS CHARGING PUMPS AND NORTH BORIC ACID BLENDER 1 In AIR OPERATED FLOW CONTROL VALVE | 12-5131              | AUXILIARY   | 587  | BORIC ACID STOR TANK          | P         | R        | Seismic and Relay | MAN C        | CL            | N           | 1-12071 1-98271                 | 1-CCV-CD-83                               |
| 301      | 12    | 7      | 1-QRV-451   | 0      | BORON MAKEUP (CVCS) / NORTH BORIC ACID BLENDER QP-21 TO REACTOR COOLANT LETDOWN VOLUME CONTROL TANK SHUTOFF VALVE                      | 1-5129A              | AUXILIARY   | 609  | VOL CONTROL TANK E HALLWAY    | P         | RI       | Seismic and Relay | MAN C        | CL            | Y           | 1-12071, 1-98271                | 1-CCV-CD-86                               |
| 302      | 12    | 7      | 1-SV-101    | 0      | NITROGEN (REACTOR PLANT SERVICE) / NITROGEN SUPPLY HEADER TO ACCUMULATOR TANKS SAFETY VALVE  | 1-5143               | AUXILIARY   | 591  | STARTUP BLOWDOWN FLASHTANK RM | S         | SUPPORT  | Seismic Only      | CL           | CL            | N           |                                 |   |
| 303      | 12    | 7      | 1-SV-102    | 0      | RHR / RHR TO REACTOR COOLANT LOOPS 2 AND 3 COLD LEGS SAFETY VALVE  | 1-5143               | CONTAINMENT | 598  | ANNULUS, QUAD2 AZ 122         | P         | DRIP     | Seismic Only      | CL           | CL            | N           |                                 |   |
| 304      | 12    | 7      | 1-SV-103    | 0      | RESIDUAL HEAT REMOVAL / REACTOR COOLANT LOOP #2 HOT LEG TO RESIDUAL HEAT REMOVAL PUMPS SAFETY VALVE                                    | 1-5143               | CONTAINMENT | 598  | ANNULUS, QUAD2                | P         | DRIP     | Seismic Only      | CL           | CL            | N           |                                 |   |
| 305      | 2     | 7      | 1-SV-104E   | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17E OUTLET SAFETY VALVE   | 1-5143               | AUXILIARY   | 609  | EAST RHR HEAT EXCHGR RM       | P         | DRIP     | Seismic Only      | CL           | CL            | N           |                                 |   |
| 306      | 1     | 7      | 1-SV-104W   | 0      | RESIDUAL HEAT REMOVAL / WEST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17W OUTLET SAFETY VALVE   | 1-5143               | AUXILIARY   | 609  | W RHR HEAT XCHGR RM           | P         | DRIP     | Seismic Only      | CL           | CL            | N           |                                 |   |
| 307      | 1     | 7      | 1-SV-120-AB | 0      | DIESEL STARTING AIR / 1-XTC-301 AND 1-XTC-302 CONTROL AIR SAFETY VALVE   | 1-5151B              | AUXILIARY   | 587  | AB EMER DSL GEN RM            | S         | EDG      | Seismic Only      | CL           | CL            | N           |                                 |   |
| 308      | 2     | 7      | 1-SV-120-CD | 0      | DIESEL STARTING AIR / 1-XTC-303 AND 1-XTC-307 CONTROL AIR SAFETY VALVE   | 1-5151D              | AUXILIARY   | 587  | CD EMER DSL GEN RM            | S         | EDG      | Seismic Only      | CL           | CL            | N           |                                 |   |
| 309      | 12    | 7      | 1-SV-121    | 0      | CCW / 1-DRA-300 SAMPLE HEAT EXCHANGERS CCW RETURN HEADER SAFETY VALVE  | 1-5135               | AUXILIARY   | 591  | STARTUP BLOWDOWN FLASHTANK RM | S         | SUPPORT  | Seismic Only      | CL           | CL            | N           |                                 |   |
| 310      | 12    | 7      | 1-SV-122-3  | 0      | CCW / CCW TO CONTAINMENT VENT FAN HV-CEQ-1 MOTOR AIR COOLER CCW OUTLET SAFETY VALVE  | 1-5135B              | CONTAINMENT | 625  | HV-CEQ-1 FAN ROOM             | S         | CCW      | Seismic Only      | CL           | CL            | N           |                                 |   |
| 311      | 12    | 7      | 1-SV-122-37 | 0      | CCW / REACTOR SUPPORT COOLERS CCW RETURN HEADER SAFETY VALVE   | 1-5135               | CONTAINMENT | 598  | ANNULUS, QUAD3 AZ 181         | S         | SUPPORT  | Seismic Only      | CL           | CL            | N           |                                 |   |



**DONALD C. COOK NUCLEAR PLANT UNIT # 1**  
**SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**

| Line No. | Train | Eq. CL | Eq. ID      | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.       | FIEL | Rm or Rwf/CL                | Flow Path | Function | Eval Type    | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|-------------|--------|---|----------------------|-------------|------|-----------------------------|-----------|----------|--------------|--------------|---------------|-------------|---------------------------------|---|
| 312      | 12    | 7      | 1-SV-122-4  | 0      | CCW / CCW TO CONTAINMENT VENT FAN HV-CEQ-2 MOTOR AIR COOLER CCW OUTLET SV   | 1-5135B              | CONTAINMENT | 625  | HV-CEQ-1 FAN ROOM           | S         | CCW      | Seismic Only | CL           | CL            | N           |                                 |   |
| 313      | 1     | 7      | 1-SV-139-AB | 0      | DIESEL STARTING AIR / AB EMERG DIESEL STARTING AIR TO TURBOCHARGER SAFETY VALVE   | 1-5151B              | AUXILIARY   | 587  | AB EMER DSL GEN RM          | S         | EDG      | Seismic Only | CL           | CL            | N           |                                 |   |
| 314      | 2     | 7      | 1-SV-139-CD | 0      | DIESEL STARTING AIR / CD EMERG DIESEL STARTING AIR TO TURBOCHARGER SAFETY VALVE   | 1-5151D              | AUXILIARY   | 587  | CD EMER DSL GEN RM          | S         | EDG      | Seismic Only | CL           | CL            | N           |                                 |   |
| 315      | 12    | 7      | 1-SV-140-1  | 0      | AUX FEEDWATER / TURBINE DRIV AUX FEED PUMP GOVERNOR OIL COOLER COOLING WATER INLET SAFETY VALVE                         | 1-5106A              | TURBINE     | 591  | TB DRIVEN AUX FDWTR PMP     | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 316      | 12    | 7      | 1-SV-140-2  | 0      | AUX FEEDWATER / TURBINE DRIV AUX FEED PUMP OIL COOLER COOLING WATER INLET SAFETY VALVE                                  | 1-5106A              | TURBINE     | 591  | TB DRIVEN AUX FDWTR PMP     | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 317      | 2     | 7      | 1-SV-14E    | 0      | ESW / EAST CONTAINMENT SPRAY HEAT EXCHANGER HE-18E SHELL SIDE SAFETY VALVE  | 1-5113               | AUXILIARY   | 609  | E CONT SPRAY HEAT XCHGR RM  | S         | ESW      | Seismic Only | CL           | CL            | N           |                                 |   |
| 318      | 1     | 7      | 1-SV-14W    | 0      | ESW / WEST CONTAINMENT SPRAY HEAT EXCHANGER HE-18W SHELL SIDE SAFETY VALVE  | 1-5113               | AUXILIARY   | 609  | W CONT SPRAY HEAT XCHGR RM  | S         | ESW      | Seismic Only | CL           | CL            | N           |                                 |   |
| 319      | 2     | 7      | 1-SV-15E    | 0      | ESSENTIAL SERVICE WATER / EAST COMPONENT COOLING WATER HEAT EXCHANGER HE-15E TUBE SIDE SAFETY VALVE                     | 1-5113               | AUXILIARY   | 609  | 609 HALLWAY                 | S         | ESW      | Seismic Only | CL           | CL            | N           |                                 |   |
| 320      | 1     | 7      | 1-SV-15W    | 0      | ESSENTIAL SERVICE WATER / WEST COMPONENT COOLING WATER HEAT EXCHANGER HE-15W TUBE SIDE SAFETY VALVE                     | 1-5113               | AUXILIARY   | 609  | 609 HALLWAY                 | S         | ESW      | Seismic Only | CL           | CL            | N           |                                 |   |
| 321      | 2     | 7      | 1-SV-16-AB  | 0      | ESSENTIAL SERVICE WATER / AB EMERGENCY DIESEL JACKET WATER COOLER QT-131-AB ESSENTIAL SERVICE WATER OUTLET SAFETY VALVE | 1-5113               | AUXILIARY   | 587  | AB EMER DSL GEN RM          | S         | ESW      | Seismic Only | CL           | CL            | N           |                                 |   |
| 322      | 2     | 7      | 1-SV-16-CD  | 0      | ESSENTIAL SERVICE WATER / CD EMERGENCY DIESEL JACKET WATER COOLER QT-131-CD ESSENTIAL SERVICE WATER OUTLET SAFETY VALVE | 1-5113               | AUXILIARY   | 587  | CD EMER DSL GEN RM          | S         | ESW      | Seismic Only | CL           | CL            | N           |                                 |   |
| 323      | 2     | 7      | 1-SV-169E   | 0      | AUX FEEDWATER / EAST MOTOR DRIV AUX FEED PUMP PP-3E SUCTION SAFETY VALVE  | 1-5106A              | TURBINE     | 591  | E MOTOR DRIVEN AUX FDWTR PU | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 324      | 1     | 7      | 1-SV-169W   | 0      | AUX FEEDWATER / WEST MOTOR DRIV AUX FEEDWATER PUMP SUCTION SAFETY VALVE   | 1-5106A              | TURBINE     | 591  | W MOTOR DRIVEN AUX FDWTR PU | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 325      | 2     | 7      | 1-SV-1A-1   | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 SAFETY VALVE 1A  | 1-5105D              | AUXILIARY   | 633  | E MAIN STM STOP ENCL        | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 326      | 1     | 7      | 1-SV-1A-2   | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2 SAFETY VALVE 1A  | 1-5105D              | AUXILIARY   | 633  | W MAIN STM STOP ENCL        | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 327      | 1     | 7      | 1-SV-1A-3   | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3 SAFETY VALVE 1A  | 1-5105D              | AUXILIARY   | 633  | W MAIN STM STOP ENCL        | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 328      | 2     | 7      | 1-SV-1A-4   | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 SAFETY VALVE 1A  | 1-5105D              | AUXILIARY   | 633  | E MAIN STM STOP ENCL        | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 329      | 2     | 7      | 1-SV-1B-1   | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 SAFETY VALVE 1B  | 1-5105D              | AUXILIARY   | 633  | E MAIN STM STOP ENCL        | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 330      | 1     | 7      | 1-SV-1B-2   | 0      | MAIN STEAM / STEAM GENERATOR 2 SAFETY VALVE 1B  | 1-5105D              | AUXILIARY   | 633  | W MAIN STM STOP ENCL        | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 331      | 1     | 7      | 1-SV-1B-3   | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3 SAFETY VALVE 1B  | 1-5105D              | AUXILIARY   | 633  | W MAIN STM STOP ENCL        | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 332      | 2     | 7      | 1-SV-1B-4   | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 SAFETY VALVE 1B  | 1-5105D              | AUXILIARY   | 633  | E MAIN STM STOP ENCL        | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 333      | 1     | 7      | 1-SV-200-AB | 0      | DIESEL FUEL OIL / AB EMERG DIESEL FUEL OIL MANIFOLDS TO FUEL OIL DAY TANK SAFETY VALVE                                  | 1-5151A              | AUXILIARY   | 587  | AB EMER DSL GEN RM          | S         | EDG      | Seismic Only | CL           | CL            | N           |                                 |   |

DONALD C. COOK NUCLEAR PLANT UNIT #1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID       | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.       | FIEL | Rm or Rwf/CL               | Flow Path | Function | Eval Type    | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|--------------|--------|---|----------------------|-------------|------|----------------------------|-----------|----------|--------------|--------------|---------------|-------------|---------------------------------|---|
| 334      | 2     | 7      | 1-SV-200-CD  | 0      | DIESEL FUEL OIL / CD EMERG DIESEL FUEL OIL MANIFOLDS TO FUEL OIL DAY TANK SAFETY VALVE  | 1-5151C              | AUXILIARY   | 587  | CD EMER DSL GEN RM         | S         | EDG      | Seismic Only | CL           | CL            | N           |                                 |   |
| 335      | 1     | 7      | 1-SV-201-AB1 | 0      | DIESEL FUEL OIL / AB EMERG DIESEL FRONT BANK FUEL OIL MANIFOLD SAFETY VALVE   | 1-5151A              | AUXILIARY   | 587  | AB EMER DSL GEN RM         | S         | EDG      | Seismic Only | CL           | CL            | N           |                                 |   |
| 336      | 1     | 7      | 1-SV-201-AB2 | 0      | DIESEL FUEL OIL / AB EMERG DIESEL REAR BANK FUEL OIL MANIFOLD SAFETY VALVE  | 1-5151A              | AUXILIARY   | 587  | AB EMER DSL GEN RM         | S         | EDG      | Seismic Only | CL           | CL            | N           |                                 |   |
| 337      | 2     | 7      | 1-SV-201-CD1 | 0      | DIESEL FUEL OIL / CD EMERG DIESEL FRONT BANK FUEL OIL MANIFOLD SAFETY VALVE   | 1-5151C              | AUXILIARY   | 587  | CD EMER DSL GEN RM         | S         | EDG      | Seismic Only | CL           | CL            | N           |                                 |   |
| 338      | 2     | 7      | 1-SV-201-CD2 | 0      | DIESEL FUEL OIL / CD EMERG. DIESEL REAR BANK FUEL OIL MANIFOLD SAFETY VALVE   | 1-5151C              | AUXILIARY   | 587  | CD EMER DSL GEN RM         | S         | EDG      | Seismic Only | CL           | CL            | N           |                                 |   |
| 339      | 2     | 7      | 1-SV-2A-1    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 SAFETY VALVE 2A  | 1-5105D              | AUXILIARY   | 633  | E MAIN STM STOP ENCL       | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 340      | 1     | 7      | 1-SV-2A-2    | 0      | MAIN STEAM / STEAM GENERATOR 2 SAFETY VALVE 2A  | 1-5105D              | AUXILIARY   | 591  | TB DRIVEN AUX FDMTR PMP    | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 341      | 1     | 7      | 1-SV-2A-3    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3 SAFETY VALVE 2A  | 1-5105D              | AUXILIARY   | 633  | W MAIN STM STOP ENCL       | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 342      | 2     | 7      | 1-SV-2A-4    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 SAFETY VALVE 2A  | 1-5105D 1-5104F      | AUXILIARY   | 633  | E MAIN STM STOP ENCL       | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 343      | 2     | 7      | 1-SV-2B-1    | 0      | MAIN STEAM / STEAM OME-3-1 SAFETY VALVE 2B  | 1-5105D              | AUXILIARY   | 633  | E MAIN STM STOP ENCL       | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 344      | 1     | 7      | 1-SV-2B-2    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2 SAFETY VALVE 2B  | 1-5105D              | AUXILIARY   | 633  | W MAIN STM STOP ENCL       | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 345      | 1     | 7      | 1-SV-2B-3    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3 SAFETY VALVE 2B  | 1-5105D              | AUXILIARY   | 633  | W MAIN STM STOP ENCL       | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 346      | 2     | 7      | 1-SV-2B-4    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 SAFETY VALVE 2B  | 1-5105D              | AUXILIARY   | 633  | E MAIN STM STOP ENCL       | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 347      | 2     | 7      | 1-SV-3-1     | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 SAFETY VALVE 3   | 1-5105D              | AUXILIARY   | 633  | E MAIN STM STOP ENCL       | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 348      | 1     | 7      | 1-SV-3-2     | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2 SAFETY VALVE 3   | 1-5105D              | AUXILIARY   | 633  | W MAIN STM STOP ENCL       | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 349      | 1     | 7      | 1-SV-3-3     | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3 SAFETY VALVE #3  | 1-5105D              | AUXILIARY   | 633  | W MAIN STM STOP ENCL       | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 350      | 2     | 7      | 1-SV-3-4     | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 SAFETY VALVE 3   | 1-5105D              | AUXILIARY   | 633  | E MAIN STM STOP ENCL       | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 351      | 12    | 7      | 1-SV-45A     | 0      | PRESSURIZER / PRESSURIZER OME-4 SAFETY VALVE 'A'  | 1-5128A              | CONTAINMENT | 650  | PRESSRZR ENCL, INTERIOR    | P         | RIP      | Seismic Only | CL           | CL            | N           |                                 |   |
| 352      | 12    | 7      | 1-SV-45B     | 0      | PRESSURIZER / PRESSURIZER OME-4 SAFETY VALVE 'B'  | 1-5128A              | CONTAINMENT | 650  | PRESSRZR ENCL, INTERIOR    | P         | RIP      | Seismic Only | CL           | CL            | N           |                                 |   |
| 353      | 12    | 7      | 1-SV-45C     | 0      | PRESSURIZER / PRESSURIZER OME-4 SAFETY VALVE 'C'  | 1-5128A              | CONTAINMENT | 650  | PRESSRZR ENCL, INTERIOR    | P         | RIP      | Seismic Only | CL           | CL            | N           |                                 |   |
| 354      | 12    | 7      | 1-SV-50      | 0      | REACTOR COOLANT SYSTEM / REACTOR COOLANT PUMP SEAL 1 AND STARTUP SEAL SYSTEM BYPASS TO SEAL WATER RETURN FILTERS SAFETY VALVE | 1-5128A              | CONTAINMENT | 598  | ANNULUS, QUAD3             | P         | RIP      | Seismic Only | CL           | CL            | N           |                                 |   |
| 355      | 12    | 7      | 1-SV-51      | 0      | CVCS / CHARGING TO REGENERATE HEAT EXCHANGER HE-12 LETDOWN OUTLET SAFETY VALVE  | 1-5129               | CONTAINMENT | 598  | ANNULUS, QUAD4             | P         | RIP      | Seismic Only | CL           | CL            | N           |                                 |   |
| 356      | 12    | 7      | 1-SV-54      | 0      | CVCS / REACTOR COOLANT PUMP SEAL WATER HEAT EXCHANGER HE-11 SAFETY VALVE  | 1-5129A              | AUXILIARY   | 609  | SEAL WTR HEAT XCHGR RM     | P         | RI       | Seismic Only | CL           | CL            | N           |                                 |   |
| 357      | 12    | 7      | 1-SV-56      | 0      | CVCS / CHARGING PUMPS SUCTION HEADER SAFETY VALVE   | 1-5129               | AUXILIARY   | 587  | RECIPROCATIN G CHRG PMP RM | P         | RIP      | Seismic Only | CL           | CL            | N           |                                 |   |
| 358      | 12    | 7      | 1-SV-60      | 0      | COMPONENT COOLING WATER / COMPONENT COOLING WATER SURGE TANK TK-37 SAFETY VALVE   | 1-5135A              | AUXILIARY   | 650  | 650 HALLWAY                | S         | CCW      | Seismic Only | CL           | CL            | N           |                                 |   |
| 359      | 1     | 7      | 1-SV-61-AB   | 0      | DIESEL JACKET WATER / AB EMERGENCY DIESEL AUXILIARY JACKET WATER HEATER QT-134-AB SAFETY VALVE                                | 1-5151B              | AUXILIARY   | 587  | AB EMER DSL GEN RM         | S         | EDG      | Seismic Only | CL           | CL            | N           |                                 |   |



# DONALD C. COOK NUCLEAR PLANT UNIT # 1 SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID          | Rev No | Sys/Eq. Desc   | Drawing No. RevZone | Bldg.            | FIEL | Rm or RwfCl                            | Flow Path | Function | Eval Type    | Normal State | Desired State | Power Req'd | Supporting Sys. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|-----------------|--------|--|---------------------|------------------|------|--|-----------|----------|--------------|--------------|---------------|-------------|----------------------------|---|
| 300      | 2     | 7      | 1-SV-61-CD      | 0      | DIESEL JACKET WATER / CD EMERGENCY DIESEL AUXILIARY JACKET WATER HEATER QT-134-CD SAFETY VALVE                         | 1-5151D             | AUXILIARY        | 587  | CD EMER DSL GEN RM                     | S         | EDG      | Seismic Only | CL           | CL            | N           |                            |   |
| 301      | 12    | 7      | 1-SV-62-1,2,3,4 | 0      | CCW / REACTOR COOLANT PUMP PP-45-1 THERMAL BARRIER CCW OUTLET SAFETY VALVE   | 1-5135              | CONTAINMENT      | 617  | LOWER CONT, QUAD1                      | S         | SUPPORT  | Seismic Only | CL           | CL            | N           |                            |   |
| 302      | 12    | 7      | 1-SV-63         | 0      | CCW / REACTOR COOLANT PUMP MOTORS BEARING OIL COOLERS CCW RETURN HEADER SAFETY VALVE                                   | 1-5135              | CONTAINMENT      | 598  | ANNULUS, QUAD 2 AZ 100                 | S         | SUPPORT  | Seismic Only | CL           | CL            | N           |                            |   |
| 303      | 12    | 7      | 1-SV-64         | 0      | CCW / EXCESS LETDOWN HEAT EXCHANGER HE-13 CCW OUTLET SAFETY VALVE  | 1-5135              | CONTAINMENT      | 598  | ANNULUS, QUAD3 AZ 195                  | S         | SUPPORT  | Seismic Only | CL           | CL            | N           |                            |   |
| 304      | 12    | 7      | 1-SV-65         | 0      | CCW / LETDOWN HEAT EXCHANGER HE-14 CCW OUTLET SAFETY VALVE   | 1-5135              | AUXILIARY        | 633  | 633 HALLWAY                            | S         | SUPPORT  | Seismic Only | CL           | CL            | N           |                            |   |
| 305      | 12    | 7      | 1-SV-66         | 0      | COMPONENT COOLING WATER / CCW TO NORTH BORIC ACID EVAP DRUM 12-HE-19-DN SAFETY VALVE                                   | 1-5135              | AUXILIARY        | 587  | 587 HALLWAY                            | S         | CCW      | Seismic Only | CL           | CL            | N           |                            |   |
| 306      | 12    | 7      | 1-SV-67-1       | 0      | CCW / POST-ACCIDENT UNDLUTED LIQUID SAMPLE HE QC-501-13 CCW OUTLET SV  | 1-5135              | AUXILIARY        | 587  | REFUELING WATER PURIFICATION PUMP ROOM | S         | SUPPORT  | Seismic Only | CL           | CL            | N           |                            |   |
| 307      | 12    | 7      | 1-SV-67-2       | 0      | CCW / NUCLEAR SAMPLING SAMPLE RACK 'A' CCW RETURN HEADER SAFETY VALVE  | 1-5135              | AUXILIARY        | 587  | NUCLEAR SAMPLING RM                    | S         | SUPPORT  | Seismic Only | CL           | CL            | N           |                            |   |
| 308      | 12    | 7      | 1-SV-67-3       | 0      | CCW / NUCLEAR SAMPLING SAMPLE RACK 'B' CCW RETURN HEADER SAFETY VALVE  | 1-5135              | AUXILIARY        | 587  | NUCLEAR SAMPLING RM                    | S         | SUPPORT  | Seismic Only | CL           | CL            | N           |                            |   |
| 309      | 12    | 7      | 1-SV-68         | 0      | CCW / REACTOR COOLANT PUMP SEAL WATER HE HE-11 CCW OUTLET SAFETY VALVE   | 1-5135              | AUXILIARY        | 609  | 609 HALLWAY                            | S         | SUPPORT  | Seismic Only | CL           | CL            | N           |                            |   |
| 370      | 12    | 7      | 1-SV-71         | 0      | CCW / NORTH SPENT FUEL PIT HTX 12-HE-16N CCW OUTLET SAFETY VALVE   | 1-5135              | AUXILIARY UNIT 1 | 609  | SPENT FUEL PIT HEAT XCHGR RM           | S         | SUPPORT  | Seismic Only | CL           | CL            | N           |                            |   |
| 371      | 2     | 7      | 1-SV-72E        | 0      | COMPONENT COOLING WATER / EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17E COMPONENT COOLING WATER OUTLET SAFETY VALVE | 1-5135A             | AUXILIARY        | 609  | 609 HALLWAY                            | S         | CCW      | Seismic Only | CL           | CL            | N           |                            |   |
| 372      | 1     | 7      | 1-SV-72W        | 0      | COMPONENT COOLING WATER / WEST RESIDUAL HEAT REMOVAL HEAT EXCHANGER COMPONENT COOLING WATER OUTLET SAFETY VALVE        | 1-5135A             | AUXILIARY        | 633  | 633 HALLWAY                            | S         | CCW      | Seismic Only | CL           | CL            | N           |                            |   |
| 373      | 1     | 7      | 1-SV-78-AB1     | 0      | DIESEL STARTING AIR / AB EMERG DIESEL STARTING AIR RECEIVER 1 QT-141-AB1 SAFETY VALVE                                  | 1-5151B             | AUXILIARY        | 587  | AB EMER DSL GEN RM                     | S         | EDG      | Seismic Only | CL           | CL            | N           |                            |   |
| 374      | 1     | 7      | 1-SV-78-AB2     | 0      | DIESEL STARTING AIR / AB EMERG DIESEL STARTING AIR RECEIVER QT-141-AB2 SAFETY VALVE                                    | 1-5151B             | AUXILIARY        | 587  | AB EMER DSL GEN RM                     | S         | EDG      | Seismic Only | CL           | CL            | N           |                            |   |
| 375      | 2     | 7      | 1-SV-78-CD1     | 0      | DIESEL STARTING AIR / CD EMERG DIESEL STARTING AIR RECEIVER QT-141-CD1 SAFETY VALVE                                    | 1-5151D             | AUXILIARY        | 587  | CD EMER DSL GEN RM                     | S         | EDG      | Seismic Only | CL           | CL            | N           |                            |   |
| 376      | 2     | 7      | 1-SV-78-CD2     | 0      | DIESEL STARTING AIR / CD EMERGENCY DIESEL STARTING AIR RECEIVER (QT-141-CD2) SAFETY VALVE                              | 1-5151D             | AUXILIARY        | 587  | CD EMER DSL GEN RM                     | S         | EDG      | Seismic Only | CL           | CL            | N           |                            |   |
| 377      | 1     | 7      | 1-SV-79-AB1     | 0      | DIESEL STARTING AIR / AB EMERG DIESEL CONTROL AIR DRYER QT-143-AB1 SAFETY VALVE  | 1-5151B             | AUXILIARY        | 587  | AB EMER DSL GEN RM                     | S         | EDG      | Seismic Only | CL           | CL            | N           |                            |   |
| 378      | 1     | 7      | 1-SV-79-AB2     | 0      | DIESEL STARTING AIR / AB EMERG DIESEL CONTROL AIR DRYER QT-143-AB2 SAFETY VALVE  | 1-5151B             | AUXILIARY        | 587  | AB EMER DSL GEN RM                     | S         | EDG      | Seismic Only | CL           | CL            | N           |                            |   |
| 379      | 2     | 7      | 1-SV-79-CD1     | 0      | DIESEL STARTING AIR / CD EMERG DIESEL CONTROL AIR DRYER QT-143-CD1 SAFETY VALVE  | 1-5151D             | AUXILIARY        | 587  | CD EMER DSL GEN RM                     | S         | EDG      | Seismic Only | CL           | CL            | N           |                            |   |





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DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

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| Line No. | Train | Eq. Cl. | Eq. ID      | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.        | FIEL | Rm or Rwf/Cl              | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. No. / Rev. | Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|---------|-------------|--------|--|----------------------|--------------|------|---------------------------|-----------|----------|-------------------|--------------|---------------|-------------|----------------------------|-----------------|---|
| 380      | 2     | 7       | 1-SV-79-CD2 | 0      | DIESEL STARTING AIR / CD EMERG DIESEL CONTROL AIR DRYER QT-143-CD2 SAFETY VALVE  | 1-5151D              | AUXILIARY    | 587  | CD EMER DSL GEN RM        | S         | EDG      | Seismic Only      | CL           | CL            | N           |                            |                 |   |
| 381      | 2     | 7       | 1-SV-94N    | 0      | CTRL RM AIR CONDITIONING CHILL WTR / CONTROL ROOM AIR CONDITIONING NORTH CHILL WATER EXPANSION TANK TK-78N SAFETY VALVE    | 1-5149               | AUXILIARY    | 650  | CTRL RM AIR COND RM       | S         | ESW      | Seismic Only      | CL           | CL            | N           |                            |                 |   |
| 382      | 1     | 7       | 1-SV-94S    | 0      | CTRL RM AIR CONDITIONING CHILL WTR / CONTROL ROOM AIR CONDITIONING SOUTH CHILL WATER EXPANSION TANK TK-78S SAFETY VALVE    | 1-5149               | AUXILIARY    | 650  | CTRL RM AIR COND RM       | S         | ESW      | Seismic Only      | CL           | CL            | N           |                            |                 |   |
| 383      | 12    | 7       | 1-SV-96     | 0      | REFUELING WATER STORAGE TANK SUPPLY / SAFETY INJECTION PUMPS SUCTION HEADER SAFETY VALVE                                   | 1-5142               | AUXILIARY    | 587  | N SAFETY INJ PMP RM       | P         | RI       | Seismic Only      | CL           | CL            | N           |                            |                 |   |
| 384      | 12    | 7       | 1-SV-97     | 0      | BORON INJECTION / BORON INJECTION TANK TK-11 OUTLET SAFETY VALVE   | 1-5142               | AUXILIARY    | 612  | BORON INJECTION TANK ROOM | P         | RI       | Seismic Only      | CL           | CL            | N           |                            |                 |   |
| 385      | 12    | 7       | 1-SV-98N    | 0      | SAFETY INJECTION / NORTH SAFETY INJECTION PUMP PP-26N DISCHARGE HEADER SAFETY VALVE  | 1-5142               | AUXILIARY    | 587  | N SAFETY INJ PMP RM       | P         | RI       | Seismic Only      | CL           | CL            | N           |                            |                 |   |
| 386      | 12    | 7       | 1-SV-98S    | 0      | SAFETY INJECTION / SOUTH SAFETY INJECTION PUMP PP-26S DISCHARGE HEADER SAFETY VALVE  | 1-5142               | AUXILIARY    | 587  | S SAFETY INJ PMP RM       | P         | RI       | Seismic Only      | CL           | CL            | N           |                            |                 |   |
| 387      | 2     | 7       | 1-VRV-315   | 0      | CONTROL ROOM A/C CHILL WATER / CONTROL ROOM VENT UNIT HV-ACRA-1 CHILL WATER INLET/BYPASS, 3-WAY AIR OPERATED CONTROL VALVE | 1-5149               | AUXILIARY    | 650  | CONTROL ROOM A/C ROOM     | S         | HVAC     | Seismic and Relay | OP           | OP            | N           | 1-12071, 1-98742           |                 | 1-CCD-CD-78                               |
| 388      | 1     | 7       | 1-VRV-325   | 0      | CONTROL ROOM A/C CHILL WATER / CONTROL ROOM VENT UNIT HV-ACRA-2 CHILL WATER INLET/BYPASS 3-WAY AIR OPERATED CONTROL VALVE  | 1-5149               | AUXILIARY    | 650  | CONTROL ROOM A/C ROOM     | S         | HVAC     | Seismic and Relay | OP           | OP            | N           | 1-12061, 1-98742           |                 | 1-CCV-AB-78                               |
| 389      | 2     | 7       | 1-WRV-721   | 0      | ESW / AB EMERG DIESEL SOUTH COMBUSTION AIR AFTERCOOLER HE-47ABS ESW INLET/BYPASS VALVE                                     | 1-5113               | AUXILIARY    | 587  | AB EMER DSL GEN RM        | S         | ESW      | Seismic Only      | I            | I             | N           |                            |                 |   |
| 390      | 2     | 7       | 1-WRV-723   | 0      | ESW / AB EMERG DIESEL GENERATOR NORTH COMBUSTION AIR AFTERCOOLER HE-47ABN ESW INLET/BYPASS VALVE                           | 1-5113               | AUXILIARY    | 587  | AB EMER DSL GEN RM        | S         | ESW      | Seismic Only      | I            | I             | N           |                            |                 |   |
| 391      | 2     | 7       | 1-WRV-725   | 0      | ESW / CD EMERG DIESEL SOUTH COMBUSTION AIR AFTERCOOLER HE-47CDS ESW INLET/BYPASS VALVE                                     | 1-5113               | AUXILIARY    | 587  | CD EMER DSL GEN RM        | S         | ESW      | Seismic Only      | I            | I             | N           |                            |                 |   |
| 392      | 2     | 7       | 1-WRV-727   | 0      | ESW / CD EMERGENCY DIESEL NORTH COMBUSTION AIR AFTERCOOLER HE-47-CDN ESW INLET/BYPASS VALVE                                | 1-5113               | AUXILIARY    | 587  | CD EMER DSL GEN RM        | S         | ESW      | Seismic Only      | I            | I             | N           |                            |                 |   |
| 393      | 2     | 7       | 1-WRV-761   | 0      | ESW / EAST ESW PUMP PP-7E DISCHARGE STRAINER EAST BASKET BACKWASH OUTLET SHUTOFF VALVE                                     | 1-5113               | SCREENHOU SE | 591  | E ESSNTL SERV WTR PMP RM  | S         | ESW      | Seismic and Relay | CL           | CL            | A           | 1-12033 1-98415            |                 | 1-PS-D-3C                                 |
| 394      | 1     | 7       | 1-WRV-762   | 0      | ESW / WEST ESW PUMP PP-7W DISCHARGE STRAINER EAST BASKET BACKWASH OUTLET SHUTOFF VALVE                                     | 1-5113               | SCREENHOU SE | 591  | W ESSNTL SERV WTR PMP RM  | S         | ESW      | Seismic and Relay | CL           | CL            | A           | 1-12014 1-98415            |                 | 1-PS-A-1C                                 |
| 395      | 2     | 7       | 1-WRV-766   | 0      | ESW / EAST ESW PUMP PP-7E DISCHARGE STRAINER EAST BASKET BACKWASH 4 In AIR OPERATED INLET SHUTOFF VALVE                    | 1-5113               | SCREENHOU SE | 591  | E ESSNTL SERV WTR PMP RM  | S         | ESW      | Seismic and Relay | CL           | CL            | N           | 1-12033 1-98415            |                 | 1-PS-D-3C                                 |
| 396      | 1     | 7       | 1-WRV-767   | 0      | ESW / WEST ESW PUMP PP-7W DISCHARGE STRAINER EAST BASKET BACKWASH INLET 4 In AIR OPERATED SHUTOFF VALVE                    | 1-5113               | SCREENHOU SE | 591  | W ESSNTL SERV WTR PMP RM  | S         | ESW      | Seismic and Relay | CL           | CL            | N           | 1-12014 1-98415            |                 | 1-PS-A-1C                                 |
| 397      | 2     | 7       | 1-WRV-771   | 0      | ESW / EAST ESW PUMP PP-7E DISCHARGE STRAINER WEST BASKET BACKWASH OUTLET SHUTOFF VALVE                                     | 1-5113               | SCREENHOU SE | 591  | E ESSNTL SERV WTR PMP RM  | S         | ESW      | Seismic and Relay | CL           | CL            | A           | 1-12033 1-98415            |                 | 1-PS-D-3C                                 |
| 398      | 1     | 7       | 1-WRV-772   | 0      | ESW / WEST ESW PUMP PP-7W DISCHARGE STRAINER WEST BASKET BACKWASH SHUTOFF VALVE  | 1-5113               | SCREENHOU SE | 591  | W ESSNTL SERV WTR PMP RM  | S         | ESW      | Seismic and Relay | CL           | CL            | A           | 1-12014 1-98415            |                 | 1-PS-A-1C                                 |



DONALD C. COOK NUCLEAR PLANT UNIT #1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID     | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.       | F I EL | Rm or Rwt/Cl                    | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|------------|--------|---|----------------------|-------------|--------|---------------------------------|-----------|----------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 399      | 2     | 7      | 1-WRV-776  | 0      | ESW / EAST ESW PUMP PP-7E DISCHARGE STRAINER WEST BASKET BACKWASH INLET 4 In AIR OPERATED SHUTOFF VALVE               | 1-5113               | SCREENHOUSE | 591    | E ESSNTL SERV WTR PMP RM        | S         | ESW      | Seismic and Relay | CL           | CL            | N           | 1-12033 1-98415                 | 1-PS-D-3C                                 |
| 400      | 1     | 7      | 1-WRV-777  | 0      | ESW / WEST ESW PUMP PP-7W DISCHARGE STRAINER WEST BASKET BACKWASH INLET 4 In AIR OPERATED SHUTOFF VALVE               | 1-5113               | SCREENHOUSE | 591    | W ESSNTL SERV WTR PMP RM        | S         | ESW      | Seismic and Relay | CL           | CL            | N           | 1-12014 1-98415                 | 1-PS-A-1C                                 |
| 401      | 1     | 7      | 1-XRV-220  | 0      | DIESEL STARTING AIR / AB EMERG DIESEL STARTING AIR JET ASSIST CONTROL VALVE   | 1-5151B              | AUXILIARY   | 587    | AB EMER DSL GEN RM              | S         | EDG      | Seismic and Relay | CL           | CL            | A           | 1-12060                         | 1-TDAB-2                                  |
| 402      | 1     | 7      | 1-XRV-221  | 0      | DIESEL STARTING AIR / AB EMERG DIESEL FRONT BANK STARTING AIR SHUTOFF VALVE   | 1-5151B              | AUXILIARY   | 587    | AB EMER DSL GEN RM              | S         | EDG      | Seismic Only      | CL           | CL            | Y           | W-700051CH                      | TRIM-LINE 4 WAY VALVE-100# AIR            |
| 403      | 1     | 7      | 1-XRV-222  | 0      | DIESEL STARTING AIR / AB EMERG DIESEL REAR BANK STARTING AIR SHUTOFF VALVE  | 1-5151B              | AUXILIARY   | 587    | AB EMER DSL GEN RM              | S         | EDG      | Seismic and Relay | CL           | CL            | A           | W-700051CH                      | TRIM-LINE 4 WAY VALVE-100# AIR            |
| 404      | 2     | 7      | 1-XRV-225  | 0      | DIESEL STARTING AIR / CD EMERG DIESEL STARTING AIR JET ASSIST CONTROL VALVE   | 1-5151D              | AUXILIARY   | 587    | CD EMER DSL GEN RM              | S         | EDG      | Seismic and Relay | CL           | CL            | A           | 1-12070                         | 1-TDCD-2                                  |
| 405      | 2     | 7      | 1-XRV-226  | 0      | DIESEL STARTING AIR / CD EMERG DIESEL FRONT BANK STARTING AIR SHUTOFF VALVE   | 1-5151D              | AUXILIARY   | 587    | CD EMER DSL GEN RM              | S         | EDG      | Seismic and Relay | CL           | OP            | A           | W-700051CH                      | TRIM-LINE 4 WAY VALVE-100# AIR            |
| 406      | 2     | 7      | 1-XRV-227  | 0      | DIESEL STARTING AIR / CD EMERG DIESEL REAR BANK STARTING AIR SHUTOFF VALVE  | 1-5151D              | AUXILIARY   | 587    | CD EMER DSL GEN RM              | S         | EDG      | Seismic and Relay | CL           | OP            | A           | W-700051CH                      | TRIM-LINE 4 WAY VALVE-100# AIR            |
| 407      | 12    | 7      | 12-CRV-51  | 0      | CONDENSATE STORAGE SUPPLY / UNIT 1 AND 2 CONDENSATE STORAGE TANK CROSSTIE 8 In AIR OPERATED SHUTOFF VALVE             | 1-5108A              | TURBINE     | 591    | AUX FEED PMP E HALLWAY          | P         | D        | Seismic and Relay | CL           | CL            | N           | 1-12070 1-98421                 | BOP 1-CRCD-7 CONTROL AIR                  |
| 408      | 12    | 7      | 12-QRV-410 | 0      | CVCS / NORTH BAST TK-12N 2 In AIR OPERATED INLET FLOW CONTROL VALVE   | 12-5131              | AUXILIARY   | 587    | BORIC ACID STOR TANK            | P         | RI       | Seismic and Relay | OP           | OP            | N           | 1-12050 1-98558                 | 1-CRID-2-12                               |
| 409      | 12    | 7      | 12-QRV-420 | 0      | CVCS (BORON MAKEUP) / MIDDLES BAST TK-12M 2 In AIR OPERATED INLET FLOW CONTROL VALVE                                  | 12-5131              | AUXILIARY   | 587    | BORIC ACID STOR TANK            | P         | RI       | Seismic and Relay | OP           | OP            | N           | 1-12050 1-98559                 | 1-CRID-4-12                               |
| 410      | 12    | 7      | 12-SV-217  | 0      | NITROGEN (REACTOR PLANT SERVICE) / REACTOR PLANT NITROGEN BULK STORAGE TANKS SAFETY VALVE                             | 12-5118B             | GROUND      | 609    | REACTOR GAS BOTTLE STORAGE AREA | S         | SUPPORT  | Seismic Only      | CL           | CL            | N           |                                 |   |
| 411      | 12    | 7      | 12-SV-69N  | 0      | CCW / N. RADIOACTIVE WASTE GAS COMP SEAL WTR HE OME-44N-2 CCW OUTLET SV   | 1-5135               | AUXILIARY   | 609    | 609 HALLWAY                     | S         | SUPPORT  | Seismic Only      | CL           | CL            | N           |                                 |   |
| 412      | 12    | 7      | 12-SV-69S  | 0      | CCW / S. RADIOACTIVE WASTE GAS COMP SEAL WTR HE OME-44S-2 CCW OUTLET SV   | 1-5135               | AUXILIARY   | 609    | 609 HALLWAY                     | S         | SUPPORT  | Seismic Only      | CL           | CL            | N           |                                 |   |
| 413      | 2     | 8      | 1-CCM-451  | 0      | CCW / REACTOR COOLANT PUMPS BEARING OIL COOLERS CCW RETURN HEADER 'A' CONTAINMENT 8 In MOTOR OPERATED ISOLATION VALVE | 1-5135               | AUXILIARY   | 591    | STARTUP BLOWDOWN FLASHTANK RM   | S         | CCW      | Seismic and Relay | OP           | OP            | Y           | 1-12031 1-98406                 | 1-AM-D-R8B                                |
| 414      | 1     | 8      | 1-CCM-452  | 0      | CCW / RC PUMPS BEARING OIL COOLERS CCW RETURN HEADER 'B' CONTAINMENT 8 In MOTOR OPERATED ISOLATION VALVE              | 1-5135               | AUXILIARY   | 591    | STARTUP BLOWDOWN FLASHTANK RM   | S         | CCW      | Seismic and Relay | OP           | OP            |             | 1-12011, 1-98406                | 1-AM-A-2B                                 |
| 415      | 2     | 8      | 1-CCM-453  | 0      | CCW / RCP THERMAL BARRIER CCW OUTLET 'A' CONTAINMENT 4 In MOTOR OPERATED ISOLATION VALVE                              | 1-5135               | AUXILIARY   | 591    | STARTUP BLOWDOWN FLASHTANK RM   | S         | CCW      | Seismic and Relay | OP           | OP            | N           | 1-12031 1-98406                 | 1-AM-D-R7B                                |
| 416      | 1     | 8      | 1-CCM-454  | 0      | CCW / RC PUMPS THERMAL BARRIER CCW RETURN HEADER 'B' CONTAINMENT 4 In MOTOR OPERATED ISOLATION VALVE                  | 1-5135               | AUXILIARY   | 591    | STARTUP BLOWDOWN FLASHTANK RM   | S         | CCW      | Seismic and Relay | OP           | OP            | N           | 1-12011, 1-98406                | 1-AM-A-2C                                 |
| 417      | 2     | 8      | 1-CCM-458  | 0      | CCW / CCW TO REACTOR COOLANT PUMPS TRAIN 'A' CONTAINMENT ISOLATION VALVE  | 1-5135               | AUXILIARY   | 591    | STARTUP BLOWDOWN FLASHTANK RM   | S         | CCW      | Seismic and Relay | OP           | OP            | Y           | 1-12031 1-98406                 | 1-AM-D-R7C                                |
| 418      | 1     | 8      | 1-CCM-459  | 0      | CCW / CCW TO REACTOR COOLANT PUMPS TRAIN 'B' CONTAINMENT ISOLATION VALVE  | 1-5135               | AUXILIARY   | 591    | STARTUP BLOWDOWN FLASHTANK RM   | S         | CCW      | Seismic and Relay | OP           | OP            | Y           | 1-12011 1-98406                 | 1-AM-A-1C                                 |

DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID       | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.     | FIEL | Rm or Rm/CL                   | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|--------------|--------|--|----------------------|-----------|------|-------------------------------|-----------|----------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 419      | 2     | 8      | 1-CMO-410    | 0      | CCW / EAST CCW TO HEAT EXCHANGER HE-15E CCW OUTLET SHUTOFF VALVE   | 1-5135A              | AUXILIARY | 609  | 609 HALLWAY                   | S         | CCW      | Seismic and Relay | AS IS        | AS IS         | Y           | 1-12031 1-98405                 | 1-AM-D-R8C                                |
| 420      | 2     | 8      | 1-CMO-411    | 0      | CCW / CCW PUMPS SUCTION CROSSTIE HEADER 'A' 18 in MOTOR OPERATED SHUTOFF VALVE   | 1-5135A              | AUXILIARY | 609  | 609 HALLWAY                   | S         | CCW      | Seismic and Relay | OP           | OP            | N           | 1-12031 1-98405                 | 1-AM-D-6B                                 |
| 421      | 2     | 8      | 1-CMO-412    | 0      | CCW / CCW PUMPS DISCHARGE CROSSTIE HEADER 'A' 18 in MOTOR OPERATED SHUTOFF VALVE   | 1-5135A              | AUXILIARY | 609  | 609 HALLWAY                   | S         | CCW      | Seismic and Relay | OP           | OP            | N           | 1-12031 1-98405                 | 1-AM-D-7B                                 |
| 422      | 1     | 8      | 1-CMO-413    | 0      | CCW / CCW PUMPS SUCTION CROSSTIE HEADER 'B' 18 in MOTOR OPERATED SHUTOFF VALVE   | 1-5135A              | AUXILIARY | 609  | 609 HALLWAY                   | S         | CCW      | Seismic and Relay | OP           | OP            | N           | 1-12011 1-98405                 | 1-AM-A-R4B                                |
| 423      | 1     | 8      | 1-CMO-414    | 0      | CCW / CCW PUMPS DISCHARGE CROSSTIE HEADER 'A' 18 in MOTOR OPERATED SHUTOFF VALVE   | 1-5135A              | AUXILIARY | 609  | 609 HALLWAY                   | S         | CCW      | Seismic and Relay | OP           | OP            | N           | 1-12011 1-98405                 | 1-AM-A-R4C                                |
| 424      | 2     | 8      | 1-CMO-415    | 0      | CCW / CCW TO MISCELLANEOUS SERVICE HEADER 'A' 18 in MOTOR OPERATED SHUTOFF VALVE   | 1-5135A              | AUXILIARY | 609  | 609 HALLWAY                   | S         | CCW      | Seismic and Relay | OP           | OP            | N           | 1-12031 1-98405                 | 1-AM-D-7C                                 |
| 425      | 1     | 8      | 1-CMO-416    | 0      | CCW / CCW TO MISCELLANEOUS SERVICE HEADER 'B' 18 in MOTOR OPERATED SHUTOFF VALVE   | 1-5135A              | AUXILIARY | 609  | 609 HALLWAY                   | S         | CCW      | Seismic and Relay | OP           | OP            | N           | 1-12011 1-98405                 | 1-AM-A-R3B                                |
| 426      | 2     | 8      | 1-CMO-419    | 0      | CCW / EAST RHR HEAT EXCHANGER HE-17E CCW OUTLET SHUTOFF VALVE  | 1-5135A              | AUXILIARY | 609  | 609 HALLWAY                   | S         | CCW      | Seismic and Relay | CL           | OP            | Y           | 1-12031 1-98405                 | 1-AM-D-6C                                 |
| 427      | 1     | 8      | 1-CMO-420    | 0      | CCW / WEST CCW TO HEAT EXCHANGER HE-15W CCW OUTLET SHUTOFF VALVE   | 1-5135A              | AUXILIARY | 609  | 609 HALLWAY                   | S         | CCW      | Seismic and Relay | AS IS        | AS IS         | Y           | 1-12011 1-98405                 | 1-AM-A-R3C                                |
| 428      | 2     | 8      | 1-CMO-429    | 0      | CCW / WEST RHR HEAT EXCHANGER HE-17W CCW OUTLET SHUTOFF VALVE  | 1-5135A              | AUXILIARY | 633  | 633 HALLWAY                   | S         | CCW      | Seismic and Relay | CL           | CL            | Y           | 1-12011 1-98405                 | 1-AM-A-R5B                                |
| 429      | 1     | 8      | 1-FMO-211    | 0      | AUX FEEDWATER / TURBINE DRIV AUX FEED PUMP PP-4 DISCHARGE TO STEAM GENERATOR OME-3-1 4 in MOTOR OPERATED CONTROL VALVE       | 1-5108A              | AUXILIARY | 612  | E MAIN STM STOP ENCL          | P         | D        | Seismic and Relay | OP           | OP            | N           | 1-12065 1-98215                 | 1-AB-N-1A                                 |
| 430      | 1     | 8      | 1-FMO-212    | 0      | AUX FEEDWATER / WEST MOTOR DRIV AUX FEEDWATER PUMP PP-3W SUPPLY TO STEAM GENERATOR OME-3-1 4 in MOTOR OPERATED CONTROL VALVE | 1-5108A              | AUXILIARY | 612  | E MAIN STM STOP ENCL          | P         | D        | Seismic and Relay | OP           | OP            | N           | 1-12012 1-98217                 | VCC 1-AZV-A-6B                            |
| 431      | 2     | 8      | 1-FMO-221    | 0      | AUX FEEDWATER / TURBINE DRIV AUX FEED PUMP PP-4 DISCHARGE TO STEAM GENERATOR OME-3-2 4 in MOTOR OPERATED CONTROL VALVE       | 1-5108A              | AUXILIARY | 591  | STARTUP BLOWDOWN FLASHTANK RM | P         | D        | Seismic and Relay | OP           | OP            | N           | 1-12065 1-98215                 | 1-AB-N-1B                                 |
| 432      | 2     | 8      | 1-FMO-222    | 0      | AUX FEEDWATER / EAST MOTOR DRIV AUX FEED PUMP PP-3E SUPPLY TO STEAM GENERATOR OME-3-2 4 in MOTOR OPERATED CONTROL VALVE      | 1-5108A              | AUXILIARY | 591  | STARTUP BLOWDOWN FLASHTANK RM | P         | D        | Seismic and Relay | OP           | OP            | N           | 1-12033 1-98217                 | 1-EZC-D-R3B                               |
| 433      | 2     | 8      | 1-FMO-231    | 0      | AUX FEEDWATER / TURBINE DRIV AUX FEED PP-4 PUMP SUPPLY TO STEAM GENERATOR OME-3-3 4 in MOTOR OPERATED CONTROL VALVE          | 1-5108A              | AUXILIARY | 591  | STARTUP BLOWDOWN FLASHTANK RM | P         | D        | Seismic and Relay | OP           | OP            | N           | 1-12065 1-98215                 | VCC 1-AB-N-2A                             |
| 434      | 2     | 8      | 1-FMO-232    | 0      | AUX FEEDWATER / EAST MOTOR DRIV AUX FEED PUMP PP-3E SUPPLY TO STEAM GENERATOR 3-3 4 in MOTOR OPERATED CONTROL VALVE          | 1-5108A              | AUXILIARY | 591  | STARTUP BLOWDOWN FLASHTANK RM | P         | D        | Seismic and Relay | OP           | OP            | N           | 1-12033 1-98217                 | 1-EZC-D-R3C                               |
| 435      | 1     | 8      | 1-FMO-241    | 0      | AUX FEEDWATER / TURBINE DRIV AUX FEED PUMP PP-4 DISCHARGE TO STEAM GENERATOR OME-3-4 4 in MOTOR OPERATED CONTROL VALVE       | 1-5108A              | AUXILIARY | 612  | E MAIN STM STOP ENCL          | P         | D        | Seismic and Relay | OP           | OP            | N           | 1-12065 1-98215                 | 1-AB-N-2B                                 |
| 436      | 1     | 8      | 1-FMO-242    | 0      | AUX FEEDWATER / WEST MOTOR DRIV AUX FEED PUMP PP-3W SUPPLY TO STEAM GENERATOR 3-4 4 in MOTOR OPERATED CONTROL VALVE          | 1-5108A              | AUXILIARY | 612  | E MAIN STM STOP ENCL          | P         | D        | Seismic and Relay | OP           | OP            | N           | 1-12012 1-98217                 | 1-AZV-A-6C                                |
| 437      | 1     | 8      | 1-HV-DDP-AB1 | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FAN HV- DGX-1 TEMPERING AIR DAMPER          | 1-5148C              | AUXILIARY | 587  | AB EMER DSL GEN RM            | S         | HVAC     | Seismic and Relay | AS IS        | AS IS         | Y           | 1-12010                         |   |



DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID        | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.       | FIEL | Rm or Rwr/CI                 | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|---------------|--------|--|----------------------|-------------|------|------------------------------|-----------|----------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 438      | 1     | 8      | 1-HV-DOP-AB2  | 0      | DIESEL ROOM VENTILATION / DIESEL GENERATOR ROOM 1AB VENTILATION SUPPLY FAN HV-DGS-1 TEMPERING AIR DAMPER 1-HV-DOP-AB2              | 1-5148C              | AUXILIARY   | 587  | AB EMER DSL GEN RM           | S         | HVAC     | Seismic and Relay | AS IS        | AS IS         | Y           | 1-12010                         |   |
| 439      | 2     | 8      | 1-HV-DOP-CD1  | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FAN HV-DGX-2 TEMPERING AIR DAMPER                 | 1-5148C              | AUXILIARY   | 587  | CD EMER DSL GEN RM           | S         | HVAC     | Seismic and Relay | AS IS        | AS IS         | Y           | 1-12030                         |   |
| 440      | 2     | 8      | 1-HV-DOP-CD2  | 0      | DIESEL ROOM VENTILATION / DIESEL GEN ROOM 1 CD VENTILATION SUPPLY FAN 1-HV-DGS-2 TEMPERING AIR DAMPER 1-HV-DOP-CD2                 | 1-5148C              | AUXILIARY   | 587  | CD EMER DSL GEN RM           | S         | HVAC     | Seismic and Relay | N/A          | N/A           | Y           | 1-12030                         | 1-ABD-C-R2D                               |
| 441      | 1     | 8      | 1-HV-DGS-DAB  | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN HV-DGS-1 OUTSIDE AIR SHUTOFF DAMPER            | 1-5148C              | AUXILIARY   | 596  | RCTR CABLE TUNNEL, QUAD3     | S         | HVAC     | Seismic and Relay | AS IS        | AS IS         | Y           | 1-12015                         |   |
| 442      | 2     | 8      | 1-HV-DGS-DCD  | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN HV-DGS-2 OUTSIDE AIR SHUTOFF DAMPER            | 1-5148C              | AUXILIARY   | 588  | STORAGE TANK PIPE TUNNEL     | S         | HVAC     | Seismic and Relay | AS IS        | AS IS         | Y           | 1-12035                         |   |
| 443      | 12    | 8      | 1-HV-SGR-MD-3 | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600V SWITCHGEAR TRANSFORMERS TR11A & TR11C AREA VENT SUPPLY FAN HV-SGRS-8 SUCTION DAMPER | 1-5148C              | AUXILIARY   | 609  | 4KV RM - 600V SWGR           | S         | HVAC     | Seismic and Relay | AS IS        | AS IS         | Y           |                                 |   |
| 444      | 12    | 8      | 1-HV-SGR-MD-4 | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600V SWITCHGEAR TRANSFORMERS AREA VENTILATION SUPPLY FAN HV-SGRS-7 SUCTION DAMPER        | 1-5148C              | AUXILIARY   | 609  | 4KV RM - 600V SWGR           | S         | HVAC     | Seismic and Relay | AS IS        | AS IS         | Y           |                                 |   |
| 445      | 12    | 8      | 1-HV-SGR-MD-5 | 0      | AUXILIARY BUILDING VENTILATION / 600VAC MOTOR CONTROL CENTER MEZZANINE AREA VENTILATION SUPPLY FAN HV-SGRS-9 VENT DAMPER           | 1-5148C              | AUXILIARY   | 613  | 4KV RM - MEZZANINE           | S         | HVAC     | Seismic and Relay | AS IS        | AS IS         | Y           |                                 |   |
| 446      | 12    | 8      | 1-JCM-111     | 0      | RHR / RHR TO REACTOR COOLANT LOOPS 2 AND 3 COLD LEGS CONTAINMENT ISOLATION VALVE   | 1-5143               | CONTAINMENT | 598  | ANNULUS, QUAD2               | P         | DRIP     | Seismic and Relay | CL           | CL            | Y           | 1-12032 1-98284                 | 1-EZC-C-R2D                               |
| 447      | 2     | 8      | 1-JCM-129     | 0      | RHR / REACTOR COOLANT LOOP 2 HOT LEG TO RHR PUMPS SUCTION CONTAINMENT ISOLATION VALVE  | 1-5143               | CONTAINMENT | 598  | ANNULUS, QUAD2               | P         | DRIP     | Seismic and Relay | CL           | CL            | Y           | 1-12032 1-98284                 | 1-EZC-C-3C                                |
| 448      | 2     | 8      | 1-JCM-250     | 0      | BORON INJECTION / BORON INJECTION TANK 'A' CONTAINMENT ISOLATION VALVE   | 1-5142               | AUXILIARY   | 612  | BORON INJ TANK OUTLET VLV RM | P         | RI       | Seismic and Relay | CL           | CL            | Y           | 1-12031 1-98282                 | MCC 1-AM-D-2B                             |
| 449      | 1     | 8      | 1-JCM-251     | 0      | BORON INJECTION / BORON INJECTION TANK 'B' CONTAINMENT ISOLATION VALVE   | 1-5142               | AUXILIARY   | 612  | BORON INJ TANK OUTLET VLV RM | P         | RI       | Seismic and Relay | CL           | CL            | Y           | 1-12012 1-98282                 | VCC 1-AZV-A-2B                            |
| 450      | 2     | 8      | 1-JCM-260     | 0      | SAFETY INJECTION / NORTH SAFETY INJECTION PUMP PP-26S DISCHARGE CONTAINMENT ISOLATION 4 in MOTOR OPERATED VALVE                    | 1-5142               | AUXILIARY   | 587  | N SAFETY INJ PMP RM          | P         | RI       | Seismic and Relay | OP           | OP            | N           | 1-12031, 1-98288                | 1-ABV-D-R5C                               |
| 451      | 1     | 8      | 1-JCM-265     | 0      | SAFETY INJECTION / SOUTH SAFETY INJECTION PUMP PP-26S DISCHARGE CONTAINMENT ISOLATION 4 in MOTOR OPERATED VALVE                    | 1-5142, 1-5123C      | AUXILIARY   | 587  | S SAFETY INJ PMP RM          | P         | RI       | Seismic and Relay | OP           | OP            | N           | 1-12011, 1-98288                | 1-ABV-A-RIC                               |
| 452      | 2     | 8      | 1-JCM-305     | 0      | RHR / RECIRCULATION SUMP TO EAST RHR/CTS PUMPS SUCTION CONTAINMENT ISOLATION 18 in MOTOR OPERATED VALVE                            | 1-5143               | AUXILIARY   | 591  | VESTIBULE                    | P         | DRIP     | Seismic and Relay | CL           | CL            | N           | 1-12031 1-98284                 | MCC 1-ABV-D-1B                            |
| 453      | 1     | 8      | 1-JCM-306     | 0      | RHR / RECIRCULATION SUMP TO WEST RHR/CTS PUMPS SUCTION CONTAINMENT ISOLATION 18 in MOTOR OPERATED VALVE                            | 1-5143               | AUXILIARY   | 591  | VESTIBULE                    | P         | DRIP     | Seismic and Relay | CL           | CL            | N           | 1-12011 1-98284                 | MCC 1-ABV-A-1B                            |
| 454      | 2     | 8      | 1-JCM-311     | 0      | RHR / EAST RHR TO REACTOR COOLANT LOOPS 1 AND 4 HOT LEGS CONTAINMENT ISOLATION 8 in MOTOR OPERATED VALVE                           | 1-5143               | AUXILIARY   | 609  | EAST RHR HEAT EXCHGR RM      | P         | DRIP     | Seismic and Relay | OP           | OP            | N           | 1-98284 1-12031                 | VCC 1-ABV-D-4B                            |

DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. Cl. | Eq. ID    | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.       | Ft EL | Rm or Rwr/Cl        | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|---------|-----------|--------|---|----------------------|-------------|-------|---------------------|-----------|----------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 455      | 1     | 8       | 1-ICM-321 | 0      | RHR / WEST RHR TO REACTOR COOLANT LOOPS 2 AND 3 HOT LEGS CONTAINMENT ISOLATION 8 in MOTOR OPERATED VALVE  | 1-5143               | AUXILIARY   | 609   | W RHR HEAT XCHGR RM | P         | DRIP     | Seismic and Relay | OP           | OP            | N           | 1-98284 1-12011                 | VCC 1-ABV-A-4C                            |
| 456      | 1     | 8       | 1-IMO-128 | 0      | RHR / REACTOR COOLANT LOOP 2 HOT LEG TO RHR PUMPS SUCTION SHUTOFF VALVE   | 1-5143               | CONTAINMENT | 598   | LOWER CONT. QUAD2   | P         | DRIP     | Seismic and Relay | CL           | CL            | Y           | 1-12013 1-98284                 | MCC 1-EZC-B-4C                            |
| 457      | 2     | 8       | 1-IMO-210 | 0      | CONTAINMENT SPRAY / EAST CONTAINMENT SPRAY PUMP PP-9E DISCHARGE SHUTOFF 10 in MOTOR OPERATED VALVE  | 1-5144               | AUXILIARY   | 573   | E CONT SPRAY PMP RM | P         | DRI      | Seismic and Relay | CL           | CL            | N           | 1-12031 1-98285                 | 1-ABV-D-2C                                |
| 458      | 2     | 8       | 1-IMO-211 | 0      | CONTAINMENT SPRAY / EAST CONTAINMENT SPRAY PUMP PP-9E DISCHARGE SHUTOFF 10 in MOTOR OPERATED VALVE  | 1-5144               | AUXILIARY   | 573   | E CONT SPRAY PMP RM | P         | DRI      | Seismic and Relay | CL           | CL            | N           | 1-12031 1-98285                 | 1-ABV-D-2B                                |
| 459      | 2     | 8       | 1-IMO-212 | 0      | CONTAINMENT SPRAY / EAST CONTAINMENT SPRAY PUMP PP-9E DISCHARGE TO CONTAINMENT SPRAY ADDITIVE EDUCTOR 2 in MOTOR OPERATED SHUTOFF VALVE               | 1-5144               | AUXILIARY   | 573   | E CONT SPRAY PMP RM | P         | DRI      | Seismic and Relay | OP           | OP            | N           | 1-12031 1-98285                 | VCC 1-ABV-D-3C                            |
| 460      | 2     | 8       | 1-IMO-215 | 0      | CONTAINMENT SPRAY / RWST TO EAST CONTAINMENT SPRAY PUMP PP-9E SUCTION 12 in MOTOR OPERATED SHUTOFF VALVE  | 1-5144               | AUXILIARY   | 573   | E CONT SPRAY PMP RM | P         | DRI      | Seismic and Relay | OP           | OP            | N           | 1-12031 1-98285                 | 1-ABV-D-3B                                |
| 461      | 1     | 8       | 1-IMO-220 | 0      | CONTAINMENT SPRAY / WEST CONTAINMENT SPRAY PUMP PP-9W DISCHARGE SHUTOFF 10 in MOTOR OPERATED VALVE  | 1-5144               | AUXILIARY   | 573   | W CONT SPRAY PMP RM | P         | DRI      | Seismic and Relay | CL           | CL            | N           | 1-12011 1-98285                 | 1-ABV-A-2C                                |
| 462      | 1     | 8       | 1-IMO-221 | 0      | CONTAINMENT SPRAY / WEST CONTAINMENT SPRAY PUMP PP-9W DISCHARGE SHUTOFF 10 in MOTOR OPERATED VALVE  | 1-5144               | AUXILIARY   | 573   | W CONT SPRAY PMP RM | P         | DRI      | Seismic and Relay | CL           | CL            | N           | 1-12011 1-98285                 | 1-ABV-A-2B                                |
| 463      | 1     | 8       | 1-IMO-222 | 0      | CONTAINMENT SPRAY / WEST CONTAINMENT SPRAY PUMP PP-9W DISCHARGE TO CONTAINMENT SPRAY ADDITIVE EDUCTOR SHUTOFF 2 in MOTOR OPERATED VALVE               | 1-5144               | AUXILIARY   | 573   | W CONT SPRAY PMP RM | P         | DRI      | Seismic and Relay | OP           | OP            | N           | 1-12011 1-98285                 | 1-ABV-A-3C                                |
| 464      | 1     | 8       | 1-IMO-225 | 0      | CONTAINMENT SPRAY / RWST TO WEST CONTAINMENT SPRAY PUMP PP-9W SUCTION 12 in MOTOR OPERATED SHUTOFF VALVE  | 1-5144               | AUXILIARY   | 573   | W CONT SPRAY PMP RM | P         | DRI      | Seismic and Relay | OP           | OP            | N           | 1-12011 1-98285                 | 1-ABV-A-3B                                |
| 465      | 2     | 8       | 1-IMO-255 | 0      | BORON INJECTION / BORON INJECTION TANK 'A' INLET SHUTOFF VALVE  | 1-5142               | AUXILIARY   | 612   | BORON INJ TANK RM   | P         | RI       | Seismic and Relay | CL           | CL            | Y           | 1-12031 1-98282                 | MCC 1-AM-D-2C                             |
| 466      | 1     | 8       | 1-IMO-256 | 0      | BORON INJECTION / BORON INJECTION TANK 'B' INLET SHUTOFF VALVE  | 1-5142               | AUXILIARY   | 612   | BORON INJ TANK RM   | P         | RI       | Seismic and Relay | CL           | CL            | Y           | 1-12012 1-98282                 | 1-AZV-A-2C                                |
| 467      | 12    | 8       | 1-IMO-261 | 0      | REFUELING WATER STORAGE TANK SUPPLY / TK-33 SUPPLY TO SAFETY INJECTION PUMP SHUTOFF 8 in MOTOR OPERATED VALVE   | 1-5142               | AUXILIARY   | 587   | N SAFETY INJ PMP RM | P         | RI       | Seismic and Relay | OP           | OP            | N           | 1-98281 1-12012                 | VCC1 1-AZV-A-3C                           |
| 468      | 2     | 8       | 1-IMO-262 | 0      | REFUELING WATER STORAGE TANK SUPPLY / SAFETY INJECTION PUMPS RECIRC TO REFUELING WATER STORAGE TANK TK-33 TRAIN 'A' SHUTOFF 2 in MOTOR OPERATED VALVE | 1-5142               | AUXILIARY   | 587   | S SAFETY INJ PMP RM | P         | RI       | Seismic and Relay | OP           | OP            | N           | 1-12031, 1-98281                | 1-ABV-D-R3C                               |
| 469      | 1     | 8       | 1-IMO-263 | 0      | REFUELING WATER STORAGE TANK SUPPLY / SAFETY INJECTION PUMPS RECIRC TO REFUELING WATER STORAGE TANK TK-33 TRAIN 'B' SHUTOFF 2 in MOTOR OPERATED VALVE | 1-5142               | AUXILIARY   | 587   | S SAFETY INJ PMP RM | P         | RI       | Seismic and Relay | OP           | OP            | N           | 1-12011, 1-98281                | 1-ABV-A-4B                                |
| 470      | 2     | 8       | 1-IMO-270 | 0      | SAFETY INJECTION / SAFETY INJECTION PUMPS DISCHARGE CROSSTIE TRAIN 'A' SHUTOFF 4 in MOTOR OPERATED VALVE  | 1-5142               | AUXILIARY   | 587   | N SAFETY INJ PMP RM | P         | RI       | Seismic and Relay | OP           | OP            | N           | 1-12031, 1-98288                | 1-ABV-D-R4B                               |
| 471      | 1     | 8       | 1-IMO-275 | 0      | SAFETY INJECTION / SAFETY INJECTION PUMPS DISCHARGE CROSSTIE TRAIN 'B' SHUTOFF 4 in MOTOR OPERATED VALVE  | 1-5142               | AUXILIARY   | 587   | S SAFETY INJ PMP RM | P         | RI       | Seismic and Relay | OP           | OP            | N           | 1-12011, 1-98288                | 1-ABV-A-5C                                |





DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID    | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.       | FIEL | Rm or Rm/CL               | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|-----------|--------|--|----------------------|-------------|------|---------------------------|-----------|----------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 472      | 2     | 8      | 1-IMO-310 | 0      | RHR / EAST RHR PUMP PP-35E SUCTION SHUTOFF 14 In MOTOR OPERATED VALVE  | 1-5143               | AUXILIARY   | 573  | EAST RHR PUMP RM          | P         | DRIP     | Seismic and Relay | OP           | OP            | N           | 1-12031 1-98284                 | 1-ABV-D-1C                                |
| 473      | 2     | 8      | 1-IMO-312 | 0      | RHR / EAST RHR HEAT EXCHANGER HE-17E OUTLET MINI-FLOW LINE SHUTOFF VALVE   | 1-5143               | AUXILIARY   | 609  | EAST RHR HEAT EXCHGR RM   | P         | DRIP     | Seismic and Relay | OP           | OP            | Y           | 1-12031 1-98284                 | 1-AM-D-1B                                 |
| 474      | 2     | 8      | 1-IMO-314 | 0      | RHR / EAST RHR PUMP PP-35E DISCHARGE CROSSTIE SHUTOFF 8 In MOTOR OPERATED VALVE  | 1-5143               | AUXILIARY   | 609  | EAST RHR HEAT EXCHGR RM   | P         | DRIP     | Seismic and Relay | CL           | CL            | N           | 1-12031 1-98287                 | 1-ABV-D-R5B                               |
| 475      | 2     | 8      | 1-IMO-315 | 0      | RHR / EAST RHR AND NORTH SAFETY INJECTION TO REACTOR COOLANT LOOPS 1 AND 4 HOT LEGS SHUTOFF VALVE                          | 1-5143               | CONTAINMENT | 612  | E CONT LWR VENT RM        | P         | DRIP     | Seismic and Relay | CL           | CL            | Y           | 1-12033 1-98287                 | 1-EZC-D-2C                                |
| 476      | 2     | 8      | 1-IMO-316 | 0      | RHR / EAST RHR AND NORTH SAFETY INJECTION TO REACTOR COOLANT LOOPS 1 AND 4 COLD LEGS SHUTOFF 8 In MOTOR OPERATED VALVE     | 1-5143               | CONTAINMENT | 612  | E CONT LWR VENT RM        | P         | DRIP     | Seismic and Relay | OP           | OP            | N           | 1-12032 1-98287                 | MCC 1-EZC-C-2A                            |
| 477      | 1     | 8      | 1-IMO-320 | 0      | RHR / WEST RHR PUMP PP-35W SUCTION SHUTOFF 14 In MOTOR OPERATED VALVE  | 1-5143               | AUXILIARY   | 573  | W RHR PUMP RM             | P         | DRIP     | Seismic and Relay | OP           | OP            | N           | 1-12011 1-98284                 | 1-ABV-A-1C                                |
| 478      | 1     | 8      | 1-IMO-322 | 0      | RHR / WEST RHR HEAT EXCHANGER HE-17W OUTLET MINI-FLOW LINE SHUTOFF VALVE   | 1-5143               | AUXILIARY   | 609  | W RHR HEAT EXCHGR RM      | P         | DRIP     | Seismic and Relay | OP           | OP            | Y           | 1-12011 1-98284                 | 1-AM-A-R1A                                |
| 479      | 1     | 8      | 1-IMO-324 | 0      | RHR / WEST RHR PUMP PP-35W DISCHARGE CROSSTIE SHUTOFF 8 In MOTOR OPERATED VALVE  | 1-5143               | AUXILIARY   | 609  | W RHR HEAT EXCHGR RM      | P         | DRIP     | Seismic and Relay | CL           | CL            | N           | 1-12012 1-98287                 | 1-AZV-A-R2D                               |
| 480      | 1     | 8      | 1-IMO-325 | 0      | RHR / WEST RHR AND SOUTH SAFETY INJECTION TO REACTOR COOLANT LOOPS 2 AND 3 HOT LEGS SHUTOFF VALVE                          | 1-5143               | CONTAINMENT | 612  | W CONT LOWER VENT RM      | P         | DRIP     | Seismic and Relay | CL           | CL            | Y           | 1-12013 1-98287                 | 1-EZC-A-R2D                               |
| 481      | 1     | 8      | 1-IMO-326 | 0      | RHR / WEST RHR AND SOUTH SAFETY INJECTION TO REACTOR COOLANT LOOPS 2 AND 3 COLD LEGS SHUTOFF 8 In MOTOR OPERATED VALVE     | 1-5143               | CONTAINMENT | 612  | W CONT LOWER VENT RM      | P         | DRIP     | Seismic and Relay | OP           | OP            | N           | 1-12013 1-98287                 | MCC 1-EZC-B-R4C                           |
| 482      | 2     | 8      | 1-IMO-330 | 0      | RHR / EAST RHR TO UPPER CONTAINMENT SPRAY SHUTOFF 8 In MOTOR OPERATED VALVE  | 1-5143               | AUXILIARY   | 609  | EAST RHR HEAT EXCHGR RM   | P         | DRIP     | Seismic and Relay | CL           | CL            | N           | 1-98285 1-12031                 | 1-AM-D-8B                                 |
| 483      | 1     | 8      | 1-IMO-331 | 0      | RHR / WEST RHR TO UPPER CONTAINMENT SPRAY SHUTOFF 8 In MOTOR OPERATED VALVE  | 1-5143               | AUXILIARY   | 609  | W RHR HEAT EXCHGR RM      | P         | DRIP     | Seismic and Relay | CL           | CL            | N           | 1-12011 1-98285                 | 1-AM-A-R1B                                |
| 484      | 12    | 8      | 1-IMO-340 | 0      | RHR / EAST RHR HEAT EXCHANGER TO CHARGING PUMPS SUCTION SHUTOFF 8 In MOTOR OPERATED VALVE                                  | 1-5143               | AUXILIARY   | 609  | EAST RHR HEAT EXCHGR RM   | P         | DRIP     | Seismic and Relay | CL           | CL            | N           | 1-12031 1-98273                 | 1-AM-D-1C                                 |
| 485      | 12    | 8      | 1-IMO-350 | 0      | RHR / WEST RHR HEAT EXCHANGER OUTLET TO SAFETY INJECTION PUMP SUCTION SHUTOFF 8 In MOTOR OPERATED VALVE                    | 1-5143               | AUXILIARY   | 609  | W RHR HEAT EXCHGR RM      | P         | DRIP     | Seismic and Relay | CL           | CL            | N           | 1-12011 1-98281                 | 1-AM-A-R2D                                |
| 486      | 12    | 8      | 1-IMO-360 | 0      | SAFETY INJECTION / SAFETY INJECTION PUMPS TO CVCS CHARGING PUMPS SUCTION HEADER CROSSTIE SHUTOFF VALVE                     | 1-5129               | AUXILIARY   | 587  | W CENTRIFUGAL CHRG PMP RM | P         | RIP      | Seismic and Relay | CL           | CL            | Y           | 1-12031 1-98282                 | VCC 1-ABV-D-R2B                           |
| 487      | 2     | 8      | 1-IMO-361 | 0      | SAFETY INJECTION / SAFETY INJECTION PUMPS SUCTION TO AND FROM CHARGING PUMPS SUCTION 'A' SHUTOFF 4 In MOTOR OPERATED VALVE | 1-5142               | AUXILIARY   | 587  | N SAFETY INJ PMP RM       | P         | Ri       | Seismic and Relay | CL           | CL            | N           | 1-12031 1-98281                 | VCC 1-ABV-D-R2C                           |
| 488      | 1     | 8      | 1-IMO-362 | 0      | SAFETY INJECTION / SAFETY INJECTION PUMPS SUCTION TO AND FROM CHARGING PUMP 'B' SHUTOFF 4 In MOTOR OPERATED VALVE          | 1-5142               | AUXILIARY   | 587  | N SAFETY INJ PMP RM       | P         | Ri       | Seismic and Relay | CL           | CL            | N           | 1-98281 1-12011                 | 1-ABV-A-R3B                               |
| 489      | 12    | 8      | 1-IMO-390 | 0      | RHR / RWST TK-33 TO RHR PUMPS SUCTION SHUTOFF 12 In MOTOR OPERATED VALVE   | 1-5143               | AUXILIARY   | 591  | VESTIBULE                 | P         | DRIP     | Seismic and Relay | OP           | OP            | N           | 1-12031 1-98284                 | 1-ABV-D-4C                                |
| 490      | 2     | 8      | 1-IMO-51  | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP 1 SHUTOFF 1.5 In MOTOR OPERATED VALVE                            | 1-5142               | CONTAINMENT | 598  | ANNULUS, QUAD1            | P         | Ri       | Seismic and Relay | OP           | OP            | N           | 1-12032 1-98282                 | 1-EZC-C-5B                                |

DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID    | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.       | FIEL | Rm or Rwt/Cl                     | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|-----------|--------|---|----------------------|-------------|------|----------------------------------|-----------|----------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 491      | 1     | 8      | 1-IMO-52  | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP 2 SHUTOFF 1.5 In MOTOR OPERATED VALVE     | 1-5142               | CONTAINMENT | 598  | ANNULUS, QUAD2                   | P         | RI       | Seismic and Relay | OP           | OP            | N           | 1-12013 1-98282                 | 1-EZC-B-1B                                |
| 492      | 1     | 8      | 1-IMO-53  | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP 3 SHUTOFF 1.5 In MOTOR OPERATED VALVE     | 1-5142               | CONTAINMENT | 598  | ANNULUS, QUAD3                   | P         | RI       | Seismic and Relay | OP           | OP            | N           | 1-12033 1-98282                 | 1-EZC-D-1B                                |
| 493      | 2     | 8      | 1-IMO-54  | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP 4 SHUTOFF 1.5 In MOTOR OPERATED VALVE     | 1-5142               | CONTAINMENT | 598  | ANNULUS, QUAD4                   | P         | RI       | Seismic and Relay | OP           | OP            | N           | 1-12013 1-98282                 | MCC 1-EZC-A-5B                            |
| 494      | 2     | 8      | 1-IMO-910 | 0      | CVCS / RWST TO CHARGING PUMP SUCTION SHUTOFF VALVE  | 1-5129               | AUXILIARY   | 587  | RECIPROCATING CHARGING PUMP ROOM | P         | RIP      | Seismic and Relay | CL           | OP            | Y           | 1-12031 1-98273                 | MCC 1-AM-D-3B                             |
| 495      | 1     | 8      | 1-IMO-911 | 0      | CVCS / RWST TO CHARGING PUMP SUCTION SHUTOFF VALVE  | 1-5129               | AUXILIARY   | 587  | E CENTRIFUGAL CHARGE PUMP RM     | P         | RIP      | Seismic and Relay | CL           | OP            | Y           | 1-12012 1-98273                 | 1-AZV-A-1B                                |
| 496      | 1     | 8      | 1-LSO-240 | 0      | DIESEL LUBE OIL / AB EMERG DIESEL UPPER VALVE GEAR LUBRICATION CONTROL SOLENOID 1                   | 1-5151A              | AUXILIARY   | 587  | AB EMER DSL GEN RM               | S         | EDG      | Seismic and Relay | CL           | CL            | Y           | 1-12010 1-98013                 | 1-ABD-A-R1CL, 1-ABD-B-R2AL                |
| 497      | 1     | 8      | 1-LSO-241 | 0      | DIESEL LUBE OIL / AB EMERG DIESEL UPPER VALVE GEAR LUBRICATION CONTROL SOLENOID 2                   | 1-5151A              | AUXILIARY   | 587  | AB EMER DSL GEN RM               | S         | EDG      | Seismic and Relay | CL           | CL            | Y           | 1-12010 1-98013                 |   |
| 498      | 2     | 8      | 1-LSO-245 | 0      | DIESEL LUBE OIL / CD EMERG DIESEL GENERATOR UPPER VALVE GEAR LUBRICATION CONTROL SOLENOID 1         | 1-5151C              | AUXILIARY   | 587  | CD EMER DSL GEN RM               | S         | EDG      | Seismic and Relay | CL           | CL            | Y           | 1-12030 1-98014                 | 1-ABD-D-R2AL, 1-ABD-D-R1CR                |
| 499      | 2     | 8      | 1-LSO-246 | 0      | DIESEL LUBE OIL / CD EMERG DIESEL GENERATOR UPPER VALVE GEAR LUBRICATION CONTROL SOLENOID 2         | 1-5151C              | AUXILIARY   | 587  | CD EMER DSL GEN RM               | S         | EDG      | Seismic and Relay | CL           | CL            | Y           | 1-12030 1-98014                 | 1-ABD-D-R1CR, 1-ABD-D-R2AL                |
| 500      | 1     | 8      | 1-MCM-221 | 0      | MAIN STEAM / MAIN STEAM LEAD 2 TO AUX FEED PUMP TURBINE 4 In MOTOR OPERATED SHUTOFF VALVE           | 1-5105D              | AUXILIARY   | 633  | W MAIN STM STOP ENCL             | P         | D        | Seismic and Relay | OP           | OP            | N           | 1-12011 1-98218                 | 1-AM-A-1B                                 |
| 501      | 1     | 8      | 1-MCM-231 | 0      | MAIN STEAM / MAIN STEAM LEAD 3 TO AUX FEED PUMP TURBINE 4 In MOTOR OPERATED SHUTOFF VALVE           | 1-5105D              | AUXILIARY   | 633  | W MAIN STM STOP ENCL             | P         | D        | Seismic and Relay | OP           | OP            | N           | 1-12031 1-98218                 | 1-AM-D-R8C                                |
| 502      | 2     | 8      | 1-MMO-210 | 0      | MAIN STEAM / STEAM STOP VALVE MRV-210 STEAM CYLINDER DUMP 4 In MOTOR OPERATED VALVES SELECTOR VALVE | 1-5105D              | AUXILIARY   | 633  | E MAIN STM STOP ENCL             | P         | D        | Seismic and Relay | OP           | OP            | N           | 1-12041 1-98538                 | BOP 1-EZC-CN-6C                           |
| 503      | 1     | 8      | 1-MMO-220 | 0      | MAIN STEAM / STEAM STOP VALVE MRV-220 STEAM CYLINDER DUMP 4 In MOTOR OPERATED VALVES SELECTOR VALVE | 1-5105D              | AUXILIARY   | 633  | W MAIN STM STOP ENCL             | P         | D        | Seismic and Relay | OP           | OP            | N           | 1-12020 1-98538                 | BOP 1-AM-B-R3B                            |
| 504      | 1     | 8      | 1-MMO-230 | 0      | MAIN STEAM / STEAM STOP VALVE MRV-230 STEAM CYLINDER DUMP VALVES 4 In MOTOR OPERATED SELECTOR VALVE | 1-5105D              | AUXILIARY   | 633  | W MAIN STM STOP ENCL             | P         | D        | Seismic and Relay | OP           | OP            | N           | 1-12041 1-98538                 | BOP 1-EZC-CS-R4C                          |
| 505      | 2     | 8      | 1-MMO-240 | 0      | MAIN STEAM / STEAM STOP VALVE MRV-240 STEAM CYLINDER DUMP VALVE 4 In MOTOR OPERATED SELECTOR VALVE  | 1-5105D              | AUXILIARY   | 633  | E MAIN STM STOP ENCL             | P         | D        | Seismic and Relay | OP           | OP            | N           | 1-12021 1-98538                 | BOP 1-EZC-BN-6B                           |
| 506      | 1     | 8      | 1-NMO-151 | 0      | PRESSURIZER / PRESSURIZER RELIEF VALVE NRV-151 UPSTREAM 3 In MOTOR OPERATED SHUTOFF VALVE           | 1-5128A              | CONTAINMENT | 650  | PRESSURIZER ENCL, INTERIOR       | P         | RIP      | Seismic and Relay | OP           | CL            | N           | 1-12013 1-98204                 | MCC 1-EZC-A-3D                            |
| 507      | 1     | 8      | 1-NMO-152 | 0      | PRESSURIZER / PRESSURIZER RELIEF VALVE NRV-152 UPSTREAM 3 In MOTOR OPERATED SHUTOFF VALVE           | 1-5128A              | CONTAINMENT | 650  | PRESSURIZER ENCL, INTERIOR       | P         | RIP      | Seismic and Relay | OP           | CL            | N           | 1-12013 1-98204                 | MCC 1-EZC-B-3D                            |
| 508      | 2     | 8      | 1-NMO-153 | 0      | PRESSURIZER / PRESSURIZER RELIEF VALVE NRV-153 3 In MOTOR OPERATED UPSTREAM SHUTOFF VALVE           | 1-5128A              | CONTAINMENT | 650  | PRESSURIZER ENCL, INTERIOR       | P         | RIP      | Seismic and Relay | OP           | CL            | N           | 1-12033 1-98204                 | MCC 1-EZC-D-3D                            |
| 509      | 2     | 8      | 1-NSO-21  | 0      | REACTOR COOLANT SYSTEM / REACTOR VESSEL HEAD VENT 1 In SOLENOID VALVE                               | 1-5128               | CONTAINMENT | 622  | REACTOR VESSEL HEAD AREA         | P         | DRIP     | Seismic Only      | CL           | CL            | N           | 1-12071 1-98307                 | 1-SSV-A1-1B                               |

DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID    | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.       | FIEL | Rm or Rwr/CL                | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|-----------|--------|--|----------------------|-------------|------|-----------------------------|-----------|----------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 510      | 2     | 8      | 1-NSO-22  | 0      | REACTOR COOLANT SYSTEM / REACTOR VESSEL HEAD VENT 1 in SOLENOID VALVE  | 1-5128               | CONTAINMENT | 622  | REACTOR VESSEL HEAD AREA    | P         | DRIP     | Seismic Only      | CL           | CL            | N           | 1-12071 1-98307                 | 1-SSV-A1-18                               |
| 511      | 1     | 8      | 1-NSO-23  | 0      | REACTOR COOLANT SYSTEM / REACTOR VESSEL HEAD VENT 1 in SOLENOID VALVE  | 1-5128               | CONTAINMENT | 621  | REACTOR VESSEL HEAD AREA    | P         | DRIP     | Seismic Only      | CL           | CL            | N           | 1-12061 1-98307                 | 1-CCV-AB-73                               |
| 512      | 1     | 8      | 1-NSO-24  | 0      | REACTOR COOLANT SYSTEM / REACTOR VESSEL HEAD VENT 1 in SOLENOID VALVE  | 1-5128               | CONTAINMENT | 621  | REACTOR VESSEL HEAD AREA    | P         | DRIP     | Seismic Only      | CL           | CL            | N           | 1-12061 1-98307                 | 1-CCV-AB-73                               |
| 513      | 2     | 8      | 1-NSO-61  | 0      | REACTOR COOLANT SYSTEM VENTS / PRESSURIZER OME-4 POST-ACCIDENT VENT 'A' SOLENOID VALVE                                   | 1-5128A              | CONTAINMENT | 650  | PRESSURIZER ENCL. INTERIOR  | P         | IP       | Seismic and Relay | CL           | CL            | Y           | 1-12071 1-98307                 | 1-SSV-A1-17                               |
| 514      | 2     | 8      | 1-NSO-62  | 0      | REACTOR COOLANT SYSTEM VENTS / PRESSURIZER OME-4 POST-ACCIDENT VENT 'A' SOLENOID VALVE                                   | 1-5128A              | CONTAINMENT | 650  | PRESSURIZER ENCL. INTERIOR  | P         | RIP      | Seismic and Relay | CL           | CL            | Y           | 1-12071 1-98307                 | 1-SSV-A1-17                               |
| 515      | 1     | 8      | 1-NSO-63  | 0      | REACTOR COOLANT SYSTEM VENTS / PRESSURIZER OME-4 POST-ACCIDENT VENT 'B' SOLENOID VALVE                                   | 1-5128A              | CONTAINMENT | 650  | PRESSURIZER ENCL. INTERIOR  | P         | RIP      | Seismic and Relay | CL           | CL            | Y           | 1-12061 1-98307                 | 1-CCV-AB-74                               |
| 516      | 1     | 8      | 1-NSO-64  | 0      | REACTOR COOLANT SYSTEM VENTS / PRESSURIZER OME-4 POST-ACCIDENT VENT 'B' SOLENOID VALVE                                   | 1-5128A              | CONTAINMENT | 650  | PRESSURIZER ENCL. INTERIOR  | P         | RIP      | Seismic and Relay | CL           | CL            | Y           | 1-12061 1-98307                 | 1-CCV-AB-74                               |
| 517      | 2     | 8      | 1-QCM-250 | 0      | RCTR COOLANT PMP SEAL WTR IN/LEAKOFF / RCP SEAL WATER RETURN 'A' CONTAINMENT ISOLATION 4 in MOTOR OPERATED VALVE         | 1-5129A              | CONTAINMENT | 598  | ANNULUS, QUAD2              | P         | RI       | Seismic and Relay | OP           | OP            | N           | 1-12033 1-98274                 | MCC 1-EZC-D-R58                           |
| 518      | 1     | 8      | 1-QCM-350 | 0      | RCTR COOLANT PMP SEAL WTR IN/LEAKOFF / RCP SEAL WATER RETURN 'B' CONTAINMENT ISOLATION 4 in MOTOR OPERATED VALVE         | 1-5129A              | AUXILIARY   | 591  | VESTIBULE                   | P         | RI       | Seismic and Relay | OP           | OP            | N           | 1-12011 1-98274                 | MCC 1-ABV-A-58                            |
| 519      | 2     | 8      | 1-QMO-200 | 0      | CVCS / CHARGING TO REGENERATIVE HEAT EXCHANGER 'A' SHUTOFF VALVE   | 1-5129               | AUXILIARY   | 587  | RECIPROCATING CHRG PMP RM   | P         | RIP      | Seismic and Relay | OP           | CL            | Y           | 1-12031 1-98273                 | 1-AM-D-4B                                 |
| 520      | 1     | 8      | 1-QMO-201 | 0      | CVCS / CHARGING TO REGENERATE HEAT EXCHANGER 'B' SHUTOFF VALVE   | 1-5129               | AUXILIARY   | 587  | RECIPROCATING CHRG PMP RM   | P         | RIP      | Seismic and Relay | OP           | CL            | Y           | 1-12012 1-98273                 | VCC 1-AZV-A-3B                            |
| 521      | 2     | 8      | 1-QMO-225 | 0      | CVCS / EAST CENTRIFUGAL CHARGING PUMP MINI FLOW TO RCP SEAL WATER HEAT EXCHANGER HE-11 2 in MOTOR OPERATED SHUTOFF VALVE | 1-5129               | AUXILIARY   | 587  | W CENTRIFUGAL CHRG PMP RM   | P         | RIP      | Seismic and Relay | OP           | OP            | N           | 1-12031 1-98266                 | VCC 1-ABV-D-5C                            |
| 522      | 1     | 8      | 1-QMO-226 | 0      | CVCS / WEST CENTRIFUGAL CHARGING PUMP MINI FLOW TO RCP SEAL WATER HEAT EXCHANGER HE-11 2 in MOTOR OPERATED SHUTOFF VALVE | 1-5129               | AUXILIARY   | 587  | W CENTRIFUGAL CHRG PMP RM   | P         | RIP      | Seismic and Relay | OP           | OP            | N           | 1-12011 1-98266                 | VCC 1-ABV-A-5C                            |
| 523      | 12    | 8      | 1-QMO-410 | 0      | CVCS / EMERG. BORATION TO CHARGING PUMP SUCTION SHUTOFF VALVE  | 12-5131              | AUXILIARY   | 587  | BORIC ACID STOR TANK        | P         | RI       | Seismic and Relay | CL           | CL            | Y           | 1-12011 1-98273                 | VCC 1-ABV-A-R2C                           |
| 524      | 2     | 8      | 1-QMO-451 | 0      | CVCS / REACTOR COOLANT LETDOWN VOLUME CONTROL TANK TK-10 TO CHARGING PUMP 'A' SHUTOFF 4 in MOTOR OPERATED VALVE          | 1-5129A              | AUXILIARY   | 609  | VOL CONTROL TANK E HALLWAY  | P         | RI       | Seismic and Relay | OP           | OP            | N           | 1-12031 1-98271                 | 1-AM-D-3C                                 |
| 525      | 1     | 8      | 1-QMO-452 | 0      | CVCS / REACTOR COOLANT LETDOWN VOLUME CONTROL TANK TK-10 TO CHARGING PUMP 'B' SHUTOFF 4 in MOTOR OPERATED VALVE          | 1-5129A              | AUXILIARY   | 609  | VOL CONTROL TANK E HALLWAY  | P         | RI       | Seismic and Relay | OP           | OP            | N           | 1-12012 1-98271                 | VCC 1-AZV-A-1C                            |
| 526      | 12    | 8      | 1-QT-508  | 0      | MAIN STEAM / TURBINE DRIV AUX FEED PUMP PP-4 TRIP AND THROTTLE VALVE   | 1-5105E              | TURBINE     | 591  | TB DRIVEN AUX FDWTR PMP     | P         | D        | Seismic and Relay | CL           | OP            | Y           | 1-12065 1-98215                 | 1-AB-N-3B                                 |
| 527      | 2     | 8      | 1-WMO-701 | 0      | ESW / EAST ESW PUMP PP-7E DISCHARGE SHUTOFF VALVE  | 1-5113               | SCREENHOUSE | 591  | E ESSNTL SERV WTR PMP RM    | S         | ESW      | Seismic and Relay | C/O          | AS IS         | Y           | 1-12033 1-98415                 | 1-PS-D-4C                                 |
| 528      | 1     | 8      | 1-WMO-702 | 0      | ESW / WEST ESW PUMP PP-7W DISCHARGE SHUTOFF VALVE  | 1-5113               | SCREENHOUSE | 591  | W ESSNTL SERV WTR PMP RM    | S         | ESW      | Seismic and Relay | C/O          | AS IS         | Y           | 1-12014 1-98415                 | 1-PS-A-2D                                 |
| 529      | 1     | 8      | 1-WMO-705 | 0      | ESW / WEST ESW SUPPLY HEADER CROSSTIE TO UNIT 2 20 in MOTOR OPERATED SHUTOFF VALVE                                       | 1-5113 2-5113        | TURBINE     | 569  | ESSNTL SERV WTR PIPE TUNNEL | S         | ESW      | Seismic and Relay | OP           | OP            | N           | 1-12010 1-98416                 | 1-ABD-A-1B                                |



**DONALD C. COOK NUCLEAR PLANT UNIT #1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**

| Line No. | Train | Eq. CL | Eq. ID         | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.       | FIEL | Rm or Rwt/CL                | Flow Path | Function    | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|----------------|--------|--|----------------------|-------------|------|-----------------------------|-----------|-------------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 530      | 2     | 8      | 1-WMO-707      | 0      | ESW / EAST ESSENTIAL SERVICE WATER SUPPLY HEADER CROSSTIE TO UNIT 2 20 in MOTOR OPERATED SHUTOFF VALVE | 1-5113, 2-5113       | TURBINE     | 569  | ESSNTL SERV WTR PIPE TUNNEL | S         | ESW         | Seismic and Relay | OP           | OP            | N           |                                 |   |
| 531      | 2     | 8      | 1-WMO-711      | 0      | ESW / EAST CONTAINMENT SPRAY HEAT EXCHANGER HE-18E ESW INLET 12 in MOTOR OPERATED SHUTOFF VALVE        | 1-5113               | AUXILIARY   | 633  | 633 HALLWAY                 | S         | ESW         | Seismic and Relay | OP           | OP            | N           | 1-12031 1-98418                 | 1-AM-D-4C                                 |
| 532      | 2     | 8      | 1-WMO-713      | 0      | ESW / EAST CONTAINMENT SPRAY HEAT EXCHANGER ESW OUTLET SHUTOFF VALVE                                   | 1-5113               | AUXILIARY   | 609  | 609 HALLWAY                 | S         | ESW         | Seismic and Relay | CL           | CL            | Y           | 1-12031 1-98418                 | 1-AM-D-5B                                 |
| 533      | 1     | 8      | 1-WMO-715      | 0      | ESW / WEST CONTAINMENT SPRAY HEAT EXCHANGER HE-18W ESW INLET 12 in MOTOR OPERATED SHUTOFF VALVE        | 1-5113               | AUXILIARY   | 633  | 633 HALLWAY                 | S         | ESW         | Seismic and Relay | OP           | OP            | N           | 1-12012 1-98418                 | 1-AZV-A-4C                                |
| 534      | 1     | 8      | 1-WMO-717      | 0      | ESW / WEST CONTAINMENT SPRAY HEAT EXCHANGER ESW OUTLET SHUTOFF VALVE                                   | 1-5113               | AUXILIARY   | 609  | 609 HALLWAY                 | S         | ESW         | Seismic and Relay | CL           | CL            | Y           | 1-12012 1-98418                 | 1-AZV-A-4B                                |
| 535      | 1     | 8      | 1-WMO-721      | 0      | ESW / WEST ESW SUPPLY HEADER TO AB EMERG DIESEL HEAT EXCHANGER SHUTOFF VALVE                           | 1-5113               | AUXILIARY   | 587  | AB DSL RM SO PIPE TUNN      | S         | ESW         | Seismic and Relay | CL           | OP            | Y           | 1-12010 1-98418                 | 1-ABD-A-1C                                |
| 536      | 2     | 8      | 1-WMO-723      | 0      | ESW / EAST ESW SUPPLY HEADER TO AB EMERG DIESEL HEAT EXCHANGER SHUTOFF VALVE                           | 1-5113               | AUXILIARY   | 587  | AB DSL RM SO PIPE TUNN      | S         | ESW         | Seismic and Relay | CL           | OP            | Y           | 1-12030 1-98418                 | 1-ABD-D-1C                                |
| 537      | 2     | 8      | 1-WMO-725      | 0      | ESW / EAST ESW SUPPLY HEADER TO CD EMERG DIESEL HEAT EXCHANGER SHUTOFF VALVE                           | 1-5113               | AUXILIARY   | 587  | AB DSL RM SO PIPE TUNN      | S         | ESW         | Seismic and Relay | CL           | OP            | Y           | 1-12030 1-98418                 | 1-ABD-D-R2D                               |
| 538      | 1     | 8      | 1-WMO-727      | 0      | ESW / WEST ESW SUPPLY HEADER TO CD EMERG DIESEL HEAT EXCHANGER SHUTOFF VALVE                           | 1-5113               | AUXILIARY   | 587  | AB DSL RM SO PIPE TUNN      | S         | ESW         | Seismic and Relay | CL           | OP            | Y           | 1-12010 1-98418                 | 1-ABD-A-R2D                               |
| 539      | 2     | 8      | 1-WMO-731      | 0      | ESW / EAST CCW HEAT EXCHANGER HE-15E ESW INLET 18 in MOTOR OPERATED SHUTOFF VALVE                      | 1-5113               | AUXILIARY   | 609  | 609 HALLWAY                 | S         | ESW         | Seismic and Relay | OP           | OP            | N           | 1-12031 1-98418                 | 1-AM-D-5C                                 |
| 540      | 2     | 8      | 1-WMO-733      | 0      | ESW / EAST CCW HEAT EXCHANGER HE-15E ESW OUTLET SHUTOFF VALVE  | 1-5113               | AUXILIARY   | 609  | 609 HALLWAY                 | S         | ESW         | Seismic and Relay | AS IS        | AS IS         | Y           | 1-12031 1-98418                 | 1-AM-D-6C                                 |
| 541      | 1     | 8      | 1-WMO-735      | 0      | ESW / WEST CCW HEAT EXCHANGER HE-15W ESW INLET 18 in MOTOR OPERATED SHUTOFF VALVE                      | 1-5113               | AUXILIARY   | 609  | 609 HALLWAY                 | S         | ESW         | Seismic and Relay | OP           | OP            | N           | 1-12012 1-98418                 | 1-AZV-A-5C                                |
| 542      | 1     | 8      | 1-WMO-737      | 0      | ESW / WEST CCW HEAT EXCHANGER HE-15W ESW OUTLET SHUTOFF VALVE  | 1-5113               | AUXILIARY   | 609  | 609 HALLWAY                 | S         | ESW         | Seismic and Relay | AS IS        | AS IS         | Y           | 1-12012 1-98418                 | 1-AZV-A-5B                                |
| 543      | 1     | 8      | 1-WMO-744      | 0      | AFW / (ESW TO WEST MOTOR DRIV AUX FEEDWATER PUMP) SHUTOFF 4 in MOV                                     | 1-5108A 1-5113       | TURBINE     | 591  | W MOTOR DRIVEN AUX FDWTR PU | P         | D           | Seismic and Relay | CL           | CL            | N           | 1-12011, 1-98218                | VCC-1-ABV-A-R4C                           |
| 544      | 12    | 8      | 1-WMO-753      | 0      | AFW / (ESW TO TURB DRIV AUX FEED PUMP PP-4) SHUTOFF 6 in MOTOR OPERATED VALVE                          | 1-5108A 1-5113       | TURBINE     | 591  | TB DRIVEN AUX FDWTR PMP     | P         | D           | Seismic and Relay | CL           | CL            | N           | 1-12012 1-98218                 | 1-AZ-8C-3B                                |
| 545      | 2     | 8      | 1-WMO-754      | 0      | AFW / (ESW TO EAST MOTOR DRIV AUX FEED PUMP) SHUTOFF 4 in MOTOR OPERATED VALVE                         | 1-5108A 1-5113       | TURBINE     | 591  | E MOTOR DRIVEN AUX FDWTR PU | P         | D           | Seismic and Relay | CL           | CL            | N           | 1-12031 1-98214                 | VCC-1-ABV-D-R3B                           |
| 546      | 12    | 8      | 1-XSO-505      | 0      | CONTROL AIR / PRESSURIZER TRAIN 1 in B in PRESSURE RELIEF VALVE NRV-152 CONTROL SOLENOID               | 1-51200              | CONTAINMENT | 650  | PRESSRZR ENCL, INTERIOR     | S         | SUPPORT AIR | Seismic and Relay | CL           | CL            |             |                                 |   |
| 547      | 12    | 8      | 1-XSO-507      | 0      | CONTROL AIR / PRESSURIZER TRAIN 'A' PRESSURE RELIEF VALVE NRV-153 CONTROL SOLENOID                     | 1-51200              | CONTAINMENT | 650  | PRESSRZR ENCL, INTERIOR     | S         | SUPPORT AIR | Seismic and Relay | CL           | CL            |             |                                 |   |
| 548      | 2     | 9      | 1-HV-AES-1     | 0      | AUX BUILDING VENTILATION / AUX BUILDING VENTILATION ENGINEERED SAFETY FEATURE EXHAUST UNIT 1           | 12-5148A             | AUXILIARY   | 633  | NORM BLOWDOWN FLASHTANK RM  | S         | HVAC        | Seismic and Relay | NR           | R             | Y           | 1-12031                         | 1-AM-D-R3C                                |
| 549      | 1     | 9      | 1-HV-AES-2     | 0      | AUX BUILDING VENTILATION / AUX BUILDING VENTILATION ENGINEERED SAFETY FEATURE EXHAUST UNIT 2           | 12-5148A             | AUXILIARY   | 633  | NORM BLOWDOWN FLASHTANK RM  | S         | HVAC        | Seismic and Relay | NR           | R             | Y           | 1-12011                         | 1-AM-A-3C                                 |
| 550      | 2     | 9      | 1-HV-AFP-BRE-1 | 0      | AUX BUILDING VENTILATION / 'N' BATTERY ROOM EAST EXHAUST FAN   | 12-5148B             | AUXILIARY   | 633  | 633 HALLWAY                 | S         | HVAC        | Seismic and Relay |              |               | Y           | 1-12031 1-98218                 | 1-AM-D-R3A                                |

DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. Cl. | Eq. ID         | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.       | FIEL | Rm or Rwt/Cl                | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|---------|----------------|--------|--|----------------------|-------------|------|-----------------------------|-----------|----------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 551      | 1     | 9       | 1-HV-AFP-BRE-2 | 0      | AUX BUILDING VENTILATION / TR. 11 BATTERY ROOM WEST EXHAUST FAN  | 12-5148B             | AUXILIARY   | 633  | 633 HALLWAY                 | S         | HVAC     | Seismic and Relay |              |               | Y           | 1-12010 1-98216                 | 1-ABD-B-R1D                               |
| 552      | 2     | 9       | 1-HV-AFP-M1    | 0      | TURBINE BUILDING VENTILATION / EAST MOTOR DRIV AUX FEEDWATER PUMP ROOM EXHAUST FAN                               | 12-5148B             | TURBINE     | 591  | E MOTOR DRIVEN AUX FDWTR PU | S         | HVAC     | Seismic and Relay |              |               | Y           | 1-12030 1-98214                 | 1-AB-D-R2D                                |
| 553      | 2     | 9       | 1-HV-AFP-M2    | 0      | TURBINE BUILDING VENTILATION / EAST MOTOR DRIV AUX FEED WATER PUMP ROOM SUPPLY FAN                               | 12-5148B             | TURBINE     | 591  | E MOTOR DRIVEN AUX FDWTR PU | S         | HVAC     | Seismic and Relay |              |               | Y           | 1-12031 1-98214                 | VCC 1-ABV-D-R5A                           |
| 554      | 2     | 9       | 1-HV-AFP-T1    | 0      | TURBINE BUILDING VENTILATION / TURB DRIV AUX FEED PUMP ROOM SOUTH EXHAUST FAN                                    | 12-5148B             | TURBINE     | 591  | TB DRIVEN AUX FDWTR PMP     | S         | HVAC     | Seismic and Relay |              |               | Y           | 1-12031, 1-98216                | 1-ABV-D-R4A                               |
| 555      | 1     | 9       | 1-HV-AFP-T2    | 0      | TURBINE BUILDING VENTILATION / TURBINE DRIV AUX FEED PUMP ROOM NORTH EXHAUST FAN                                 | 12-5148B             | TURBINE     | 591  | TB DRIVEN AUX FDWTR PMP     | S         | HVAC     | Seismic and Relay |              |               | Y           | 1-12012, 1-98216                | 1-AZ-BC-2A                                |
| 556      | 1     | 9       | 1-HV-AFP-X1    | 0      | TURBINE BUILDING VENTILATION / WEST MOTOR DRIV AUX FEED PUMP ROOM EAST EXHAUST FAN                               | 12-5148B             | TURBINE     | 591  | W MOTOR DRIVEN AUX FDWTR PU | S         | HVAC     | Seismic and Relay |              |               | Y           | 1-12010, 1-98216                | 1-AB-A-2E                                 |
| 557      | 1     | 9       | 1-HV-AFP-X2    | 0      | TURBINE BUILDING VENTILATION / WEST MOTOR DRIV AUX FEEDWATER PUMP ROOM WEST EXHAUST FAN                          | 12-5148B             | TURBINE     | 591  | W MOTOR DRIVEN AUX FDWTR PU | S         | HVAC     | Seismic and Relay |              |               | Y           | 1-12011 1-98216                 | 1-ABV-A-R4A                               |
| 558      | 1     | 9       | 1-HV-CEQ-1     | 0      | HYDROGEN SKIMMER / CONTAINMENT HYDROGEN SKIMMER VENTILATION FAN 1  | 1-5135B              | CONTAINMENT | 625  | HV-CEQ-1 FAN RM             | S         | CCW      | Seismic and Relay |              |               | Y           | 1-12013 1-98266                 | 1-EZC-B-R2D                               |
| 559      | 2     | 9       | 1-HV-CEQ-2     | 0      | HYDROGEN SKIMMER / CONTAINMENT HYDROGEN SKIMMER VENTILATION FAN 2  | 1-5135B              | CONTAINMENT | 625  | HV-CEQ-1 FAN RM             | S         | CCW      | Seismic and Relay |              |               | Y           | 1-12032 1-98266                 | 1-EZC-C-R3C                               |
| 560      | 1     | 9       | 1-HV-DGS-1     | 0      | DIESEL ROOM VENTILATION / AB EMERG DIESEL GENERATOR VENTILATION SUPPLY FAN                                       | 1-5148C              | AUXILIARY   | 587  | AB EMER DSL GEN RM          | S         | HVAC     | Seismic and Relay |              |               | Y           | 1-12010 1-98016                 | 1-ABD-A-R2B                               |
| 561      | 2     | 9       | 1-HV-DGS-2     | 0      | DIESEL ROOM VENTILATION / CD EMERG DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN                                  | 1-5148C              | AUXILIARY   | 587  | CD EMER DSL GEN RM          | S         | HVAC     | Seismic and Relay |              |               | Y           | 1-12030 1-98017                 | 1-ABD-C-2E                                |
| 562      | 1     | 9       | 1-HV-DGS-3     | 0      | DIESEL ROOM VENTILATION / AB EMERG DIESEL GENERATOR ROOM CONTROL PANEL VENTILATION SUPPLY FAN                    | 1-5148C              | AUXILIARY   | 587  | AB EMER DSL GEN RM          | S         | HVAC     | Seismic and Relay |              |               | Y           | 1-12010 1-98016                 | 1-ABD-B-R1E                               |
| 563      | 2     | 9       | 1-HV-DGS-4     | 0      | DIESEL ROOM VENTILATION / CD EMERG DIESEL GENERATOR ROOM CONTROL PANEL VENTILATION SUPPLY FAN                    | 1-5148C              | AUXILIARY   | 587  | CD EMER DSL GEN RM          | S         | HVAC     | Seismic and Relay |              |               | Y           | 1-12030 1-98017                 | 1-ABD-C-1A                                |
| 564      | 1     | 9       | 1-HV-DGX-1     | 0      | DIESEL ROOM VENTILATION / AB EMERG DIESEL GENERATOR ROOM VENTILATION EXHAUST FAN                                 | 1-5148C              | AUXILIARY   | 587  | AB EMER DSL GEN RM          | S         | HVAC     | Seismic and Relay |              |               | Y           | 1-12010 1-98016                 | 1-ABD-B-2E                                |
| 565      | 2     | 9       | 1-HV-DGX-2     | 0      | DIESEL ROOM VENTILATION / CD EMERG DIESEL GENERATOR VENTILATION EXHAUST FAN                                      | 1-5148C              | AUXILIARY   | 587  | CD EMER DSL GEN RM          | S         | HVAC     | Seismic and Relay |              |               | Y           | 1-12030 1-98017                 | 1-ABD-D-R2B                               |
| 566      | 1     | 9       | 1-HV-SGRS-1A   | 0      | AUXILIARY BUILDING VENTILATION / CONTROL ROD DRIVE EQUIPMENT ROOM AND INVERTER AREA VENTILATION SOUTH SUPPLY FAN | 1-5148C              | AUXILIARY   | 609  | 4KV RM - 600V SWITCHGEAR    | S         | HVAC     | Seismic and Relay |              |               | Y           |                                 |   |
| 567      | 1     | 9       | 1-HV-SGRS-2    | 0      | AUX BUILDING VENTILATION / 4KV ROOM AB 4KV SWITCHGEAR AREA VENTILATION SUPPLY FAN                                | 1-5148C              | AUXILIARY   | 609  | 4KV RM - AB 4KV SWGR        | S         | HVAC     | Seismic and Relay |              |               | Y           | 1-12013 1-98741                 | 1-EZC-A-R4B                               |
| 568      | 2     | 9       | 1-HV-SGRS-3    | 0      | AUX BUILDING VENTILATION / 4KV ROOM CD 4KV SWITCHGEAR AREA VENTILATION SUPPLY FAN                                | 1-5148C              | AUXILIARY   | 609  | 4KV RM - CD 4KV SWGR        | S         | HVAC     | Seismic and Relay |              |               | Y           | 1-12033 1-98741                 | 1-EZC-D-R2A                               |
| 569      | 2     | 9       | 1-HV-SGRS-4A   | 0      | AUX BUILDING VENTILATION / CONTROL ROD DRIVE EQUIP ROOM AND INVERTER AREA VENTILATION NORTH SUPPLY FAN           | 1-5148C              | AUXILIARY   | 609  | 4KV RM - 600V SWGR          | S         | HVAC     | Seismic and Relay |              |               | Y           | 1-12033, 1-98741                | 1-EZC-D-6C                                |
| 570      | 12    | 9       | 1-HV-SGRS-7    | 0      | AUX BUILDING VENTILATION / 4KV ROOM 600V SWITCHGEAR TRANSFORMER TR-11B AND TR-11D AREA VENTILATION SUPPLY FAN    | 1-5148C              | AUXILIARY   | 609  | 4KV RM - 600V SWGR          | S         | HVAC     | Seismic and Relay |              |               | Y           | 1-12033, 1-98741                | 1-EZC-D-6C                                |

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# DONALD C. COOK NUCLEAR PLANT UNIT # 1 SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

Page # 30

| Line No. | Train | Eq. CL | Eq. ID           | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.       | FIEL | Rm or Rwf/CI               | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|------------------|--------|--|----------------------|-------------|------|----------------------------|-----------|----------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 571      | 12    | 9      | 1-HV-SGRS-8      | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600V SWITCHGEAR TRANSFORMERS TR11A AND TR11C AREA VENTILATION SUPPLY FAN | 1-5148C              | AUXILIARY   | 609  | 4KV RM - 600V SWGR         | S         | HVAC     | Seismic and Relay |              |               | Y           |                                 |   |
| 572      | 12    | 9      | 1-HV-SGRS-9      | 0      | AUXILIARY BUILDING VENTILATION / 600VAC MOTOR CONTROL CENTER MEZZANINE AREA VENTILATION SUPPL FAN                  | 1-5148C              | AUXILIARY   | 613  | 4KV RM - MEZZANINE         | S         | HVAC     | Seismic and Relay |              |               | Y           |                                 |   |
| 573      | 1     | 9      | 1-HV-SGRX-2      | 0      | AUX BUILDING VENTILATION / 4KV ROOM AB 4KV SWITCHGEAR AREA VENTILATION EXHAUST FAN                                 | 1-5148C              | AUXILIARY   | 609  | 4KV RM - AB 4KV SWGR       | S         | HVAC     | Seismic and Relay |              |               | Y           | 1-12013 1-98741                 | 1-EZC-B-R3C                               |
| 574      | 2     | 9      | 1-HV-SGRX-3      | 0      | AUX BUILDING VENTILATION / 4KV ROOM CD 4KV SWITCHGEAR AREA VENTILATION EXHAUST FAN                                 | 1-5148C              | AUXILIARY   | 609  | 4KV RM - CD 4KV SWGR       | S         | HVAC     | Seismic and Relay |              |               | Y           | 1-12013 1-98741                 | 1-EZC-B-R3D                               |
| 575      | 1     | 9      | 1-HV-SGRX-5      | 0      | AUX BUILDING VENTILATION / AB BATTERY EQUIPMENT AREA BATTERY ROOM VENTILATION EXHAUST FAN                          | 1-5148C              | AUXILIARY   | 609  | AB BATT EQUIP              | S         | HVAC     | Seismic and Relay |              |               | Y           | 1-12013                         |   |
| 576      | 2     | 9      | 1-HV-SGRX-6      | 0      | AUX BUILDING VENTILATION / CD BATTERY EQUIPMENT AREA BATTERY ROOM VENTILATION EXHAUST FAN                          | 1-5148C              | AUXILIARY   | 626  | SWGR CSR                   | S         | HVAC     | Seismic and Relay |              |               | Y           | 1-12033 1-98741                 | 1-EZC-D-R2C                               |
| 577      | 12    | 9      | 12-HV-ACCP-1     | 0      | AUX BUILDING VENTILATION / CCW PUMPS VENTILATION NORTH SUPPLY FAN  | 12-5148A             | AUXILIARY   | 633  | 633 HALLWAY                | S         | HVAC     | Seismic and Relay |              |               | Y           | 2-12011 2-98406                 | 2-AM-A-R5C                                |
| 578      | 12    | 9      | 12-HV-ACCP-2     | 0      | AUX BUILDING VENTILATION / CCW PUMPS VENTILATION MIDDLE SUPPLY FAN   | 12-5148A             | AUXILIARY   | 633  | 633 HALLWAY                | S         | HVAC     | Seismic and Relay |              |               | Y           | 1-12011 1-98406                 | 1-AM-A-R5C                                |
| 579      | 12    | 9      | 12-HV-ACCP-3     | 0      | AUX BUILDING VENTILATION / CCW PUMPS VENTILATION SOUTH SUPPLY FAN  | 12-5148A 12-5152E    | AUXILIARY   | 633  | 633 HALLWAY                | S         | HVAC     | Seismic and Relay |              |               | Y           | 1-12031 1-98406                 | 1-AM-D-R5A                                |
| 580      | 1     | 9      | 12-HV-ESW-5      | 0      | SCREENHOUSE VENTILATION / UNIT 1 WEST ESW PUMP ROOM SUPPLY VENTILATION FAN   | 12-5148B             | SCREENHOUSE | 591  | W ESSNTL SERV WTR PMP RM   | S         | HVAC     | Seismic and Relay |              |               | Y           | 1-12014 1-98415                 | 1-PS-A-1A                                 |
| 581      | 1     | 9      | 12-HV-ESW-6      | 0      | SCREENHOUSE VENTILATION / UNIT 1 WEST ESW PUMP ROOM SUPPLY VENTILATION FAN   | 12-5148B             | SCREENHOUSE | 591  | W ESSNTL SERV WTR PMP RM   | S         | HVAC     | Seismic and Relay |              |               | Y           | 1-12014 1-98415                 | 1-PS-A-2A                                 |
| 582      | 2     | 9      | 12-HV-ESW-7      | 0      | SCREENHOUSE VENTILATION / UNIT #1 EAST ESW PUMP ROOM SUPPLY VENTILATION FAN  | 12-5148B             | SCREENHOUSE | 591  | E ESSNTL SERV WTR PMP RM   | S         | HVAC     | Seismic and Relay |              |               | Y           | 1-12033 1-98415                 | 1-PS-D-2B                                 |
| 583      | 2     | 9      | 12-HV-ESW-8      | 0      | SCREENHOUSE VENTILATION / UNIT 1 ESW PUMP ROOM SUPPLY VENTILATION FAN  | 12-5148B             | SCREENHOUSE | 591  | E ESSNTL SERV WTR PMP RM   | S         | HVAC     | Seismic and Relay |              |               | Y           | 1-12033 1-98415                 | 1-PS-D-3B                                 |
| 584      | 2     | 10     | 1-HV-ACRA-1      | 0      | CONTROL ROOM VENTILATION / CONTROL ROOM VENTILATION NORTH AIR HANDLER PACKAGE                                      | 1-5149               | AUXILIARY   | 650  | CTRL RM AIR COND RM        | S         | HVAC     | Seismic and Relay |              |               | Y           | 1-12030, 1-98742                | 1-AB-D-2C                                 |
| 585      | 1     | 10     | 1-HV-ACRA-2      | 0      | CONTROL ROOM VENTILATION / CONTROL ROOM VENTILATION SOUTH AIR HANDLER PACKAGE                                      | 1-5149               | AUXILIARY   | 650  | CTRL RM AIR COND RM        | S         | HVAC     | Seismic and Relay |              |               | Y           | 1-12011, 1-98742                | 1-AM-A-5A                                 |
| 586      | 2     | 10     | 1-HV-AES-1 (FLT) | 0      | AUX BUILDING VENTILATION / AUX BUILDING VENTILATION ENGINEERED SAFETY FEATURE EXHAUST AIR FILTER UNIT #1           | 12-5148A             | AUXILIARY   | 633  | NORM BLOWDOWN FLASHTANK RM | S         | HVAC     | Seismic Only      |              |               |             |                                 |   |
| 587      | 1     | 10     | 1-HV-AES-2 (FLT) | 0      | AUX BUILDING VENTILATION / AUX BUILDING VENTILATION ENGINEERED SAFETY FEATURE EXHAUST AIR FILTER UNIT #2           | 12-5148A             | AUXILIARY   | 633  | NORM BLOWDOWN FLASHTANK RM | S         | HVAC     | Seismic Only      |              |               |             |                                 |   |
| 588      | 2     | 11     | 1-HE-63N         | 0      | CONTROL ROOM A/C CHILL WATER / CONTROL ROOM A/C NORTH LIQUID CHILLER HV-ACR1 EVAPORATOR                            | 1-5149               | AUXILIARY   | 650  | CTRL RM AIR COND RM        | S         | HVAC     | Seismic Only      |              |               |             |                                 | see 1-HV-ACR-1                            |
| 589      | 1     | 11     | 1-HE-63S         | 0      | CTRL RM AIR CONDITIONING CHILL WTR / CONTROL ROOM AIR CONDITIONING SOUTH LIQUID CHILLER HV-ACR-2 EVAPORAT          | 1-5149               | AUXILIARY   | 650  | CTRL RM AIR COND RM        | S         | HVAC     | Seismic Only      |              |               |             |                                 | see 1-HV-ACR-2                            |
| 590      | 2     | 11     | 1-HE-64N         | 0      | CONTROL ROOM A/C CHILL WATER / CONTROL ROOM A/C NORTH LIQUID CHILLER HV-ACR-1 CONDENSER                            | 1-5149               | AUXILIARY   | 650  | CTRL RM AIR COND RM        | S         | HVAC     | Seismic Only      |              |               |             |                                 | see 1-HV-ACR-1                            |





**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**

| Line No. | Train | Eq. Cl. | Eq. ID       | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.     | FIEL | Rm or Rwf/Cl              | Flow Path | Function       | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|---------|--------------|--------|---|----------------------|-----------|------|---------------------------|-----------|----------------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 591      | 1     | 11      | 1-HE-64S     | 0      | CONTROL ROOM A/C CHILL WATER / CONTROL ROOM A/C SOUTH LIQUID CHILLER HV-ACR-2 CONDENSER   | 1-5149               | AUXILIARY | 650  | CTRL RM AIR COND RM       | S         | HVAC           | Seismic Only      |              |               |             |                                 | see 1-HV-ACR-2                            |
| 592      | 2     | 11      | 1-HV-ACR-1   | 0      | CONTROL ROOM A/C CHILL WATER / CONTROL ROOM NORTH LIQUID CHILLER PACKAGE                  | 1-5149               | AUXILIARY | 650  | CTRL RM AIR COND RM       | S         | HVAC           | Seismic and Relay |              |               | Y           | 1-12030, 1-98742                | 1-AB-D-R3AR                               |
| 593      | 1     | 11      | 1-HV-ACR-2   | 0      | CONTROL ROOM A/C CHILL WATER / CONTROL ROOM InSOUTH LIQUID CHILLER PACKAGE                | 1-5149               | AUXILIARY | 650  | CTRL RM AIR COND RM       | S         | HVAC           | Seismic and Relay |              |               | Y           | 1-12011                         | 1-AM-A-1AR                                |
| 594      | 1     | 12      | 1-QT-502-AB  | 0      | DIESEL COMBUSTION AIR / AB EMERG DIESEL TURBOCHARGER                                      | 1-5151B              | AUXILIARY | 587  | AB EMER DSL GEN RM        | S         | EDG            | Seismic Only      |              |               |             |                                 |   |
| 595      | 2     | 12      | 1-QT-502-CD  | 0      | DIESEL COMBUSTION AIR / CD EMERG DIESEL TURBOCHARGER                                      | 1-5151D              | AUXILIARY | 587  | CD EMER DSL GEN RM        | S         | EDG            | Seismic Only      |              |               |             |                                 |   |
| 596      | 1     | 14      | 1-89-ABBC    | 0      | 250 VDC DISTRIBUTION / PLANT BATTERY BATT-AB DISCONNECT SWITCH                            | 1-12003              | AUXILIARY | 609  | INVERTER AREA             | E         | 250 VDC SYSTEM | Seismic Only      |              |               |             |                                 |   |
| 597      |       | 14      | 1-89-CDBC    | 0      | 250 VDC DISTRIBUTION / PLANT BATTERY BATT-CD DISCONNECT SWITCH                            | 1-12003              | AUXILIARY | 626  | CD BATTERY EQUIPMENT AREA | E         | 250 VDC SYSTEM | Seismic Only      |              |               | N           |                                 |   |
| 598      | 2     | 14      | 1-AFW        | 0      | 120/208V MISC SAFETY RELATED PWR DISTRIB / POWER PANEL                                    | 1-12035              | AUXILIARY | 587  | CD EMER DSL GEN RM        | E         | 120 VAC SYSTEM | Seismic Only      |              |               | Y           |                                 |   |
| 599      | 2     | 14      | 1-AFWX       | 0      | 120/208V MISC SAFETY RELATED PWR DISTRIB / 120/208 VAC AUXILIARY FEEDWATER DISTR PNL      | 1-12035              | AUXILIARY | 587  | CD EMER DSL GEN RM        | E         | 120 VAC SYSTEM | Seismic Only      |              |               | Y           |                                 |   |
| 600      | 1     | 14      | 1-BATT-AB-SH | 0      | 250V DC DISTRIBUTION / PLANT BATTERY BATT-AB AMMETER SHUNT                                | 1-12003              | AUXILIARY | 613  | 4KV RM - MEZZANINE        | E         | 250 VDC SYSTEM | Seismic Only      |              |               | N           |                                 |   |
| 601      | 2     | 14      | 1-BATT-CD-SH | 0      | 250V DC DISTRIBUTION / PLANT BATTERY BATT-CD AMMETER SHUNT                                | 1-12003              | AUXILIARY | 626  | CD BATT EQUIP             | E         | 250 VDC SYSTEM | Seismic Only      |              |               | N           |                                 |   |
| 602      | 12    | 14      | 1-BATT-N-SH  | 0      | 250VDC CONTROL AND INSTRUMENTATION / METERING SHUNT                                       | 1-12003              | AUXILIARY | 633  | 633 HALLWAY               | E         | 250 VDC SYSTEM | Seismic Only      |              |               | N           |                                 |   |
| 603      | 1     | 14      | 1-BC-AB-SH   | 0      | 250 VDC DISTRIBUTION / PLANT BATTERY CHARGER AMMETER BC-AB SHUNT CABINET                  | 1-12003              | AUXILIARY | 613  | 4KV RM - MEZZANINE        | E         | 250 VDC SYSTEM | Seismic Only      |              |               |             |                                 |   |
| 604      | 2     | 14      | 1-BC-CD-SH   | 0      | 250V DC DISTRIBUTION / PLANT BATTERY CHARGER BC-CD SHUNT CABINET                          | 1-12003              | AUXILIARY | 626  | CD BATT EQUIP             | E         | 250 VDC SYSTEM | Seismic Only      |              |               |             |                                 |   |
| 605      | 1     | 14      | 1-BCTC-AB    | 0      | 250V DC DISTRIBUTION / PLANT BATTERY CHARGERS BC-AB1 AND BC-AB2 TRANSFER PANEL            | 1-12003              | AUXILIARY | 613  | 4KV RM - MEZZANINE        | E         | 250 VDC SYSTEM | Seismic Only      |              |               |             |                                 |   |
| 606      | 2     | 14      | 1-BCTC-CD    | 0      | 250V DC DISTRIBUTION / PLANT BATTERY CHARGERS BC-CD1 AND BC-CD2 TRANSFER PANEL            | 1-12003              | AUXILIARY | 626  | CD BATT EQUIP             | E         | 250 VDC SYSTEM | Seismic Only      |              |               | Y           |                                 |   |
| 607      | 1     | 14      | 1-CCV-AB     | 0      | 250VDC DISTRIBUTION / POWER PANEL   | 1-12003, 1-12081     | AUXILIARY | 633  | CONTROL RM                | E         | 250 VDC SYSTEM | Seismic Only      |              |               | Y           |                                 |   |
| 608      | 2     | 14      | 1-CCV-CD     | 0      | 250VDC DISTRIBUTION / 250VDC TRAIN 'A' CRITICAL SOLENOID VALVES DISTRIBUTION PANEL        | 1-12003, 1-12071     | AUXILIARY | 633  | CONTROL RM                | E         | 250 VDC SYSTEM | Seismic Only      |              |               | Y           |                                 |   |
| 609      | 1     | 14      | 1-CRAB       | 0      | 250VDC DISTRIBUTION / POWER PANEL   | 1-12003, 1-12080     | AUXILIARY | 633  | CONTROL RM                | E         | 250 VDC SYSTEM | Seismic Only      |              |               | Y           |                                 |   |
| 610      | 2     | 14      | 1-CRCD       | 0      | 250VDC DISTRIBUTION / POWER PANEL   | 1-12003, 1-12070     | AUXILIARY | 633  | CONTROL RM                | E         | 250 VDC SYSTEM | Seismic Only      |              |               | Y           |                                 |   |
| 611      | 2     | 14      | 1-CRID-I     | 0      | 120VAC CTRL RM INSTRUMENTATION DISTR / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION CH-I   | 1-12050              | AUXILIARY | 633  | CONTROL RM                | E         | 120 VAC SYSTEM | Seismic Only      |              |               | Y           |                                 |   |
| 612      | 2     | 14      | 1-CRID-II    | 0      | 120V AC DISTRIBUTION / 120V AC CONTROL ROOM INSTRUMENT DISTRIBUTION CH-II                 | 1-12050              | AUXILIARY | 633  | CONTROL RM                | E         | 120 VAC SYSTEM | Seismic Only      |              |               | Y           |                                 | 1-EZC-D-1AL, 1-MCCD-12                    |
| 613      | 1     | 14      | 1-CRID-III   | 0      | 120VAC CTRL RM INSTRUMENTATION DISTR / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION CH-III | 1-12050              | AUXILIARY | 633  | CONTROL RM                | E         | 120 VAC SYSTEM | Seismic Only      |              |               | Y           |                                 |   |
| 614      | 1     | 14      | 1-CRID-IV    | 0      | 120VAC CTRL RM INSTRUMENTATION DISTR / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION CH-IV  | 1-12050              | AUXILIARY | 633  | CONTROL RM                | E         | 120 VAC SYSTEM | Seismic Only      |              |               | Y           |                                 |   |
| 615      | 12    | 14      | 1-DCN        | 0      | 250VDC CONTROL AND INSTRUMENTATION / 250VDC POWER PANEL                                   | 1-12003              | AUXILIARY | 633  | 633 HALLWAY               | E         | 250 VDC SYSTEM | Seismic Only      |              |               | Y           |                                 |   |



**DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**

| Line No. | Train | Eq. CL | Eq. ID     | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.     | FIEL | Rm or Rwr/Cl        | Flow Path | Function       | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No./Rev. | Required Supporting Systems or Components |
|----------|-------|--------|------------|--------|---|----------------------|-----------|------|---------------------|-----------|----------------|-------------------|--------------|---------------|-------------|-------------------------------|---|
| 616      | 1     | 14     | 1-ELSC     | 0      | 120/208V MISC SAFETY RELATED PWR DISTRIB / POWER PANEL  | 1-12015              | AUXILIARY | 587  | AB EMER DSL GEN RM  | E         | 120 VAC SYSTEM | Seismic Only      |              |               | Y           |                               |   |
| 617      | 1     | 14     | 1-ELSCX    | 0      | 120/208V MISC SAFETY RELATED PWR DISTRIB / 120/208VAC EMERG LOCAL SHUTDOWN AUXILIARY DISTRIBUTION PANEL | 1-12015              | AUXILIARY | 587  | AB EMER DSL GEN RM  | E         | 120 VAC SYSTEM | Seismic Only      |              |               | Y           |                               |   |
| 618      | 1     | 14     | 1-MCAB     | 0      | 250V DC DISTRIBUTION / 250V DC DISTRIBUTION PANEL MCAB  | 1-12003, 1-12060     | AUXILIARY | 609  | AB BATT EQUIP       | E         | 250 VDC SYSTEM | Seismic Only      |              |               | Y           |                               |   |
| 619      | 2     | 14     | 1-MCCD     | 0      | 250V DC DISTR / 250V DC DISTRIBUTION POWER PANEL  | 1-12003, 1-12070     | AUXILIARY | 626  | CD BATT EQUIP       | E         | 250 VDC SYSTEM | Seismic Only      |              |               | Y           |                               |   |
| 620      | 1     | 14     | 1-MDAB     | 0      | 250VDC DISTRIBUTION / 250 VDC POWER PANEL   | 1-12003, 1-12060     | AUXILIARY | 609  | AB BATT EQUIP       | E         | 250 VDC SYSTEM | Seismic Only      |              |               | Y           |                               |   |
| 621      | 2     | 14     | 1-MDCD     | 0      | 250VDC DISTRIBUTION / POWER PANEL   | 1-12003, 1-12070     | AUXILIARY | 626  | CD BATT EQUIP       | E         | 250 VDC SYSTEM | Seismic Only      |              |               | Y           |                               |   |
| 622      | 2     | 14     | 1-SSV-A1   | 0      | 250VAC DISTRIBUTION / 250VDC TRAIN 'A' NUCLEAR SAMPLING FEEDER PANEL #1                                 | 1-12003, 1-12071     | AUXILIARY | 587  | NUCLEAR SAMPLING RM | E         | 250 VDC SYSTEM | Seismic Only      |              |               | Y           |                               |   |
| 623      | 2     | 14     | 1-SSV-A2   | 0      | 250VDC / 250VDC NUCLEAR SAMPLING FEEDER PANEL #2  | 1-12003, 1-12071     | AUXILIARY | 587  | NUCLEAR SAMPLING RM | E         | 250 VDC SYSTEM | Seismic Only      |              |               | Y           |                               |   |
| 624      | 1     | 14     | 1-SSV-B    | 0      | 250VDC DISTRIBUTION / POWER PANEL   | 1-12003, 1-12061     | AUXILIARY | 587  | NUCLEAR SAMPLING RM | E         | 250 VDC SYSTEM | Seismic Only      |              |               | Y           |                               |   |
| 625      | 1     | 14     | 1-TDAB     | 0      | 250VDC DISTRIBUTION / 250 VDC POWER PANEL   | 1-12003, 1-12060     | AUXILIARY | 609  | AB BATT EQUIP       | E         | 250 VDC SYSTEM | Seismic Only      |              |               | Y           |                               |   |
| 626      | 2     | 14     | 1-TDCD     | 0      | 250VDC DISTRIBUTION / POWER PANEL, TRAIN A TRANSFER CABINET   | 1-12003, 1-12070     | AUXILIARY | 626  | CD BATT EQUIP       | E         | 250 VDC SYSTEM | Seismic Only      |              |               | Y           |                               |   |
| 627      | 1     | 14     | 1-VDAB-1   | 0      | 250V DC DISTR / 250V DC VALVE DISTRIBUTION PANEL VDAB-1   | 1-12003, 1-12062     | AUXILIARY | 633  | CONTROL RM          | E         | 250 VDC SYSTEM | Seismic Only      |              |               | Y           |                               | CRAB-4                                    |
| 628      | 1     | 14     | 1-VDAB-2   | 0      | 250VDC DISTR / 250V DC VALVE DISTRIBUTION PANEL VDAB-2  | 1-12003, 1-12062     | AUXILIARY | 633  | CONTROL RM          | E         | 250 VDC SYSTEM | Seismic Only      |              |               | Y           |                               | 1-CRAB-4                                  |
| 629      | 2     | 14     | 1-VDCD-1   | 0      | 250VDC DISTR / 250V DC VALVE DISTRIBUTION PANEL VDCD-1  | 1-12003, 1-12073     | AUXILIARY | 633  | CONTROL RM          | E         | 250 VDC SYSTEM | Seismic Only      |              |               | Y           |                               | CRCD-4                                    |
| 630      | 2     | 14     | 1-VDCD-2   | 0      | 250V DC DISTR / 250V DC DISTRIBUTION PANEL VDCD-2   | 1-12003, 1-12073     | AUXILIARY | 633  | CONTROL RM          | E         | 250 VDC SYSTEM | Seismic Only      |              |               | Y           |                               | CRCD-4                                    |
| 631      | 1     | 15     | 1-BATT-AB  | 0      | 250V DC DISTRIBUTION / PLANT BATT AB  | 1-12003              | AUXILIARY | 609  | AB BATT EQUIP       | E         | 250 VDC SYSTEM | Seismic and Relay |              |               |             |                               |   |
| 632      | 2     | 15     | 1-BATT-CD  | 0      | 250V DC DISTRIBUTION / PLANT BATT CD  | 1-12003              | AUXILIARY | 626  | CD BATT EQUIP       | E         | 250 VDC SYSTEM | Seismic and Relay |              |               |             |                               |   |
| 633      | 12    | 15     | 1-BATT-N   | 0      | 250VDC CONTROL AND INSTRUMENTATION / TRAIN N PLANT BATTERY  | 1-12003              | AUXILIARY | 633  | 633 HALLWAY         | E         | 250 VDC SYSTEM | Seismic and Relay |              |               |             |                               |   |
| 634      | 12    | 16     | 1-BC-A     | 0      | 250VDC CONTROL AND INSTRUMENTATION / BATTERY CHARGER 'A' FOR 'N' TRAIN BATTERY                          | 1-12003              | AUXILIARY | 633  | 633 HALLWAY         | E         | 250 VDC SYSTEM | Seismic and Relay |              |               |             |                               |   |
| 635      | 1     | 16     | 1-BC-AB1   | 0      | 250V DC DISTRIBUTION / PLANT BATT BATT-AB BATTERY CHARGER #1  | 1-12003, 1-12013     | AUXILIARY | 613  | 4KV RM - MEZZANINE  | E         | 250 VDC SYSTEM | Seismic and Relay |              |               |             |                               | 1-EZC-A-2B                                |
| 636      | 1     | 16     | 1-BC-AB2   | 0      | 250V DC DISTRIBUTION / PLANT BATTERY BATT-AB CHARGER #2   | 1-12003, 1-12013     | AUXILIARY | 613  | 4KV RM - MEZZANINE  | E         | 250 VDC SYSTEM | Seismic and Relay |              |               |             |                               | 1-EZC-B-4B                                |
| 637      | 12    | 16     | 1-BC-B     | 0      | 250VDC CONTROL AND INSTRUMENTATION / BATTERY CHARGER 'B' FOR 'N' TRAIN BATTERY                          | 1-12003              | AUXILIARY | 633  | 633 HALLWAY         | E         | 250 VDC SYSTEM | Seismic and Relay |              |               |             |                               |   |
| 638      | 2     | 16     | 1-BC-CD1   | 0      | 250V DC DISTRIBUTION / PLANT BATTERY BATT-CD CHARGER #1   | 1-12003, 1-12033     | AUXILIARY | 626  | CD BATT EQUIP       | E         | 250 VDC SYSTEM | Seismic and Relay |              |               |             |                               | 1-EZC-D-4B                                |
| 639      | 2     | 16     | 1-BC-CD2   | 0      | 250V DC DISTRIBUTION / PLANT BATTERY BATT-CD CHARGER #2   | 1-12003, 1-12032     | AUXILIARY | 626  | CD BATT EQUIP       | E         | 250 VDC SYSTEM | Seismic and Relay |              |               |             |                               |   |
| 640      | 2     | 16     | 1-CRID-INV | 0      | 120VAC CTRL RM INSTRUMENTATION DISTR / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CH4 INVERTER  | 1-12050              | AUXILIARY | 609  | INVERTER AREA       | E         | 120 VAC SYSTEM | Seismic and Relay |              |               |             |                               |   |

DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. Cl. | Eq. ID         | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone    | Bldg.       | FIEL | Rm or Rm/Cl                              | Flow Path | Function       | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|---------|----------------|--------|---|-------------------------|-------------|------|--|-----------|----------------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 641      | 2     | 16      | 1-CRID-II-INV  | 0      | 120V DC DISTRIBUTION / 120V AC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CH-II INVERTER               | 1-12050                 | AUXILIARY   | 609  | INVERTER AREA                            | E         | 120 VAC SYSTEM | Seismic and Relay |              |               |             |                                 | 1-MCCD-12                                 |
| 642      | 1     | 16      | 1-CRID-III-INV | 0      | 120V CTRL RM INSTRUMENTATION DISTR / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CH-III INVERTER | 1-12050                 | AUXILIARY   | 609  | INVERTER AREA                            | E         | 120 VAC SYSTEM | Seismic and Relay |              |               |             |                                 |   |
| 643      | 1     | 16      | 1-CRID-IV-INV  | 0      | 120V CTRL RM INSTRUMENTATION DISTR / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CH-IV INVERTER  | 1-12050                 | AUXILIARY   | 633  | CONTROL RM                               | E         | 120 VAC SYSTEM | Seismic and Relay |              |               |             |                                 |   |
| 644      | 1     | 16      | 1-DGAB-INV     | 0      | DIESEL GENERATOR, CONTROL AND INSTRUMENT / AB EMERGENCY DIESEL GENERATOR OME-150-AB INVERTER            | 1-12001                 | AUXILIARY   | 587  | AB EMER DSL GEN RM                       | E         | EDG            | Seismic and Relay |              |               |             |                                 |   |
| 645      | 2     | 16      | 1-DGCD-INV     | 0      | DIESEL GENERATION, CONTROL AND INSTRUMENT / DIESEL GENERATOR INVERTER                                   | 1-12002                 | AUXILIARY   | 587  | CD EMER DSL GEN RM                       | E         | EDG            | Seismic and Relay |              |               |             |                                 |   |
| 646      | 1     | 17      | 1-OME-150-AB   | 0      | DIESEL GENERATOR CONTROL AND INSTRUMENTA / AB EMERG DIESEL GENERATOR                                    | 1-12001 1-5151A 1-5151B | AUXILIARY   | 587  | AB EMER DSL GEN RM                       | E         | EDG            | Seismic and Relay |              |               |             |                                 |   |
| 647      | 2     | 17      | 1-OME-150-CD   | 0      | DIESEL GENERATION CONTROL AND INSTRUMENT / CD EMERG DIESEL GENERATOR                                    | 1-12002 1-5151C 1-5151D | AUXILIARY   | 587  | CD EMER DSL GEN RM                       | E         | EDG            | Seismic and Relay |              |               |             |                                 |   |
| 648      | 2     | 18      | 1-BLI-110      | 0      | STEAM GENERATING / STEAM GENERATOR OME-3-1 WIDE RANGE LEVEL INDICATOR TRANSMITTER                       | 1-5105D                 | CONTAINMENT | 612  | EAST CONTAINMENT LOWER VENT ROOM, AZ 357 | P         | D              | Seismic Only      |              |               | Y           | 1-12050 1-98573 1-98583 1-98508 | INSTRUMENTATION BOP 1-CRID-I-4            |
| 649      | 1     | 18      | 1-BLI-120      | 0      | STEAM GENERATING / STEAM GENERATOR OME-3-2 WIDE RANGE LEVEL TRANSMITTER                                 | 1-5105D                 | CONTAINMENT | 612  | ACCUMULATOR TANK #2 AREA, AZ 126         | P         | D              | Seismic Only      |              |               | Y           | 1-12050 1-98580 1-98550 1-98506 | INSTRUMENTATION BOP 1-CRID-IV-4           |
| 650      | 1     | 18      | 1-BLI-130      | 0      | STEAM GENERATING / STEAM GENERATOR OME-3-3 WIDE RANGE LEVEL INDICATOR TRANSMITTER                       | 1-5105D                 | CONTAINMENT | 612  | WEST CONTAINMENT LOWER VENT ROOM, AZ 180 | P         | D              | Seismic Only      |              |               | Y           | 1-12050 1-98573 1-98583 1-98508 | INSTRUMENTATION BOP 1-CRID-III-4          |
| 651      | 2     | 18      | 1-BLI-140      | 0      | STEAM GENERATING / STEAM GENERATOR OME-3-4 WIDE RANGE LEVEL INDICATOR TRANSMITTER                       | 1-5105D                 | CONTAINMENT | 612  | ACCUMULATOR TANK #4 AREA, AZ 324         | P         | D              | Seismic Only      |              |               | Y           | 1-12050 1-98573 1-98583 1-98508 | INSTRUMENTATION BOP 1-CRID-II-4           |
| 652      | 2     | 18      | 1-CLI-113      | 0      | CONDENSATE STORAGE TANK SUPPLY / CONDENSATE STORAGE TANK TK-32 LEVEL INDICATOR TRANSMITTER              | 1-5106A                 | AUXILIARY   | 588  | STORAGE TANK PIPE TUNNEL                 | P         | D              | Seismic and Relay |              |               | Y           | 1-12050 1-98424                 | INSTRUMENTATION 1-CRID-II-4               |
| 653      | 1     | 18      | 1-CLI-114      | 0      | CONDENSATE STORAGE TANK SUPPLY / CONDENSATE STORAGE TANK TK-32 LEVEL INDICATOR TRANSMITTER              | 1-5106A                 | AUXILIARY   | 588  | STORAGE TANK PIPE TUNNEL                 | P         | D              | Seismic and Relay |              |               | Y           | 1-12050 1-98424                 | INSTRUMENTATION 1-CRID-III-3              |
| 654      | 1     | 18      | 1-CPS-312      | 0      | DIESEL JACKET WATER / AB EMERG DIESEL JACKET WATER PUMP QT-130-AB1 DISCHARGE PRESSURE SWITCH            | 1-5151B                 | AUXILIARY   | 587  | AB EMER DSL GEN RM                       | S         | EDG            | Seismic Only      |              |               | Y           | 1-12010 1-98013                 | INSTRUMENTATION 1-ABD-B-2C                |
| 655      | 1     | 18      | 1-CPS-314      | 0      | DIESEL JACKET WATER / AB EMERG DIESEL JACKET WATER PUMP QT-130-AB2 DISCHARGE PRESSURE SWITCH            | 1-5151B                 | AUXILIARY   | 587  | AB EMER DSL GEN RM                       | S         | EDG            | Seismic Only      |              |               | Y           | 1-12010 1-98013                 | INSTRUMENTATION 1-ABD-A-2C                |
| 656      | 2     | 18      | 1-CPS-317      | 0      | DIESEL JACKET WATER / CD EMERG DIESEL JACKET WATER PUMP QT-130-CD1 DISCHARGE PRESSURE SWITCH            | 1-5151D                 | AUXILIARY   | 587  | CD EMER DSL GEN RM                       | S         | EDG            | Seismic Only      |              |               | Y           | 1-12030 1-98014                 | INSTRUMENTATION 1-ABD-C-2C                |
| 657      | 2     | 18      | 1-CPS-319      | 0      | DIESEL JACKET WATER / CD EMERG DIESEL JACKET WATER PUMP QT-130-CD2 DISCHARGE PRESSURE SWITCH            | 1-5151D                 | AUXILIARY   | 587  | CD EMER DSL GEN RM                       | S         | EDG            | Seismic Only      |              |               | Y           | 1-12030 1-98014                 | INSTRUMENTATION 1-ABD-D-2C                |
| 658      | 2     | 18      | 1-CPS-410      | 0      | CCW / EAST CCW PUMP PP-110E DISCHARGE PRESSURE SWITCH   | 1-5135A                 | AUXILIARY   | 609  | 609 HALLWAY                              | S         | CCW            | Seismic Only      |              |               | Y           | 1-12060 1-98405                 | INSTRUMENTATION 1-MCAB-3                  |
| 659      | 1     | 18      | 1-CPS-420      | 0      | CCW / WEST CCW PUMP PP-10W DISCHARGE PRESSURE SWITCH  | 1-5135A                 | AUXILIARY   | 609  | 609 HALLWAY                              | S         | CCW            | Seismic Only      |              |               | Y           | 1-12070 1-98405                 | INSTRUMENTATION 1-MCCD-4                  |
| 660      | 1     | 18      | 1-FFI-210      | 0      | AUX FEEDWATER / AUX FEEDWATER TO STEAM GENERATOR OME-3-1 FLOW INDICATOR TRANSMITTER                     | 1-5106A                 | AUXILIARY   | 621  | E MAIN STM STOP ENCL                     | P         | D              | Seismic and Relay |              |               | Y           | 1-12050 1-98447                 | INSTRUMENTATION 1-CRID-III-3              |
| 661      | 2     | 18      | 1-FFI-220      | 0      | AUX FEEDWATER / AUX FEEDWATER TO STEAM GENERATOR OME-3-2 FLOW INDICATOR TRANSMITTER                     | 1-5106A                 | AUXILIARY   | 621  | W MAIN STM STOP ENCL                     | P         | D              | Seismic and Relay |              |               | Y           | 1-12050 1-98437                 | INSTRUMENTATION 1-CRID-III-3              |

DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID    | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.       | FIEL | Rm or Rm/CL              | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|-----------|--------|---|----------------------|-------------|------|--------------------------|-----------|----------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 662      | 2     | 18     | 1-FFI-230 | 0      | AUX FEEDWATER / AUX FEEDWATER TO STEAM GENERATOR OME-3-3 FLOW INDICATOR TRANSMITTER     | 1-5106A              | AUXILIARY   | 621  | W MAIN STM STOP ENCL     | P         | D        | Seismic and Relay |              |               | Y           | 1-12050 1-98437                 | INSTRUMENTATION 1-CRID-4-3                |
| 663      | 1     | 18     | 1-FFI-240 | 0      | AUX FEEDWATER / AUX FEEDWATER TO STEAM GENERATOR OME-3-4 FLOW INDICATOR TRANSMITTER     | 1-5106A              | AUXILIARY   | 621  | E MAIN STM STOP ENCL     | P         | D        | Seismic and Relay |              |               | Y           | 1-12050 1-98447                 | INSTRUMENTATION 1-CRID-IV-3               |
| 664      | 2     | 18     | 1-IFI-310 | 0      | RHR / EAST RHR HEAT EXCHANGER HE-17E OUTLET LOW RANGE FLOW INDICATOR TRANSMITTER        | 1-5143               | AUXILIARY   | 609  | 609 HALLWAY              | P         | DRIP     | Seismic Only      |              |               | Y           |                                 |   |
| 665      | 2     | 18     | 1-IFI-311 | 0      | RHR / EAST RHR HEAT EXCHANGER HE-17E OUTLET HIGH RANGE FLOW INDICATOR TRANSMITTER       | 1-5143               | AUXILIARY   | 609  | 609 HALLWAY              | P         | DRIP     | Seismic Only      |              |               | Y           | 1-12050 1-98566 1-98567         | INSTRUMENTATION 1-CRID-IV-4               |
| 666      | 1     | 18     | 1-IFI-320 | 0      | RHR / WEST RHR HEAT EXCHANGER HE-17W OUTLET LOW RANGE FLOW INDICATOR TRANSMITTER        | 1-5143               | AUXILIARY   | 609  | 609 HALLWAY              | P         | DRIP     | Seismic Only      |              |               | Y           | 1-12050                         |   |
| 667      | 1     | 18     | 1-IFI-321 | 0      | RHR / WEST RHR HEAT EXCHANGER HE-17W OUTLET HIGH RANGE FLOW INDICATOR TRANSMITTER       | 1-5143               | AUXILIARY   | 609  | 609 HALLWAY              | P         | DRIP     | Seismic Only      |              |               | Y           | 1-12050 1-98567 1-98568         | INSTRUMENTATION 1-CRID-IV-4               |
| 668      | 12    | 18     | 1-IFI-335 | 0      | RHR / RHR TO REACTOR COOLANT LOOPS 2 AND 3 COLD LEGS FLOW INDICATING TRANSMITTER        | 1-5143               | AUXILIARY   | 591  | VESTIBULE                | P         | DRIP     | Seismic Only      |              |               | Y           | 1-12050 1-98566                 | INSTRUMENTATION 1-CRID-II-4               |
| 669      | 2     | 18     | 1-IFI-51  | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP #1 FLOW INDICATOR TRANSMITTER | 1-5142               | CONTAINMENT | 598  | ANNULUS, QUAD1           | P         | RI       | Seismic Only      |              |               | Y           |                                 |   |
| 670      | 1     | 18     | 1-IFI-52  | 0      | BORON INJECTION / BORON INJECTION TO RC LOOP #2 FLOW INDICATOR TRANSMITTER              | 1-5142               | CONTAINMENT | 598  | ANNULUS, QUAD2           | P         | RI       | Seismic Only      |              |               | Y           |                                 |   |
| 671      | 1     | 18     | 1-IFI-53  | 0      | BORON INJECTION / BORON INJECTION TO RC LOOP #3 FLOW INDICATOR TRANSMITTER              | 1-5142               | CONTAINMENT | 598  | ANNULUS, QUAD3           | P         | RI       | Seismic Only      |              |               | Y           |                                 |   |
| 672      | 2     | 18     | 1-IFI-54  | 0      | BORON INJECTION / BORON INJECTION TO RC LOOP #4 FLOW INDICATOR TRANSMITTER              | 1-5142               | CONTAINMENT | 598  | ANNULUS, QUAD4           | P         | RI       | Seismic Only      |              |               | Y           |                                 |   |
| 673      | 12    | 18     | 1-ILS-950 | 0      | RWST SUPPLY / RWST TK-33 EXTREME LOW LEVEL TRANSMITTER                                  | 1-5144               | AUXILIARY   | 586  | STORAGE TANK PIPE TUNNEL | P         | DRI      | Seismic Only      |              |               | Y           | 1-12050 1-98567                 | INSTRUMENTATION 1-CRID-B-3 1-CRID-III-4   |
| 674      | 12    | 18     | 1-ILS-951 | 0      | RWST SUPPLY / RWST TK-33 LEVEL TRANSMITTER  | 1-5144               | AUXILIARY   | 586  | STORAGE TANK PIPE TUNNEL | P         | DRI      | Seismic Only      |              |               | Y           | 1-98050 1-98567                 | INSTRUMENTATION 1-CRID-IV-3               |
| 675      | 1     | 18     | 1-LLS-120 | 0      | DIESEL FUEL OIL / AB EMERG DIESEL FUEL OIL DAY TANK QT-107-AB HIGH LEVEL SWITCH 1       | 1-5151A              | AUXILIARY   | 587  | AB EMER DSL GEN RM       | S         | EDG      | Seismic Only      |              |               | Y           | 1-12010 1-98013                 | INSTRUMENTATION 1-ABD-B-3D                |
| 676      | 1     | 18     | 1-LLS-121 | 0      | DIESEL FUEL OIL / AB EMERG DIESEL FUEL OIL DAY TANK QT-107-AB LOW LEVEL SWITCH 1        | 1-5151A              | AUXILIARY   | 587  | AB EMER DSL GEN RM       | S         | EDG      | Seismic Only      |              |               | Y           | 1-12010 1-98013                 | INSTRUMENTATION 1-ABD-B-3D                |
| 677      | 1     | 18     | 1-LLS-122 | 0      | DIESEL FUEL OIL / AB EMERG DIESEL FUEL OIL DAY TANK QT-107-AB HIGH LEVEL SWITCH 2       | 1-5151A              | AUXILIARY   | 587  | AB EMER DSL GEN RM       | S         | EDG      | Seismic Only      |              |               | Y           | 1-12010 1-98013                 | INSTRUMENTATION 1-ABD-A-2D                |
| 678      | 1     | 18     | 1-LLS-123 | 0      | DIESEL FUEL OIL / AB EMERG DIESEL FUEL OIL DAY TANK QT-107-AB LOW LEVEL SWITCH 2        | 1-5151A              | AUXILIARY   | 587  | AB EMER DSL GEN RM       | S         | EDG      | Seismic Only      |              |               | Y           | 1-12010 1-98013                 | INSTRUMENTATION 1-ABD-A-2D                |
| 679      | 2     | 18     | 1-LLS-125 | 0      | DIESEL FUEL OIL / CD EMERG DIESEL FUEL OIL DAY TANK QT-107-CD HIGH LEVEL SWITCH 1       | 1-5151C              | AUXILIARY   | 587  | CD EMER DSL GEN RM       | S         | EDG      | Seismic Only      |              |               | Y           | 1-12030 1-98014                 | INSTRUMENTATION 1-ABD-C-3D                |
| 680      | 2     | 18     | 1-LLS-126 | 0      | DIESEL FUEL OIL / CD EMERG DIESEL FUEL OIL DAY TANK QT-107-CD LOW LEVEL SWITCH 1        | 1-5151C              | AUXILIARY   | 587  | CD EMER DSL GEN RM       | S         | EDG      | Seismic Only      |              |               | Y           | 1-12030 1-98014                 | INSTRUMENTATION 1-ABD-C-3D                |
| 681      | 2     | 18     | 1-LLS-127 | 0      | DIESEL FUEL OIL / CD EMERG DIESEL FUEL OIL DAY TANK QT-107-CD HIGH LEVEL SWITCH 2       | 1-5151C              | AUXILIARY   | 587  | CD EMER DSL GEN RM       | S         | EDG      | Seismic Only      |              |               | Y           | 1-12030 1-98014                 | INSTRUMENTATION 1-ABD-D-2D                |
| 682      | 2     | 18     | 1-LLS-128 | 0      | DIESEL FUEL OIL / CD EMERG DIESEL FUEL OIL DAY TANK QT-107-CD LOW LEVEL SWITCH 2        | 1-5151C              | AUXILIARY   | 587  | CD EMER DSL GEN RM       | S         | EDG      | Seismic Only      |              |               | Y           | 1-12030 1-98014                 | INSTRUMENTATION 1-ABD-D-2D                |
| 683      | 2     | 18     | 1-MPP-210 | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 CHANNEL 1 STEAM PRESSURE TRANSMITTER               | 1-5105D              | AUXILIARY   | 633  | E MAIN STM STOP ENCL     | P         | D        | Seismic Only      |              |               | Y           | 1-12050 1-98575 1-98506         | INSTRUMENTATION 1-CRID-4-3                |



# DONALD C. COOK NUCLEAR PLANT UNIT # 1 SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. Cl. | Eq. ID    | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.       | FIEL | Rm or RwfCl           | Flow Path | Function | Eval Type    | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|---------|-----------|--------|---|----------------------|-------------|------|-----------------------|-----------|----------|--------------|--------------|---------------|-------------|---------------------------------|---|
| 684      | 2     | 18      | 1-MPP-212 | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 CHANNEL IV REACTOR PROTECTION INPUT STEAM PRESSURE TRANSMITTER   | 1-5105D              | AUXILIARY   | 633  | E MAIN STM STOP ENCL  | P         | D        | Seismic Only |              |               | Y           | 1-12050 1-98584 1-98508         | INSTRUMENTATION 1-CRID-IV-3               |
| 685      | 1     | 18      | 1-MPP-220 | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2 CHANNEL I STEAM PRESSURE TRANSMITTER                             | 1-5105D              | AUXILIARY   | 633  | W MAIN STM STOP ENCL  | P         | D        | Seismic Only |              |               | Y           | 1-12050 1-98575 1-98508         | INSTRUMENTATION 1-CRID-I-3                |
| 686      | 1     | 18      | 1-MPP-222 | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2 CHANNEL II REACTOR PROTECTION INPUT STEAM PRESSURE TRANSMITTER   | 1-5105D              | AUXILIARY   | 633  | W MAIN STM STOP ENCL  | P         | D        | Seismic Only |              |               | Y           | 1-12050 1-98584 1-98508         | INSTRUMENTATION 1-CRID-II-3               |
| 687      | 1     | 18      | 1-MPP-230 | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3 CHANNEL I STEAM PRESSURE TRANSMITTER                             | 1-5105D              | AUXILIARY   | 633  | W MAIN STM STOP ENCL  | P         | D        | Seismic Only |              |               | Y           | 1-12050 1-98576 1-98508         | INSTRUMENTATION 1-CRID-I-3                |
| 688      | 1     | 18      | 1-MPP-232 | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3 CHANNEL II REACTOR PROTECTION INPUT STEAM PRESSURE TRANSMITTER   | 1-5105D              | AUXILIARY   | 633  | W MAIN STM STOP ENCL  | P         | D        | Seismic Only |              |               | Y           | 1-12050 1-98584 1-98508         | INSTRUMENTATION 1-CRID-II-3               |
| 689      | 2     | 18      | 1-MPP-240 | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 CHANNEL I STEAM PRESSURE TRANSMITTER                             | 1-5105D              | AUXILIARY   | 633  | E MAIN STM STOP ENCL  | P         | D        | Seismic Only |              |               | Y           | 1-12050 1-98576 1-98508         | INSTRUMENTATION 1-CRID-I-3                |
| 690      | 1     | 18      | 1-MPP-242 | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 CHANNEL IV REACTOR PROTECTION INPUT STEAM PRESSURE TRANSMITTER   | 1-5105D              | AUXILIARY   | 633  | E MAIN STM STOP ENCL  | P         | D        | Seismic Only |              |               | Y           | 1-12050 1-98584 1-98508         | INSTRUMENTATION 1-CRID-IV-3               |
| 691      | 1     | 18      | 1-NLP-151 | 0      | PRESSURIZER / PRESSURIZER LEVEL INDICATOR TRANSMITTER   | 1-5128A              | CONTAINMENT | 612  | INSTRUMENTATION ON RM | P         | RIP      | Seismic Only |              |               | Y           | 1-12050 1-98573                 | 1-CRID-IV-4                               |
| 692      | 2     | 18      | 1-NLP-151 | 0      | PRESSURIZER / PRESSURIZER (OME-4) LEVEL TRANSMITTER   | 1-5128A              | CONTAINMENT | 612  | INSTRUMENTATION ON RM | P         | RIP      | Seismic Only |              |               | Y           | 1-12050 1-98550                 | INSTRUMENTATION 1-CRID-I-3                |
| 693      | 2     | 18      | 1-NLP-152 | 0      | PRESSURIZER / PRESSURIZER (OME-4) LEVEL TRANSMITTER   | 1-5128A              | CONTAINMENT | 612  | INSTRUMENTATION ON RM | P         | RIP      | Seismic Only |              |               | Y           | 1-12050 1-98550                 | INSTRUMENTATION 1-CRID-II-3               |
| 694      | 1     | 18      | 1-NLP-153 | 0      | PRESSURIZER / PRESSURIZER (OME-4) LEVEL TRANSMITTER   | 1-5128A              | CONTAINMENT | 612  | INSTRUMENTATION ON RM | P         | RIP      | Seismic Only |              |               | Y           | 1-12050 1-98550                 | INSTRUMENTATION 1-CRID-I-3                |
| 695      | 2     | 18      | 1-NPP-151 | 0      | PRESSURIZER / PRESSURIZER (OME-4) LEVEL TRANSMITTER   | 1-5128A              | CONTAINMENT | 612  | INSTRUMENTATION ON RM | P         | RIP      | Seismic Only |              |               | Y           | 1-12050 1-98551 1-98503 1-98550 | INSTRUMENTATION 1-CRID-I-3                |
| 696      | 2     | 18      | 1-NPP-152 | 0      | PRESSURIZER / PRESSURIZER (OME-4) PRESSURE TRANSMITTER  | 1-5128A              | CONTAINMENT | 612  | INSTRUMENTATION ON RM | P         | RIP      | Seismic Only |              |               | Y           | 1-12050 1-98550 1-98551 1-98503 | INSTRUMENTATION 1-CRID-I-3                |
| 697      | 1     | 18      | 1-NPP-153 | 0      | PRESSURIZER / PRESSURIZER (OME-4) PRESSURE TRANSMITTER  | 1-5128A              | CONTAINMENT | 612  | INSTRUMENTATION ON RM | P         | RIP      | Seismic Only |              |               | Y           | 1-12050 1-98552 1-98550 1-98503 | INSTRUMENTATION 1-CRID-II-3               |
| 698      | 2     | 18      | 1-NPS-121 | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP 2 HOT LEG WIDE RANGE PRESSURE TRANSMITTER                      | 1-5128               | CONTAINMENT | 612  | W CONT LOWER VENT RM  | P         | DRIP     | Seismic Only |              |               | Y           | 1-12050 1-98571                 | INSTRUMENTATION 1-CRID-II-3               |
| 699      | 1     | 18      | 1-NPS-122 | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP 1 HOT LEG WIDE RANGE PRESSURE TRANSMITTER                      | 1-5128               | CONTAINMENT | 612  | E CONT LWVR VENT RM   | P         | DRIP     | Seismic Only |              |               | Y           | 1-12050 1-98571                 | INSTRUMENTATION 1-CRID-II-3               |
| 700      | 2     | 18      | 1-NRI-21  | 0      | NUCLEAR INSTRUMENTATION / NUCLEAR INST. WIDE RANGE RADIATION DETECTOR                                 | NONE                 | CONTAINMENT | 626  | REACTOR CAVITY        | P         | R        | Seismic Only |              |               | Y           |                                 | 1-CRID-I-6                                |
| 701      | 1     | 18      | 1-NRI-23  | 0      | NUCLEAR INSTRUMENTATION / NUCLEAR INST. SOURCE RANGE RADIATION DETECTOR                               | NONE                 | CONTAINMENT | 626  | REACTOR CAVITY        | P         | R        | Seismic Only | N/A          | N/A           | Y           |                                 | 2-CRID-II-6                               |
| 702      | 1     | 18      | 1-PPP-301 | 0      | CONTAINMENT VENTILATION / LOWER CONT. CH. II PRESSURE PROTECTION TRANSMITTER                          | NONE                 | AUXILIARY   | 612  | 612 AIRLOCK           | P         | DP       | Seismic Only |              |               | Y           |                                 |   |
| 703      | 2     | 18      | 1-PPP-302 | 0      | CONTAINMENT VENTILATION / LOWER CONTAINMENT CHANNEL II PRESSURE PROT. TRANSMITTER                     | NONE                 | AUXILIARY   | 612  | 612 AIRLOCK           | P         | DP       | Seismic Only |              |               | Y           |                                 |   |
| 704      | 2     | 18      | 1-PPP-303 | 0      | CONTAINMENT VENTILATION / LOWER CONTAINMENT CHANNEL I PRESSURE PROTECTION TRANSMITTER                 | NONE                 | AUXILIARY   | 612  | 612 AIRLOCK           | P         | DP       | Seismic Only |              |               | Y           | 1-12050                         | 1-CRID-I-3                                |
| 705      | 2     | 18      | 1-QFA-210 | 0      | RCTR COOLANT PMP SEAL WTR INJ/LEAKOFF / RCP WATER INJECTION TO RCP PP-45-1 LOW FLOW ALARM TRANSMITTER | 1-5128A              | AUXILIARY   | 587  | 587 HALLWAY           | P         | RIP      | Seismic Only |              |               | Y           | 1-12050 1-98562                 | INSTRUMENTATION BOP 1-CRID-I-4            |



DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID         | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.       | FIEL | Rm or RwrCl                 | Flow Path | Function    | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|----------------|--------|---|----------------------|-------------|------|-----------------------------|-----------|-------------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 706      | 2     | 18     | 1-QFA-220      | 0      | RCTR COOLANT PMP SEAL WTR INJ/LEAKOFF / RCP SEAL WATER INJECTION TO RCP 2 LOW FLOW ALARM TRANSMITTER    | 1-5128A              | AUX         | 587  | 587 HALLWAY                 | P         | RIP         | Seismic Only      |              |               | Y           | 1-98563 1-12050                 | INSTRUMENTATION BOP 1-CRID-II-4           |
| 707      | 1     | 18     | 1-QFA-230      | 0      | RCTR COOLANT PMP SEAL WTR INJ/LEAKOFF / RCP SEAL WATER INJECTION TO RCP 3 LOW FLOW ALARM TRANSMITTER    | 1-5128A              | AUX         | 587  | 587 HALLWAY                 | P         | RIP         | Seismic Only      |              |               | Y           | 1-98563 1-12050                 | INSTRUMENTATION BOP 1-CRID-II-4           |
| 708      | 1     | 18     | 1-QFA-240      | 0      | RCTR COOLANT PMP SEAL WTR INJ/LEAKOFF / RCP SEAL WATER TO RCP 4 LOW FLOW ALARM TRANSMITTER              | 1-5128A              | AUX         | 587  | 587 HALLWAY                 | P         | RIP         | Seismic Only      |              |               | Y           | 1-98563 1-12050                 | INSTRUMENTATION BOP 1-CRID-IV-4           |
| 709      | 12    | 18     | 1-QFI-200      | 0      | CVCS - CHARGING / CVCS CHG PPS DISCH FLOW INDICATOR   | 1-5129               | AUXILIARY   | 587  | 587 HALLWAY                 | P         | RIP         | Seismic Only      |              |               | Y           | 1-12050, 1-98573                | 1-CRID II-4                               |
| 710      | 12    | 18     | 1-QLC-451      | 0      | CVCS / REACTOR COOLANT LETDOWN VCT TK-10 EXTREME HIGH LEVEL CONTROL TRANSMITTER                         | 1-5129A              | AUXILIARY   | 609  | 609 HALLWAY                 | P         | RI          | Seismic Only      |              |               | Y           | 1-12050 1-98556 1-98514         | INSTRUMENTATION BOP 1-CRID-I-4            |
| 711      | 12    | 18     | 1-QLC-452      | 0      | CVCS / REACTOR COOLANT LETDOWN VCT TK-10 HIGH LEVEL CONTROL TRANSMITTER                                 | 1-5129A              | AUXILIARY   | 609  | 609 HALLWAY                 | P         | RI          | Seismic Only      |              |               | Y           | 1-12050 1-98556 1-98514         | INSTRUMENTATION BOP 1-CRID-IV-4           |
| 712      | 2     | 18     | 1-WDS-701      | 0      | ESW / EAST ESW PUMP PP-7E DISCHARGE STRAINER OME-34E HIGH DIFFERENTIAL PRESSURE SWITCH                  | 1-5113               | SCREENHOUSE | 591  | E ESSNTL SERV WTR PMP RM    | S         | ESW         | Seismic and Relay |              |               | Y           | 1-12033 1-98415                 | INSTRUMENTATION 1-PS-D-3C                 |
| 713      | 1     | 18     | 1-WDS-702      | 0      | ESW / WEST ESW PUMP PP-7W DISCHARGE STRAINER OME-34W HIGH DIFFERENTIAL PRESSURE SWITCH                  | 1-5113               | SCREENHOUSE | 591  | W ESSNTL SERV WTR PMP RM    | S         | ESW         | Seismic and Relay |              |               | Y           | 1-12014 1-98415                 | INSTRUMENTATION 1-PS-A-1C                 |
| 714      | 2     | 18     | 1-WPS-701      | 0      | ESW / EAST ESW SUPPLY HEADER PRESSURE SWITCH  | 1-5113               | TURBINE     | 569  | ESSNTL SERV WTR PIPE TUNNEL | S         | ESW         | Seismic and Relay |              |               | Y           | 1-12070 1-98415                 | INSTRUMENTATION 1-MCCD-4                  |
| 715      | 1     | 18     | 1-WPS-705      | 0      | ESW / WEST ESW SUPPLY HEADER PRESSURE SWITCH  | 1-5113               | TURBINE     | 569  | ESSNTL SERV WTR PIPE TUNNEL | S         | ESW         | Seismic and Relay |              |               | Y           | 1-12080 1-98415                 | INSTRUMENTATION 1-MCAB-3                  |
| 716      | 1     | 18     | 1-XPS-300      | 0      | DIESEL COMBUSTION AIR / AB EMERGENCY DIESEL FRONT BANK AIR CHEST EXTREME HIGH PRESSURE SWITCH           | 1-5151B              | AUXILIARY   | 587  | AB EMER DSL GEN RM          | S         | EDG         | Seismic Only      |              |               | Y           |                                 |   |
| 717      | 2     | 18     | 1-XPS-305      | 0      | DIESEL COMBUSTION AIR / CD EMERGENCY DIESEL FRONT BANK AIR CHEST EXTREME HIGH PRESSURE SWITCH           | 1-5151D              | AUXILIARY   | 587  | CD EMER DSL GEN RM          | S         | EDG         | Seismic Only      |              |               | Y           |                                 |   |
| 718      | 12    | 18     | 1-XRV-RACK-152 | 0      | CONTROL AIR / PRZ TR-B PRESSURE RELIEF VLV NRV-152 VLV RACK(EMERG AIR PRESSURE REGULATOR)               | 1-5120D              | CONTAINMENT | 650  | UPPER CONT, QUAD4           | S         | SUPPORT AIR | Seismic Only      |              |               |             |                                 |   |
| 719      | 12    | 18     | 1-XRV-RACK-153 | 0      | CONTROL AIR / PRZ TR-A PRESSURE RELIEF VLV NRV-153 VLV RACK(EMERG AIR PRESS REGULATOR)                  | 1-5120D              | CONTAINMENT | 650  | UPPER CONT, QUAD4           | S         | SUPPORT AIR | Seismic Only      |              |               |             |                                 |   |
| 720      | 12    | 18     | 12-CPS-430     | 0      | CCW / SPARE CCW PUMP DISCHARGE PRESSURE SWITCH  | 1-5135A              | AUXILIARY   | 609  | 609 HALLWAY                 | S         | CCW         | Seismic Only      |              |               | Y           |                                 | INSTRUMENTATION                           |
| 721      | 2     | 19     | 1-CTR-415      | 0      | CCW / EAST CCW HEAT EXCHANGER HE-15E CCW OUTLET TEMPERATURE RECORDER THERMAL SENSOR                     | 1-5135A              | AUXILIARY   | 609  | 609 HALLWAY                 | S         | CCW         | Seismic Only      |              |               | Y           |                                 | INSTRUMENTATION                           |
| 722      | 2     | 19     | 1-CTR-425      | 0      | CCW / WEST COMPONENT COOLING WATER HEAT EXCHANGER HE-15W CCW OUTLET TEMPERATURE RECORDER THERMAL SENSOR | 1-5135A              | AUXILIARY   | 609  | 609 HALLWAY                 | S         | CCW         | Seismic Only      |              |               | Y           |                                 |   |
| 723      | 12    | 19     | 1-NTR-335      | 0      | RHR / RHR TO REACTOR COOLANT LOOP 2 AND 3 COLD LEGS TEMP RECORDER THERMAL SENSOR                        | 1-5143               | AUXILIARY   | 609  | EAST RHR HEAT EXCHGR RM     | P         | DRIP        | Seismic Only      |              |               | Y           | 1-12050 1-98566                 | INSTRUMENTATION 1-CRID-II-4               |
| 724      | 2     | 19     | 1-NTR-110      | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP 1 HOT LEG WIDE RANGE TEMP RECORDER THERMAL SENSOR                | 1-5128               | CONTAINMENT | 598  | LOWER CONT, QUAD1           | P         | DRIP        | Seismic Only      |              |               | Y           | 1-12050 1-98502 1-98542         | INSTRUMENTATION 1-CRID-III-3              |
| 725      | 1     | 19     | 1-NTR-120      | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP 2 HOT LEG WIDE RANGE TEMP RECORDER THERMAL SENSOR                | 1-5128               | CONTAINMENT | 617  | LOWER CONT, QUAD2           | P         | DRIP        | Seismic Only      |              |               | Y           | 1-12015 1-98592 1-98502         | INSTRUMENTATION 1-LS4-2                   |

DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID    | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.       | FIEL | Rm or Rwf/Cl                | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|-----------|--------|--|----------------------|-------------|------|-----------------------------|-----------|----------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 726      | 1     | 19     | 1-NTR-130 | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP 3 HOT LEG WIDE RANGE TEMP RECORDER THERMAL SENSOR   | 1-5128               | CONTAINMENT | 625  | LOWER CONT, QUAD3           | P         | DRIP     | Seismic Only      |              |               | Y           | 1-12050 1-98502 1-98542         | INSTRUMENTATION 1-CRUD-II-3               |
| 727      | 2     | 19     | 1-NTR-140 | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP 4 HOT LEG WIDE RANGE TEMP RECORDER THERMAL SENSOR   | 1-5128               | CONTAINMENT | 593  | LOWER CONT, QUAD4           | P         | DRIP     | Seismic Only      |              |               | Y           | 1-12015 1-98502 1-98502         | INSTRUMENTATION 1-LSI-1                   |
| 728      | 2     | 19     | 1-NTR-210 | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP 1 COLD LEG WIDE RANGE TEMP RECORDER THERMAL SENSOR  | 1-5128               | CONTAINMENT | 593  | LOWER CONT, QUAD1           | P         | DRIP     | Seismic Only      |              |               | Y           | 1-12050 1-98502 1-98542         | INSTRUMENTATION 1-CRUD-II-3               |
| 729      | 1     | 19     | 1-NTR-220 | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP 2 COLD LEG WIDE RANGE TEMP RECORDER THERMAL SENSOR  | 1-5128               | CONTAINMENT | 617  | LOWER CONT, QUAD2           | P         | DRIP     | Seismic Only      |              |               | Y           | 1-12015 1-98502 1-98502         | INSTRUMENTATION 1-LSI-2                   |
| 730      | 1     | 19     | 1-NTR-230 | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP 3 COLD LEG WIDE RANGE TEMP RECORDER THERMAL SENSOR  | 1-5128               | CONTAINMENT | 617  | LOWER CONT, QUAD3           | P         | DRIP     | Seismic Only      |              |               | Y           | 1-12050 1-98502 1-98542         | INSTRUMENTATION 1-CRUD-II-3               |
| 731      | 2     | 19     | 1-NTR-240 | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP 4 COLD LEG WIDE RANGE TEMP RECORDER THERMAL SENSOR  | 1-5128               | CONTAINMENT | 617  | LOWER CONT, QUAD4           | P         | DRIP     | Seismic Only      |              |               | Y           | 1-12015 1-98502 1-98502         | 1-LSI-1                                   |
| 732      | 12    | 19     | 1-VTS-201 | 0      | TURBINE BUILDING VENTILATION / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP ROOM EXHAUST FAN HV-AFP-M1 THERMAL SENSOR                | 12-5148B             | TURBINE     | 591  | E MOTOR DRIVEN AUX FDWTR PU | S         | HVAC     | Seismic and Relay |              |               |             |                                 |   |
| 733      | 2     | 19     | 1-VTS-203 | 0      | TURBINE BUILDING VENTILATION / TURBINE DRIVEN AUXILIARY FEED PUMP ROOM NORTH EXHAUST FAN HV-AFP-T1 THERMAL SENSOR                  | 12-5148B             | TURBINE     | 591  | TB DRIVEN AUX FDWTR PMP     | S         | HVAC     | Seismic and Relay |              |               |             |                                 |   |
| 734      | 1     | 19     | 1-VTS-204 | 0      | TURBINE BUILDING VENTILATION / TURBINE DRIVEN AUXILIARY FEED PUMP ROOM SOUTH EXHAUST FAN HV-AFP-T2 THERMAL SENSOR                  | 12-5148B             | TURBINE     | 591  | TB DRIVEN AUX FDWTR PMP     | S         | HVAC     | Seismic and Relay |              |               |             |                                 |   |
| 735      | 12    | 19     | 1-VTS-206 | 0      | TURBINE BUILDING VENTILATION / WEST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP ROOM WEST EXHAUST FAN HV-AFP-X2 THERMAL SENSOR           | 12-5148B             | TURBINE     | 591  | W MOTOR DRIVEN AUX FDWTR PU | S         | HVAC     | Seismic and Relay |              |               |             |                                 |   |
| 736      | 1     | 19     | 1-VTS-340 | 0      | DIESEL BUILDING VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION FANS OUTSIDE AIR THERMOSTAT                           | 1-5148C              | AUXILIARY   | 596  | RCTR CABLE TUNNEL, QUAD3    | S         | HVAC     | Seismic and Relay |              |               |             |                                 |   |
| 737      | 1     | 19     | 1-VTS-341 | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION FANS HV-DGX-1 AND HV-DGS-1 THERMOSTAT                     | 1-5148C              | AUXILIARY   | 587  | AB EMER DSL GEN RM          | S         | HVAC     | Seismic and Relay |              |               |             |                                 |   |
| 738      | 2     | 19     | 1-VTS-345 | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION FANS OUTSIDE AIR THERMOSTAT                               | 1-5148C              | GROUND      | 609  | INNER PLANT GROUND          | S         | HVAC     | Seismic and Relay |              |               | Y           |                                 |   |
| 739      | 2     | 19     | 1-VTS-346 | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION FANS HV-DGX-2 AND HV-DGS-2 THERMOSTAT                     | 1-5148C              | AUXILIARY   | 587  | CD EMER DSL GEN RM          | S         | HVAC     | Seismic and Relay |              |               | Y           |                                 |   |
| 740      | 12    | 19     | 1-VTS-350 | 0      | AUXILIARY BUILDING VENTILATION / CONTROL ROD DRIVE EQUIP ROOM AND INV AREA VENT SOUTH SUPPLY FAN HV-SGRA-1A TEMPERATURE SWITCH     | 1-5148C              | AUXILIARY   | 609  | INVERTER AREA               | S         | HVAC     | Seismic and Relay |              |               |             | 1-12013                         |   |
| 741      | 12    | 19     | 1-VTS-351 | 0      | AUXILIARY BUILDING VENTILATION / CONTROL ROD DRIVE EQUIPMENT ROOM AND INV AREA VENT SOUTH SUPPLY FAN HV-SGRS-1A TEMPERATURE SWITCH | 1-5148C              | AUXILIARY   | 609  | CRD EQUIP RM                | S         | HVAC     | Seismic and Relay |              |               |             | 1-12013                         |   |



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SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID     | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.         | FIEL | Rm or RwtCl              | Flow Path | Function               | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|------------|--------|---|----------------------|---------------|------|--------------------------|-----------|------------------------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 742      | 2     | 19     | 1-VTS-352  | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600 VOLT SWGR XFMRs TR11B AND TR11D AREA VENT SUPPLY FAN HV-SGRS-7 TEMP SWITCH  | 1-5148C              | AUXILIARY     | 609  | 4KV RM - 600V SWGR       | S         | HVAC                   | Seismic and Relay |              |               |             | 1-12033                         |   |
| 743      | 12    | 19     | 1-VTS-353  | 0      | AUXILIARY BUILDING VENTILATION / 600VAC MOTOR CONTROL CENTER MEZZANINE AREA VENT SUPPLY FAN SGRS-9 TEMPERATURE SWITCH   | 1-5148C              | AUXILIARY     | 613  | 4KV RM - MEZZANINE       | S         | HVAC                   | Seismic and Relay |              |               |             |                                 |   |
| 744      | 12    | 19     | 1-VTS-354  | 0      | AUXILIARY BUILDING VENTILATION / CONT ROD DRIVE EQUIP ROOM AND INV AREA OUTSIDE AIR INLET DAMPER HV-SGR-MD-1 AND 2 TEMP SWITCH TO OVERRIDE PNEUMATIC CONTROLLER | 1-5148C              | AUXILIARY     | 609  | INVERTER AREA            | S         | HVAC                   | Seismic and Relay |              |               |             |                                 |   |
| 745      | 12    | 19     | 1-VTS-355  | 0      | AUXILIARY BUILDING VENTILATION / CRD AND CRDM INV AREA VENT AIR INLET DAMPER HV-SGR-MD-1 AND 2 TEMP SWITCH TO OVERRIDE PNEUMATIC CONTROLLER                     | 1-5148C              | AUXILIARY     | 609  | INVERTER AREA            | S         | HVAC                   | Seismic and Relay |              |               |             |                                 |   |
| 746      | 12    | 19     | 1-VTS-356  | 0      | AUXILIARY BUILDING VENTILATION / CNTRL ROD DRIVE EQUIP ROOM AND INV AREA VENT NORTH SUPPLY FAN HV-SGRS-4A TEMP SWITCH   | 1-5148C              | AUXILIARY     | 609  | INVERTER AREA            | S         | HVAC                   | Seismic and Relay |              |               |             |                                 |   |
| 747      | 12    | 19     | 1-VTS-357  | 0      | AUXILIARY BUILDING VENTILATION / CONTROL ROD DRIVE EQUIPMENT ROOM AND INV AREA VENT NORTH SUPPLY FAN HV-SGRS-4A TEMPERATURE SWITCH                              | 1-5148C              | AUXILIARY     | 609  | CRD EQUIP RM             | S         | HVAC                   | Seismic and Relay |              |               |             |                                 |   |
| 748      | 1     | 19     | 1-VTS-802  | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM AB 4KV SWITCHGEAR AREA VENTILATION SUPPLY FAN HV-SGRS-2 THERMAL SENSOR  | 1-5148C              | AUXILIARY     | 609  | 4KV RM - AB 4KV SWGR     | S         | HVAC                   | Seismic and Relay |              |               |             | 1-12013                         |   |
| 749      | 2     | 19     | 1-VTS-803  | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM CD 4KV SWITCHGEAR AREA VENTILATION SUPPLY FAN HV-SGRS-3 THERMAL SENSOR  | 1-5148C              | AUXILIARY     | 609  | 4KV RM - CD 4KV SWGR     | S         | HVAC                   | Seismic and Relay |              |               |             | 1-12033                         |   |
| 750      | 12    | 19     | 1-VTS-805  | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600V SWGR XFMRs TR11B AND TR11D AREA VENT EXHAUST FAN HV-SGRS-7 TEMP SWITCH THERMAL SENSOR                            | 1-5148C              | AUXILIARY     | 613  | 4KV RM - MEZZANINE       | S         | HVAC                   | Seismic and Relay |              |               | Y           | 1-12033                         |   |
| 751      | 1     | 19     | 1-VTS-808  | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600VAC SWGR XFMRs TR11A AND TR11C AREA VENT SUPPLY FAN HV-SGRS-8 TEMP SWITCH THERMAL SENSOR                           | 1-5148C              | AUXILIARY     | 609  | 4KV RM - 600V SWGR       | S         | HVAC                   | Seismic and Relay |              |               | Y           | 1-12013                         |   |
| 752      | 12    | 19     | 12-RTI-500 | 0      | SPENT FUEL PIT COOLING/CLEANUP / SPENT FUEL PIT TEMPERATURE INDICATOR THERMAL SENSOR  | 12-5136              | U#1 AUXILIARY | 650  | SPENT FUEL PIT           | S         | SPENT FUEL PIT COOLING | Seismic Only      |              |               | Y           |                                 |   |
| 753      | 1     | 19     | 12-VTS-706 | 0      | SCREEN HOUSE VENTILATION / UNIT 1 WEST ESSTIAL SERVICE WATER PUMP ROOM TEMPERATURE SWITCH THERMAL SENSOR  | 12-5148B             | SCREEN HOUSE  | 591  | W ESSNTL SERV WTR PMP RM | S         | HVAC                   | Seismic and Relay |              |               |             |                                 |   |
| 754      | 2     | 19     | 12-VTS-708 | 0      | SCREEN HOUSE VENTILATION / UNIT 1 EAST ESSENTIAL SERVICE WATER PUMP ROOM TEMPERATURE SWITCH THERMAL SENSOR  | 12-5148B             | SCREEN HOUSE  | 591  | E ESSNTL SERV WTR PMP RM | S         | HVAC                   | Seismic and Relay |              |               |             |                                 |   |
| 755      | NA    | 20     | 1-A11      | 0      | EQUIP CTRL AND INDICATION STN / AUXILIARY RELAY PANEL A11   |                      | AUXILIARY     | 633  | CONTROL RM               | E         | SUPPORT                | Seismic Only      |              |               |             |                                 |   |
| 756      |       | 20     | 1-A13      | 0      | EQUIP CTRL AND INDICATION STN / AUXILIARY RELAY PANEL A13   | NONE                 | AUXILIARY     | 633  | CONTROL RM               | E         | SUPPORT                | Seismic Only      |              |               |             |                                 |   |
| 757      | 2     | 20     | 1-ACRA-1   | 0      | EQUIP CTRL AND INDICATION STN / CONTROL ROOM AIR HANDLING SUBPANEL #1   |                      | AUXILIARY     | 650  | CTRL RM AIR COND RM      | E         | PANELS                 | Seismic Only      |              |               |             |                                 |   |
| 758      | 1     | 20     | 1-ACRA-2   | 0      | EQUIP CTRL AND INDICATION STN / CONTROL ROOM AIR HANDLING SUBPANEL #2   |                      | AUXILIARY     | 650  | CTRL RM AIR COND RM      | E         | PANELS                 | Seismic Only      |              |               |             |                                 |   |

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| Line No. | Train | Eq. Cl. | Eq. ID     | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.         | FIEL | Rm or Rwt/Cl       | Flow Path | Function | Eval Type    | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|---------|------------|--------|--|----------------------|---------------|------|--------------------|-----------|----------|--------------|--------------|---------------|-------------|---------------------------------|---|
| 759      | 2     | 20      | 1-ARA-2    | 0      | 120V/220 CONTROL AND INSTRUMENTATION / REACTOR PROTECTION TRAIN A AUX RELAY CABINET #2                                   |                      | AUXILIARY     | 633  | CONTROL RM         | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 760      | 1     | 20      | 1-ARB-2    | 0      | 120V/220 CONTROL AND INSTRUMENTATION / REACTOR PROTECTION TRAIN 'B' AUXILIARY RELAY CABINET#2                            |                      | AUXILIARY     | 633  | CONTROL RM         | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 761      | 12    | 20      | 1-BA       | 0      | BORON MAKEUP (CVCS) / BORIC ACID CHARGING & LETDOWN CONTROL PANEL  |                      | AUXILIARY     | 633  | CONTROL RM         | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 762      | 2     | 20      | 1-BC-A-PNL | 0      | 120/220V CONTROL AND INSTRUMENTATION / TRAIN 'N' BATTERY DISTR TRAIN 'A' BATTERY CHARGER BC-A CONTROL BOX                |                      | AUXILIARY     | 633  | 633 HALLWAY        | E         | PANELS   | Seismic Only |              |               | N           |                                 |   |
| 763      | 1     | 20      | 1-BC-B-PNL | 0      | 120/220V CONTROL INSTRUMENTATION / TRAIN 'N' BATTERY DISTR TRAIN 'B' BATTERY CHARGER BC-C CONTROL BOX                    |                      | AUXILIARY     | 633  | 633 HALLWAY        | E         | PANELS   | Seismic Only |              |               | N           |                                 |   |
| 764      | 12    | 20      | 1-CAS      | 0      | CONTAINMENT VENTILATION / CONTAINMENT AUXILIARIES SUBPANEL (VENTILATION)   |                      | AUXILIARY     | 633  | 633 HALLWAY        | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 765      | NA    | 20      | 1-CCW      | 0      | COMPONENT COOLING WATER / COMPONENT COOLING WATER CONTROL PANEL  |                      | AUXILIARY     | 633  | CONTROL ROOM       | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 766      | NA    | 20      | 1-CG1      | 0      | EQUIP CTRL AND INDICATION STN / REACTOR PROTECTION CONTROL GROUP #1 CABINET #14, #15, AND #16 (Rack# 14, 15, 16)         |                      | AUXILIARY     | 633  | CONTROL RM         | E         | PANELS   | Seismic Only |              |               |             |                                 |   |
| 767      | 12    | 20      | 1-CG2      | 0      | EQUIP CTRL AND INDICATION STN / REACTOR PROTECTION CONTROL GROUP #2 CABINETS #17, #18, AND #19 (Rack# 17, 18, 19)        |                      | AUXILIARY     | 633  | CONTROL RM         | E         | SUPPORT  | Seismic Only |              |               | N           |                                 |   |
| 768      | A     | 20      | 1-CG3      | 0      | EQUIP CTRL AND INDICATION STN / REACTOR PROTECTION CONTROL GROUP #3, CABINET #20 AND #21(Rack#20,21)                     |                      | AUXILIARY     | 633  | CONTROL RM         | E         | PANELS   | Seismic Only |              |               |             |                                 |   |
| 769      | NA    | 20      | 1-CG4      | 0      | EQUIP CTRL AND INDICATION STN / REACTOR PROTECTION CONTROL GROUP #4, CABINET #22, #23, #24, & #25 (Rack# 22, 23, 24, 25) |                      | AUXILIARY     | 633  | CONTROL RM         | E         | PANELS   | Seismic Only |              |               |             |                                 |   |
| 770      | NA    | 20      | 1-CI-26    | 0      | EQUIP CTRL AND INDICATION STN / REACTOR PROTECTION CONTROL INPUT CABINET #26   |                      | AUXILIARY     | 633  | CONTROL RM         | E         | PANELS   | Seismic Only |              |               |             |                                 |   |
| 771      | NA    | 20      | 1-CI-27    | 0      | EQUIP CTRL AND INDICATION STN / REACTOR PROTECTION CONTROL INPUT CABINET #27   |                      | AUXILIARY     | 633  | CONTROL RM         | E         | PANELS   | Seismic Only |              |               |             |                                 |   |
| 772      | NA    | 20      | 1-CP       | 0      | CONDENSATE / CONDENSATE PUMP CONTROL PANEL   |                      | AUXILIARY     | 633  | CONTROL RM         | E         | PANELS   | Seismic Only |              |               |             |                                 |   |
| 773      | NA    | 20      | 1-CR       | 0      | MISC. EQUIP SUPPORT / CONDENSATE PANEL REAR INST/RELAY RACK  |                      | AUXILIARY     | 633  | CONTROL RM         | E         | PANELS   | Seismic Only |              |               |             |                                 |   |
| 774      | 1     | 20      | 1-DGAB     | 0      | EQUIP CTRL AND INDICATION STN / AB EMERGENCY DIESEL GENERATOR OME-150-AB CONTROL SUBPANEL                                |                      | AUXILIARY     | 587  | AB EMER DSL GEN RM | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 775      | 1     | 20      | 1-DGAB-X   | 0      | EQUIP CTRL AND INDICATION STN / AB EMERGENCY DIESEL GENERATOR OME-150-AB AUXILIARY PANEL                                 | NONE                 | AUXILIARY     | 587  | AB EMER DSL GEN RM | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 776      | 2     | 20      | 1-DGCD     | 0      | EQUIP CTRL AND INDICATION STN / CD EMERGENCY DIESEL GENERATOR OME-150-CD CONTROL SUBPANEL                                |                      | AUXILIARY     | 587  | CD EMER DSL GEN RM | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 777      | 2     | 20      | 1-DGCD-X   | 0      | EQUIP CTRL AND INDICATION STN / CD EMERGENCY DIESEL GENERATOR OME-150-CD AUXILIARY SUBPANEL                              | NONE                 | U#1 AUXILIARY | 587  | CD EMER DSL GEN RM | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 778      | NA    | 20      | 1-DTU      | 0      | TURBINE INST. AND CONTROL / DELTA 'T' AND UNIT CONTROL PANEL   |                      | AUXILIARY     | 633  | CONTROL RM         | E         | PANELS   | Seismic Only |              |               |             |                                 |   |

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SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID         | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.     | FIEL | Rm or Rwl/Cl                  | Flow Path | Function | Eval Type    | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|----------------|--------|---|----------------------|-----------|------|-------------------------------|-----------|----------|--------------|--------------|---------------|-------------|---------------------------------|---|
| 779      | NA    | 20     | 1-EFR          | 0      | MISC EQUIPMENT SUPPORTS / EMERGENCY FIRE PANEL INSTRUMENT/RELAY RACK  | NONE                 | AUXILIARY | 633  | CONTROL RM                    | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 780      | NA    | 20     | 1-ERR          | 0      | MISC EQUIPMENT SUPPORTS / CONTROL ROOM EAST REAR INSTRUMENT/RELAY RACK  |                      | AUXILIARY | 633  | CONTROL RM                    | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 781      | NA    | 20     | 1-ESW          | 0      | ESSENTIAL SERVICE WATER / ESSENTIAL SERVICE WATER CONTROL PANEL   |                      | AUXILIARY | 633  | CONTROL ROOM                  | E         | SUPPORT  | Seismic Only |              |               | N           |                                 |   |
| 782      | NA    | 20     | 1-FLX          | 0      | NUCLEAR INSTRUMENTATION / FLUX CONTROL PANEL  |                      | AUXILIARY | 633  | CONTROL ROOM                  | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 783      | 12    | 20     | 1-GR-1         | 0      | MISC EQUIPMENT SUPPORTS / GENERATOR PANEL REAR INSTRUMENT/RELAY RACK #1   |                      | AUXILIARY | 633  | CONTROL RM                    | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 784      | NA    | 20     | 1-GR-2         | 0      | MISC EQUIPMENT SUPPORTS / GENERATOR PANEL REAR INSTRUMENT/RELAY RACK #2   | NONE                 | AUXILIARY | 633  | CONTROL RM                    | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 785      | NA    | 20     | 1-GRB          | 0      | MISC EQUIPMENT SUPPORTS / GENERATOR PANEL REAR INSTRUMENT/RELAY RACK B  | NONE                 | AUXILIARY | 633  | CONTROL RM                    | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 786      | NA    | 20     | 1-GRC          | 0      | MISC. EQUIPMENT SUPPORTS / GENERATOR PANEL REAR INST/RELAY RACK 'C'   |                      | AUXILIARY | 633  | CONTROL RM                    | E         | PANELS   | Seismic Only |              |               |             |                                 |   |
| 787      | NA    | 20     | 1-HSD1         | 0      | SAFETY INJECTION / UNIT 1 HOT SHUTDOWN PANEL  |                      | AUXILIARY | 633  | CONTROL RM                    | E         | PANELS   | Seismic Only |              |               |             |                                 |   |
| 788      | NA    | 20     | 1-IV           | 0      | CONTAINMENT SPRAY / CONTAINMENT ISOLATION VALVE CONTROL PANEL   |                      | AUXILIARY | 633  | CONTROL ROOM                  | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 789      | NA    | 20     | 1-LSI-1        | 0      | STEAM GENERATING / STEAM GENERATORS #1 AND #4 LOCAL SHUTDOWN STATION  | NOT APPL             | AUXILIARY | 612  | E MAIN STM STOP ENCL          | E         | PANELS   | Seismic Only |              |               |             |                                 |   |
| 790      | NA    | 20     | 1-LSI-2        | 0      | STEAM GENERATING / STEAM GENERATORS #2 AND #3 LOCAL SHUTDOWN STATION  | NOT APPL             | AUXILIARY | 591  | STARTUP BLOWDOWN FLASHTANK RM | E         | PANELS   | Seismic Only |              |               |             |                                 |   |
| 791      | NA    | 20     | 1-LSI-3        | 0      | PRESSURIZER / REACTOR COOLANT SYSTEM CHARGING AND LETDOWN LOCAL SHUTDOWN STATION                                | NOT APPL             | AUXILIARY | 587  | 587 HALLWAY                   | E         | PANELS   | Seismic Only |              |               |             |                                 |   |
| 792      | NA    | 20     | 1-LSI-4        | 0      | EQUIP CTRL AND INDICATION STN / REACTOR COOLANT SYSTEM TEMPERATURES AND STEAM GENERATORS LOCAL SHUTDOWN STATION | NOT APPL             | AUXILIARY | 587  | 587 HALLWAY                   | E         | PANELS   | Seismic Only |              |               |             |                                 |   |
| 793      | NA    | 20     | 1-LSI-5        | 0      | EQUIP CTRL AND INDICATION STN / RC LOOPS #1 & 4 TEMPS, SG'S #1 & 4 PRESS LOCAL SHUTDOWN STATION                 |                      | AUXILIARY | 612  | E MAIN STM STOP ENCL          | E         | PANELS   | Seismic Only |              |               |             |                                 |   |
| 794      | NA    | 20     | 1-LSI-5X       | 0      | EQUIP CTRL AND INDICATION STN / LOCAL SHUTDOWN STATION #5X  |                      | AUXILIARY | 621  | E MAIN STM STOP ENCL          | E         | PANELS   | Seismic Only |              |               |             |                                 |   |
| 795      | NA    | 20     | 1-LSI-6        | 0      | EQUIP CTRL AND INDICATION STN / RC LOOPS 2 & 3 TEMPS, SG'S #2 & 3 PRESS LOCAL SHUTDOWN STN                      |                      | AUXILIARY | 591  | STARTUP BLOWDOWN FLASHTANK RM | E         | PANELS   | Seismic Only |              |               |             |                                 |   |
| 796      | NA    | 20     | 1-LSI-6X       | 0      | EQUIP CTRL AND INDICATION STN / LOCAL SHUTDOWN STATION #6X  |                      | AUXILIARY | 633  | NORM BLOWDOWN FLASHTANK RM    | E         | PANELS   | Seismic Only |              |               |             |                                 |   |
| 797      | NA    | 20     | 1-NS-I         | 0      | EQUIP CTRL AND INDICATION STN / NUCLEAR INSTRUMENTATION SYSTEM PROT CH. 1 CONTROL PANEL                         |                      | AUXILIARY | 633  | CONTROL RM                    | E         | PANELS   | Seismic Only |              |               |             |                                 |   |
| 798      | NA    | 20     | 1-NS-II        | 0      | EQUIP CTRL AND INDICATION STN / NUCLEAR INSTRUMENTATION SYSTEM PROT CH. II CONTROL PANEL                        |                      | AUXILIARY | 633  | CONTROL RM                    | E         | PANELS   | Seismic Only |              |               |             |                                 |   |
| 799      | NA    | 20     | 1-NRI-21-AMP   | 0      | NUCLEAR INSTRUMENTATION / NI WIDE RANGE RADIATION AMPLIFIER CABINET   |                      | AUXILIARY | 596  | RCTR CABLE TUNNEL, QUAD1      | E         | PANELS   | Seismic Only |              |               |             |                                 |   |
| 800      | NA    | 20     | 1-NRI-21-PRCSR | 0      | NUCLEAR INSTRUMENTATION / NI WIDE RANGE SIGNAL PROCESSOR CABINET  |                      | AUXILIARY | 633  | CONTROL ROOM                  | E         | PANELS   | Seismic Only |              |               |             |                                 |   |
| 801      | NA    | 20     | 1-NRI-23-AMP   | 0      | NUCLEAR INSTRUMENTATION / NI SOURCE RANGE RADIATION DETECTOR NRI-23 AMPLIFIER CABINET                           |                      | AUXILIARY | 596  | RCTR CABLE TUNNEL, QUAD1      | E         | PANELS   | Seismic Only |              |               |             |                                 |   |

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SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID         | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.     | FIEL | Rm or Rwr/CI                 | Flow Path | Function | Eval Type    | Normal State | Desired State | Power Req'd | Supporting Sys. No. / Rev. | Dwg. No. | Required Supporting Systems or Components |
|----------|-------|--------|----------------|--------|---|----------------------|-----------|------|------------------------------|-----------|----------|--------------|--------------|---------------|-------------|----------------------------|----------|---|
| 802      | NA    | 20     | 1-NRI-23-ISOL  | 0      | NUCLEAR INSTRUMENTATION / NI SOURCE RANGE SIGNAL ISOLATOR CABINET                           |                      | AUXILIARY | 596  | RCTR CABLE TUNNEL, QUAD1     | E         | PANELS   | Seismic Only |              |               |             |                            |          |   |
| 803      | NA    | 20     | 1-NRI-23-PRCSR | 0      | NUCLEAR INSTRUMENTATION / NUCLEAR INSTRUMENTATION SOURCE RANGE SIGNAL PROCESSOR CABINET     |                      | AUXILIARY | 596  | REACTOR CABLE TUNNEL QUAD #1 | E         | PANELS   | Seismic Only |              |               |             |                            |          |   |
| 804      | NA    | 20     | 1-NSR          | 0      | MISC EQUIPMENT SUPPORTS / NUCLEAR INSTRUMENTATION SYSTEM REAR INSTRUMENT/RELAY RACK         | NONE                 | AUXILIARY | 633  | CONTROL RM                   | E         | SUPPORT  | Seismic Only |              |               |             |                            |          |   |
| 805      | NA    | 20     | 1-PRZ          | 0      | PRESSURIZER / PRESSURIZER CONTROL PANEL   |                      | AUXILIARY | 633  | CONTROL RM                   | E         | PANELS   | Seismic Only |              |               |             |                            |          |   |
| 806      | NA    | 20     | 1-RC           | 0      | ROD CONTROL AND INSTRUMENTATION / REACTOR CONTROL RODS CONTROL PANEL                        | NONE                 | AUXILIARY | 633  | CONTROL RM                   | E         | SUPPORT  | Seismic Only |              |               |             |                            |          |   |
| 807      | NA    | 20     | 1-RCP          | 0      | REACTOR COOLANT / REACTOR COOLANT PUMP CONTROL PANEL  |                      | AUXILIARY | 633  | CONTROL RM                   | E         | PANELS   | Seismic Only |              |               |             |                            |          |   |
| 808      | 12    | 20     | 1-RHR          | 0      | RESIDUAL HEAT REMOVAL / RESIDUAL HEAT REMOVAL CONTROL PANEL                                 |                      | AUXILIARY | 633  | CONTROL RM                   | E         | SUPPORT  | Seismic Only |              |               |             |                            |          |   |
| 809      | NA    | 20     | 1-RPC-I        | 0      | REACTOR PROTECTION / REACTOR PROTECTION CHANNEL I CABINET #1,2,3 AND #4 (Rack#1,2,3,4)      |                      | AUXILIARY | 633  | CONTROL RM                   | E         | PANELS   | Seismic Only |              |               |             |                            |          |   |
| 810      | NA    | 20     | 1-RPC-II       | 0      | REACTOR PROTECTION / REACTOR PROTECTION CHANNEL II CABINETS #5,6,7 AND 8 (Rack#5,6,7,8)     |                      | AUXILIARY | 633  | CONTROL RM                   | E         | PANELS   | Seismic Only |              |               |             |                            |          |   |
| 811      | NA    | 20     | 1-RPC-III      | 0      | REACTOR PROTECTION / REACTOR PROTECTION CHANNEL III CABINET #9,10 AND #11 (Rack#9,10,11)    |                      | AUXILIARY | 633  | CONTROL RM                   | E         | PANELS   | Seismic Only |              |               |             |                            |          |   |
| 812      | NA    | 20     | 1-RPC-IV       | 0      | REACTOR PROTECTION / REACTOR PROTECTION CHANNEL IV CABINET #12 AND #13 (Rack#12,13)         |                      | AUXILIARY | 633  | CONTROL RM                   | E         | PANELS   | Seismic Only |              |               |             |                            |          |   |
| 813      | 2     | 20     | 1-RPS-A        | 0      | REACTOR PROTECTION / REACTOR PROTECTION AND SAFEGUARD ACTUATION TRAIN 'A'                   |                      | AUXILIARY | 633  | CONTROL RM                   | E         | SUPPORT  | Seismic Only |              |               |             |                            |          |   |
| 814      | 1     | 20     | 1-RPS-B        | 0      | REACTOR PROTECTION / REACTOR PROTECTION AND SAFEGUARD ACTUATION TRAIN 'B' CABINET           | NA                   | AUXILIARY | 633  | CONTROL RM                   | E         | SUPPORT  | Seismic Only |              |               |             |                            |          |   |
| 815      | 2     | 20     | 1-RPSX-A       | 0      | REACTOR PROTECTION / REACTOR PROTECTION AND SAFEGUARD ACTUATION TRAIN 'A' AUXILIARY CABINET |                      | AUXILIARY | 633  | CONTROL RM                   | E         | SUPPORT  | Seismic Only |              |               |             |                            |          |   |
| 816      | 1     | 20     | 1-RPSX-B       | 0      | REACTOR PROTECTION / REACTOR PROTECTION AND SAFEGUARD ACTUATION TRAIN 'B' AUXILIARY CABINET |                      | AUXILIARY | 633  | CONTROL RM                   | E         | SUPPORT  | Seismic Only |              |               |             |                            |          |   |
| 817      | NA    | 20     | 1-SA           | 0      | ELECTRICAL DISTRIBUTION, 4180 VAC / STATION AUXILIARIES CONTROL PANEL                       |                      | AUXILIARY | 633  | CONTROL RM                   | E         | SUPPORT  | Seismic Only |              |               |             |                            |          |   |
| 818      | NA    | 20     | 1-SCP          | 0      | NUCLEAR SAMPLING / NUCLEAR SAMPLING SYSTEM CONTROL PANEL                                    |                      | AUXILIARY | 587  | NUCLEAR SAMPLING RM          | E         | SUPPORT  | Seismic Only |              |               |             |                            |          |   |
| 819      | NA    | 20     | 1-SG           | 0      | STEAM GENERATION / S.G. AND APW PUMP CONTROL PANEL  |                      | AUXILIARY | 633  | CONTROL RM                   | E         | PANELS   | Seismic Only |              |               |             |                            |          |   |
| 820      | 12    | 20     | 1-SIS          | 0      | SAFETY INJECTION / SAFETY INJECTION CONTROL PANEL   |                      | AUXILIARY | 633  | CONTROL RM                   | E         | SUPPORT  | Seismic Only |              |               |             |                            |          |   |
| 821      | 12    | 20     | 1-SPY          | 0      | CONTAINMENT SPRAY / CONTAINMENT SPRAY CONTROL PANEL   |                      | AUXILIARY | 633  | CONTROL RM                   | E         | SUPPORT  | Seismic Only |              |               |             |                            |          |   |
| 822      | 12    | 20     | 1-SR1          | 0      | MISC EQUIPMENT SUPPORTS / STATION AUXILIARIES REAR INSTRUMENT/RELAY RACK #1                 |                      | AUXILIARY | 633  | CONTROL RM                   | E         | SUPPORT  | Seismic Only |              |               |             |                            |          |   |
| 823      | NA    | 20     | 1-SR2          | 0      | MISC EQUIPMENT SUPPORTS / STATION AUXILIARIES REAR INSTRUMENT/RELAY RACK #2                 | NONE                 | AUXILIARY | 633  | CONTROL RM                   | E         | SUPPORT  | Seismic Only |              |               |             |                            |          |   |
| 824      | NA    | 20     | 1-SR3          | 0      | MISC EQUIPMENT SUPPORTS / STATION AUXILIARIES REAR INSTRUMENT/RELAY RACK #3                 |                      | AUXILIARY | 633  | CONTROL RM                   | E         | SUPPORT  | Seismic Only |              |               |             |                            |          |   |





DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID      | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.       | FIEL | Rm or Rwf/Cl                 | Flow Path | Function               | Eval Type    | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|-------------|--------|---|----------------------|-------------|------|------------------------------|-----------|------------------------|--------------|--------------|---------------|-------------|---------------------------------|---|
| 825      | NA    | 20     | 1-SR4       | 0      | MISC EQUIPMENT SUPPORTS / STATION AUXILIARIES REAR INSTRUMENT/RELAY RACK #4           | NONE                 | AUXILIARY   | 633  | CONTROL RM                   | E         | SUPPORT                | Seismic Only |              |               |             |                                 |   |
| 826      | 12    | 20     | 1-SSR       | 0      | MISC EQUIPMENT SUPPORTS / ENGINEER SAFETY SYSTEM REAR INSTRUMENT/RELAY RACK           |                      | AUXILIARY   | 633  | CONTROL RM                   | E         | SUPPORT                | Seismic Only |              |               |             |                                 |   |
| 827      | NA    | 20     | 1-SWR       | 0      | MISC EQUIPMENT SUPPORTS / NUCLEAR INSTRUMENTAL SOURCE RANGE N21 INSTRUMENT/RELAY RACK |                      | AUXILIARY   | 633  | CONTROL RM                   | E         | SUPPORT                | Seismic Only |              |               |             |                                 |   |
| 828      | NA    | 20     | 1-TFP       | 0      | EQUIP CTRL AND INDICATION STN / TURBINE DRIVEN AUXILIARY FEED PUMP SUBPANEL           | NONE                 | TURBINE     | 591  | TB DRIVEN AUX FDMTR PMP      | E         | SUPPORT                | Seismic Only |              |               |             |                                 |   |
| 829      | NA    | 20     | 1-TRB       | 0      | MISC EQUIPMENT SUPPORTS / TURBINE PANEL REAR INSTRUMENT/RELAY RACK 'B'                |                      | AUXILIARY   | 633  | CONTROL RM                   | E         | SUPPORT                | Seismic Only |              |               |             |                                 |   |
| 830      | NA    | 20     | 1-TRD       | 0      | MISC EQUIPMENT SUPPORTS / TURBINE PANEL REAR INSTRUMENT/RELAY RACK 'D'                | NONE                 | AUXILIARY   | 633  | CONTROL RM                   | E         | SUPPORT                | Seismic Only |              |               |             |                                 |   |
| 831      | NA    | 20     | 1-TRE       | 0      | MISC EQUIPMENT SUPPORTS / TURBINE PANEL REAR INSTRUMENT/RELAY RACK 'E'                | NONE                 | AUXILIARY   | 633  | CONTROL RM                   | E         | SUPPORT                | Seismic Only |              |               |             |                                 |   |
| 832      | NA    | 20     | 1-TSC-VO-07 | 0      | NONE / TSC COMPUTER INPUT/OUTPUT CABINET #07  |                      | AUXILIARY   | 633  | 633 HALLWAY                  | E         | SUPPORT                | Seismic Only |              |               |             |                                 |   |
| 833      | NA    | 20     | 1-TSC-VO-09 | 0      | NONE / TSC COMPUTER INPUT/OUTPUT CABINET #9   |                      | AUXILIARY   | 633  | 633 HALLWAY                  | E         | SUPPORT                | Seismic Only |              |               |             |                                 |   |
| 834      | NA    | 20     | 1-TSC-VO-13 | 0      | NONE / TSC COMPUTER INPUT/OUTPUT CABINET #13  |                      | AUXILIARY   | 633  | 633 HALLWAY                  | E         | SUPPORT                | Seismic Only |              |               |             |                                 |   |
| 835      | NA    | 20     | 1-TSC-VO-15 | 0      | COMPUTER SUPPORT SYSTEMS / TSC COMPUTER INPUT/OUTPUT CABINET #15                      |                      | AUXILIARY   | 633  | 633 HALLWAY                  | E         | SUPPORT                | Seismic Only |              |               |             |                                 |   |
| 836      | NA    | 20     | 1-VS        | 0      | CONTAINMENT VENTILATION / VENTILATION CONTROL PANEL                                   |                      | AUXILIARY   | 633  | CONTROL ROOM                 | E         | SUPPORT                | Seismic Only |              |               |             |                                 |   |
| 837      | 12    | 20     | 1-WRR       | 0      | MISC EQUIPMENT SUPPORTS / WEST RELAY RACK   |                      | AUXILIARY   | 633  | CONTROL RM                   | E         | SUPPORT                | Seismic Only |              |               |             |                                 |   |
| 838      | 12    | 20     | 12-SFP-12   | 0      | EQUIP CTRL AND INDICATION STN / SPENT FUEL PIT SUBPANEL                               |                      | UNIT #2 AUX | 609  | SPENT FUEL PIT HEAT XCHGR RM | E         | SPENT FUEL PIT COOLING | Seismic Only |              |               |             |                                 |   |
| 839      | 12    | 21     | 1-HE-11     | 0      | RCTR COOLANT PMP SEAL WTR IN/LEAKOFF / REACTOR COOLANT PUMP SEAL WATER HEAT EXCHANGER | 1-5129A, 1-5135      | AUXILIARY   | 609  | SEAL WTR HEAT XCHGR RM       | P         | RI                     | Seismic Only |              |               | N           |                                 |   |
| 840      | 12    | 21     | 1-HE-13     | 0      | CVCS / EXCESS LETDOWN HEAT EXCHANGER  | 1-5129A 1-5135       | CONTAINMENT | 612  | REGEN HEAT XCHGR RM          | P         | RI                     | Seismic Only |              |               | N           |                                 |   |
| 841      | 12    | 21     | 1-HE-14     | 0      | CVCS / LETDOWN HEAT EXCHANGER   | 1-5135               | AUXILIARY   | 633  | LETDOWN HEAT EXCHGR RM       | S         | CCW                    | Seismic Only |              |               | N           |                                 |   |
| 842      | 2     | 21     | 1-HE-15E    | 0      | CCW / EAST CCW HEAT EXCHANGER   | 1-5135A 1-5113       | AUXILIARY   | 609  | 609 HALLWAY                  | S         | CCW                    | Seismic Only |              |               | N           |                                 |   |
| 843      | 2     | 21     | 1-HE-15W    | 0      | CCW / WEST CCW HEAT EXCHANGER   | 1-5135A 1-5113       | AUXILIARY   | 609  | 609 HALLWAY                  | S         | CCW                    | Seismic Only |              |               | N           |                                 |   |
| 844      | 2     | 21     | 1-HE-17E    | 0      | RHR / EAST RHR HEAT EXCHANGER   | 1-5143 1-5135A       | AUXILIARY   | 609  | EAST RHR HEAT EXCHGR RM      | P         | D                      | Seismic Only |              |               | N           |                                 |   |
| 845      | 1     | 21     | 1-HE-17W    | 0      | RHR / WEST RHR HEAT EXCHANGER   | 1-5143               | AUXILIARY   | 609  | W RHR HEAT XCHGR RM          | P         | DRIP                   | Seismic Only |              |               | N           |                                 |   |
| 846      | 2     | 21     | 1-HE-18E    | 0      | CONTAINMENT SPRAY / EAST CONTAINMENT SPRAY HEAT EXCHANGER                             | 1-5113 1-5144        | AUXILIARY   | 609  | E CONT SPRAY HEAT XCHGR RM   | S         | ESW                    | Seismic Only |              |               | N           |                                 |   |
| 847      | 1     | 21     | 1-HE-18W    | 0      | CONTAINMENT SPRAY / WEST CONTAINMENT SPRAY HEAT EXCHANGER                             | 1-5113 1-5144        | AUXILIARY   | 609  | W CONT SPRAY HEAT XCHGR RM   | S         | ESW                    | Seismic Only |              |               | N           |                                 |   |
| 848      | 2     | 21     | 1-HE-32E    | 0      | RHR / EAST RHR PUMP PP-35E MECHANICAL SEAL HEAT EXCHANGER                             | 1-5135A              | AUXILIARY   | 573  | EAST RHR PUMP ROOM           | S         | CCW                    | Seismic Only |              |               | N           |                                 |   |
| 849      | 2     | 21     | 1-HE-32W    | 0      | RHR / WEST RHR PUMP PP-35W MECHANICAL SEAL HEAT EXCHANGER                             | 1-5135A              | AUXILIARY   | 573  | WEST RHR PUMP ROOM           | S         | CCW                    | Seismic Only |              |               | N           |                                 |   |
| 850      | 2     | 21     | 1-HE-33E    | 0      | CCW / EAST CONTAINMENT SPRAY PUMP PP-3E MECHANICAL SEAL HEAT EXCHANGER                | 1-5135A              | AUXILIARY   | 573  | E CONT SPRAY PMP RM          | S         | CCW                    | Seismic Only |              |               | N           |                                 |   |

DONALD C. COOK NUCLEAR PLANT UNIT # 1  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. Cl. | Eq. ID      | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.     | F I EL | Rm or Rm/Cl               | Flow Path | Function | Eval Type    | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|---------|-------------|--------|---|----------------------|-----------|--------|---------------------------|-----------|----------|--------------|--------------|---------------|-------------|---------------------------------|---|
| 851      | 1     | 21      | 1-HE-33W    | 0      | CCW / WEST CONTAINMENT SPRAY PUMP PP-9W MECHANICAL SEAL HEAT EXCHANGER              | 1-5135A              | AUXILIARY | 573    | W CONT SPRAY PMP RM       | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 852      | 2     | 21      | 1-HE-34-NE  | 0      | CCW / NORTH SAFETY INJECTION PUMP PP-26N OUTBOARD MECHANICAL SEAL HEAT EXCHANGER    | 1-5135A              | AUXILIARY | 587    | N SAFETY INJ PMP RM       | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 853      | 2     | 21      | 1-HE-34-NW  | 0      | CCW / NORTH SAFETY INJECTION PUMP PP-26N INBOARD MECHANICAL SEAL HEAT EXCHANGER     | 1-5135A              | AUXILIARY | 587    | N SAFETY INJ PMP RM       | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 854      | 2     | 21      | 1-HE-34-SE  | 0      | CCW / SOUTH SAFETY INJECTION PUMP PP-26S OUTBOARD MECHANICAL SEAL HEAT EXCHANGER    | 1-5135A              | AUXILIARY | 587    | S SAFETY INJ PMP RM       | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 855      | 2     | 21      | 1-HE-34-SW  | 0      | CCW / SOUTH SAFETY INJECTION PUMP PP-26S INBOARD MECHANICAL SEAL HEAT EXCHANGER     | 1-5135A              | AUXILIARY | 587    | S SAFETY INJ PMP RM       | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 856      | 2     | 21      | 1-HE-35N    | 0      | CCW / NORTH SAFETY INJECTION PUMP PP-26N LUBE OIL COOLER                            | 1-5135A              | AUXILIARY | 587    | N SAFETY INJ PMP RM       | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 857      | 1     | 21      | 1-HE-35S    | 0      | CCW / SOUTH SAFETY INJECTION PUMP PP-26S LUBE OIL COOLER                            | 1-5135A              | AUXILIARY | 587    | S SAFETY INJ PMP RM       | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 858      | 2     | 21      | 1-HE-36-EN  | 0      | CCW / EAST CENTRIFUGAL CHARGING PUMP PP-50E INBOARD MECHANICAL SEAL HEAT EXCHANGER  | 1-5135A              | AUXILIARY | 587    | E CNTRFGL CHARG PMP RM    | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 859      | 2     | 21      | 1-HE-36-ES  | 0      | CCW / EAST CENTRIFUGAL CHARGING PUMP PP-50E OUTBOARD MECHANICAL SEAL HEAT EXCHANGER | 1-5135A              | AUXILIARY | 587    | E CNTRFGL CHARG PMP RM    | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 860      | 2     | 21      | 1-HE-36-WN  | 0      | CCW / WEST CENTRIFUGAL CHARGING PUMP PP-50W INBOARD MECHANICAL SEAL HEAT EXCHANGER  | 1-5135A              | AUXILIARY | 587    | W CENTRIFUGAL CHRG PMP RM | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 861      | 2     | 21      | 1-HE-36-WS  | 0      | CCW / WEST CENTRIFUGAL CHARGING PUMP PP-50W OUTBOARD MECHANICAL SEAL HEAT EXCHANGER | 1-5135A              | AUXILIARY | 587    | W CENTRIFUGAL CHRG PMP RM | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 862      | 2     | 21      | 1-HE-37E    | 0      | CCW / EAST CENTRIFUGAL CHARGING PUMP PP-50E GEAR OIL COOLER                         | 1-5135A              | AUXILIARY | 587    | E CNTRFGL CHARG PMP RM    | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 863      | 2     | 21      | 1-HE-37W    | 0      | CCW / WEST CENTRIFUGAL CHARGING PUMP PP-50W GEAR OIL COOLER                         | 1-5135A              | AUXILIARY | 587    | W CENTRIFUGAL CHRG PMP RM | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 864      | 2     | 21      | 1-HE-38E    | 0      | CCW / EAST CENTRIFUGAL CHARGING PUMP BEARING LUBE OIL COOLER                        | 1-5135A              | AUXILIARY | 587    | E CNTRFGL CHARG PMP RM    | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 865      | 2     | 21      | 1-HE-38W    | 0      | CCW / WEST CENTRIFUGAL CHARGING PUMP PP-50W BEARING LUBE OIL COOLER                 | 1-5135A              | AUXILIARY | 587    | W CENTRIFUGAL CHRG PMP RM | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 866      | 1     | 21      | 1-HE-47-ABN | 0      | DIESEL COMBUSTION AIR / AB EMERG DIESEL NORTH COMBUSTION AIR AFTERCOOLER            | 1-5113 1-5151B       | AUXILIARY | 587    | AB EMER DSL GEN RM        | S         | EDG      | Seismic Only |              |               | N           |                                 |   |
| 867      | 1     | 21      | 1-HE-47-ABS | 0      | DIESEL COMBUSTION AIR / AB EMERG DIESEL SOUTH COMBUSTION AIR AFTERCOOLER            | 1-5113 1-5151B       | AUXILIARY | 587    | AB EMER DSL GEN RM        | S         | EDG      | Seismic Only |              |               | Y           |                                 |   |
| 868      | 2     | 21      | 1-HE-47-CDN | 0      | DIESEL COMBUSTION AIR / CD EMERG DIESEL NORTH COMBUSTION AIR AFTERCOOLER            | 1-5113 1-5151D       | AUXILIARY | 587    | CD EMER DSL GEN RM        | S         | ESW      | Seismic Only |              |               | N           |                                 |   |
| 869      | 2     | 21      | 1-HE-47-CDS | 0      | DIESEL COMBUSTION AIR / CD EMERG DIESEL SOUTH COMBUSTION AIR AFTERCOOLER            | 1-5113 1-5151D       | AUXILIARY | 587    | CD EMER DSL GEN RM        | S         | ESW      | Seismic Only |              |               | N           |                                 |   |
| 870      | 12    | 21      | 1-QP-21     | 0      | CVCS (BORON MAKEUP) / NORTH BORIC ACID BLENDER (MIXING TEE)                         | 12-5131              | AUXILIARY | 587    | BORIC ACID STOR TANK      | P         | RI       | Seismic Only |              |               | N           |                                 |   |
| 871      | 1     | 21      | 1-QT-107-AB | 0      | DIESEL FUEL OIL / AB EMERG DIESEL FUEL OIL DAY TANK                                 | 1-5151A              | AUXILIARY | 587    | AB EMER DSL GEN RM        | S         | EDG      | Seismic Only |              |               | N           |                                 |   |
| 872      | 2     | 21      | 1-QT-107-CD | 0      | DIESEL FUEL OIL / CD EMERG DIESEL FUEL OIL DAY TANK                                 | 1-5151C              | AUXILIARY | 587    | CD EMER DSL GEN RM        | S         | EDG      | Seismic Only |              |               | N           |                                 |   |
| 873      | 1     | 21      | 1-QT-110-AB | 0      | DIESEL LUBE OIL / AB EMERG DIESEL LUBE OIL COOLER                                   | 1-5151A 1-5113       | AUXILIARY | 587    | AB EMER DSL GEN RM        | S         | EDG      | Seismic Only |              |               | N           |                                 |   |
| 874      | 2     | 21      | 1-QT-110-CD | 0      | DIESEL LUBE OIL / CD EMERG DIESEL LUBE OIL COOLER                                   | 1-5151C, 1-5113      | AUXILIARY | 587    | CD EMER DSL GEN RM        | S         | EDG      | Seismic Only |              |               | N           |                                 |   |
| 875      | 1     | 21      | 1-QT-115-AB | 0      | DIESEL LUBE OIL / AB EMERG DIESEL LUBE OIL SUMP TANK                                | 1-5151A              | AUXILIARY | 579    | AB EMER DSL LUBE OIL PIT  | S         | EDG      | Seismic Only |              |               | N           |                                 |   |

# DONALD C. COOK NUCLEAR PLANT UNIT # 1 SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID       | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.         | FIEL | Rm or Rm/CL                  | Flow Path | Function | Eval Type    | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|--------------|--------|--|----------------------|---------------|------|------------------------------|-----------|----------|--------------|--------------|---------------|-------------|---------------------------------|---|
| 876      | 2     | 21     | 1-QT-115-CD  | 0      | DIESEL LUBE OIL / CD EMERG DIESEL LUBE OIL SUMP TANK                                   | 1-5151C              | AUXILIARY     | 579  | CD EMER DSL LUBE OIL PIT     | S         | EDG      | Seismic Only |              |               | N           |                                 |   |
| 877      | 1     | 21     | 1-QT-131-AB  | 0      | DIESEL JACKET WATER / AB EMERG DIESEL JACKET WATER COOLER                              | 1-5151B 1-5113       | AUXILIARY     | 587  | AB EMER DSL GEN RM           | S         | EDG      | Seismic Only |              |               | N           |                                 |   |
| 878      | 2     | 21     | 1-QT-131-CD  | 0      | DIESEL JACKET WATER / CD EMERG DIESEL JACKET WATER COOLER                              | 1-5151D 1-5113       | AUXILIARY     | 587  | CD EMER DSL GEN RM           | S         | EDG      | Seismic Only |              |               | N           |                                 |   |
| 879      | 1     | 21     | 1-QT-133-AB  | 0      | DIESEL JACKET WATER / AB EMERG DIESEL JACKET WATER SURGE TANK                          | 1-5151B              | AUXILIARY     | 587  | AB EMER DSL GEN RM           | S         | EDG      | Seismic Only |              |               | N           |                                 |   |
| 880      | 2     | 21     | 1-QT-133-CD  | 0      | DIESEL JACKET WATER / CD EMERG DIESEL JACKET WATER SUREG TANK                          | 1-5151D              | AUXILIARY     | 587  | CD EMER DSL GEN RM           | S         | EDG      | Seismic Only |              |               | N           |                                 |   |
| 881      | 1     | 21     | 1-QT-134-AB  | 0      | DIESEL JACKET WATER / AB EMERG DIESEL AUX JACKET WATER HEATER(TANK)                    | 1-5151B              | AUXILIARY     | 587  | AB EMER DSL GEN RM           | S         | EDG      | Seismic Only |              |               | Y           | 1-12010 1-98013                 | 1-ABD-B-1D                                |
| 882      | 2     | 21     | 1-QT-134-CD  | 0      | DIESEL JACKET WATER / CD EMERG DIESEL AUX JACKET WATER HEATER(TANK)                    | 1-5151D              | AUXILIARY     | 587  | CD EMER DSL GEN RM           | S         | EDG      | Seismic Only |              |               | Y           | 1-12030 1-98014                 | 1-ABD-C-1D                                |
| 883      | 1     | 21     | 1-QT-141-AB1 | 0      | DIESEL STARTING AIR / AB EMERG DIESEL STARTING AIR RECEIVER 1                          | 1-5151B              | AUXILIARY     | 587  | AB EMER DSL GEN RM           | S         | EDG      | Seismic Only |              |               | N           |                                 |   |
| 884      | 1     | 21     | 1-QT-141-AB2 | 0      | DIESEL STARTING AIR / AB EMERG DIESEL STARTING AIR RECEIVER 2                          | 1-5151B              | AUXILIARY     | 587  | AB EMER DSL GEN RM           | S         | EDG      | Seismic Only |              |               | N           |                                 |   |
| 885      | 2     | 21     | 1-QT-141-CD1 | 0      | DIESEL STARTING AIR / CD EMERG DIESEL STARTING AIR RECEIVER 1                          | 1-5151D              | AUXILIARY     | 587  | CD EMER DSL GEN RM           | S         | EDG      | Seismic Only |              |               | N           |                                 |   |
| 886      | 2     | 21     | 1-QT-141-CD2 | 0      | DIESEL STARTING AIR / CD EMERG DIESEL STARTING AIR RECEIVER 2                          | 1-5151D              | AUXILIARY     | 587  | CD EMER DSL GEN RM           | S         | EDG      | Seismic Only |              |               | N           |                                 |   |
| 887      | 12    | 21     | 1-TK-10      | 0      | CVCS / REACTOR COOLANT LETDOWN VOLUME CONTROL TANK                                     | 1-5129A              | AUXILIARY     | 609  | VOL CONTROL TANK RM          | P         | RI       | Seismic Only |              |               | N           |                                 |   |
| 888      | 12    | 21     | 1-TK-11      | 0      | BORON INJECTION / BORON INJECTION TANK   | 1-5142               | AUXILIARY     | 612  | BORON INJ TANK RM            | P         | RI       | Seismic Only |              |               |             |                                 |   |
| 889      | 12    | 21     | 1-TK-200     | 0      | STEAM LINE DRAINS / MAIN STEAM LEADS CONDENSATION DRAIN TANK (POT)                     | 1-5105 1-5110B       | AUXILIARY     | 621  | W MAIN STM STOP ENCL         | P         | D        | Seismic Only |              |               | N           |                                 |   |
| 890      | 12    | 21     | 1-TK-32      | 0      | CONDENSATE STORAGE SUPPLY / CONDENSATE SOTRAGE TANK                                    | 1-5106A              | GROUND        | 609  | COND STOR TANK               | P         | D        | Seismic Only |              |               | N           |                                 |   |
| 891      | 12    | 21     | 1-TK-33      | 0      | REFUELING WATER STORAGE TANK SUPPLY / REFUELING WATER STORAGE TANK                     | 1-5144               | GROUND        | 609  | REFUELING WTR STOR TANK AREA | P         | DRI      | Seismic Only |              |               |             |                                 |   |
| 892      | 12    | 21     | 1-TK-37      | 0      | CCW / COMPONENT COOLING WATER SURGE TANK   | 1-5135A              | AUXILIARY     | 650  | 650 HALLWAY                  | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 893      | 2     | 21     | 1-TK-76N     | 0      | CONTROL ROOM A/C CHILL WATER / CONTRL ROOM A/C NORTH CHILL WATER EXPANSION TANK        | 1-5149               | AUXILIARY     | 650  | CTRL RM AIR COND RM          | S         | HVAC     | Seismic Only |              |               | N           |                                 |   |
| 894      | 1     | 21     | 1-TK-76S     | 0      | CONTROL ROOM A/C CHILL WATER / CONTROL ROOM A/C SOUTH CHILL WATER EXPANSION TANK       | 1-5149               | AUXILIARY     | 650  | CTRL RM AIR COND RM          | S         | HVAC     | Seismic Only |              |               | N           |                                 |   |
| 895      | 12    | 21     | 1-TK12-N     | 0      | CVCS (BORON MAKEUP) / NORTH BORIC ACID STORAGE TANK                                    | 12-5131              | AUXILIARY     | 587  | BORIC ACID STOR TANK         | P         | RI       | Seismic Only |              |               |             |                                 |   |
| 896      | 12    | 21     | 12-HE-16N    | 0      | SPENT FUEL PIT COOLING & CCW / NORTH SPENT FUEL PIT HEAT EXCHANGER                     | 1-5135, 12-5136      | U-1 AUXILIARY | 609  | SPENT FUEL PIT HEAT XCHGR RM | S         | CCW, SFP | Seismic Only |              |               | N           |                                 |   |
| 897      | 2     | 21     | 12-OME-44N-2 | 0      | WASTE GAS / NORTH RADIOACTIVE WASTE GAS COMPRESSOR OME-44N-2 SEAL WATER HEAT EXCHANGER | 1-5135, 12-5139      | AUXILIARY     | 609  | N WASTE GAS COMPRESSR RM     | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 898      | 1     | 21     | 12-OME-44S-2 | 0      | WASTE GAS / SOUTH RADIOACTIVE WASTE GAS COMPRESSOR OME-44S-1 SEAL WATER HEAT EXCHANGER | 1-5135, 12-5139      | AUXILIARY     | 609  | S WASTE GAS COMPRESSOR RM    | S         | CCW      | Seismic Only | NA           | NA            | N           |                                 |   |
| 899      | 1     | 21     | 12-TK-47-AB  | 0      | DIESEL FUEL OIL / AB EMERG DIESEL FUEL OIL STORAGE TANK (BURIED IN THE YARD)           | 2-5151C              | GROUND        | 609  | INNER PLANT GROUNDS          | S         | EDG      | Seismic Only |              |               | N           |                                 |   |
| 900      | 2     | 21     | 12-TK-47-CD  | 0      | DIESEL FUEL OIL / CD EMERG DIESEL FUEL OIL STORAGE TANK (BURIED IN THE YARD)           | 1-5151C              | GROUND        | 609  | INNER PLANT GROUNDS          | S         | EDG      | Seismic Only |              |               | N           |                                 |   |
| 901      | 12    | 21     | 12-TK12-M    | 0      | CVCS (BORON MAKEUP) / MIDDLE BORIC ACID STORAGE TANK                                   | 12-5131              | AUXILIARY     | 587  | BORIC ACID STOR TANK         | P         | RI       | Seismic Only |              |               |             |                                 |   |

**APPENDIX A**

**DONALD C. COOK NUCLEAR PLANT - UNIT 2**

**COMPOSITE SAFE SHUTDOWN  
EQUIPMENT LIST (SSEL)**

## Donald C. Cook Nuclear Plant - Unit 2

### SSEL Certification:

The information identifying the equipment required to bring the plant to a safe shutdown condition on this safe shutdown equipment list is, to be the best of our knowledge and belief, correct and accurate.

| <u>Name</u>                            | <u>Signature</u>           | <u>Date</u>        |
|--|----------------------------|--------------------|
| B. A. Svensson<br>Operations           | <u>B. A. Svensson</u>      | <u>1/21/96</u>     |
| G. P. Arent<br>Operations              | <u>G. P. Arent</u>         | <u>12-15-95</u>    |
| J. V. Ruparel<br>Systems               | <u>J. V. Ruparel</u>       | <u>Dec 15, 95.</u> |
| H. W. Young<br>Systems                 | <u>Harold W. Young III</u> | <u>12/15/95</u>    |
| R. C. Steele<br>Electrical             | <u>R. C. Steele</u>        | <u>12-15-95</u>    |
| T. R. Satyan Sharma<br>Project Manager | <u>T. R. Satyan Sharma</u> | <u>12/15/95</u>    |

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**DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**

Page # 1

**Certification:**

The information identifying the equipment required to bring the plant to a safe shutdown condition on this Safe Shutdown Equipment List (SSEL) is, to the best of our knowledge and belief, correct and accurate (Systems or Operations Engineers).

|                          |           |      |
|--------------------------|-----------|------|
| Print or Type Name/Title | Signature | Date |
| Print or Type Name/Title | Signature | Date |

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DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. Cl. | Eq. ID        | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.         | Ft EL | Rm or Rwf/Cl              | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|---------|---------------|--------|---|----------------------|---------------|-------|---------------------------|-----------|----------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 1        | 12    | 0       | 12-HE-19S     | 0      | BORON RECOVERY (CVCS) / SOUTH BORIC ACID EVAPORATOR SKID  | 2-5135               | AUXILIARY     | 587   | S BORIC ACID EVAP RM      | S         | CCW      | Seismic Only      |              |               | N           | 12-98276                        |   |
| 2        | 12    | 0       | 12-HE-25A     | 0      | RADIOACTIVE WASTE EVAPORATOR (15GPM) / 15GPM RADIOACTIVE WASTE EVAPORATOR HE-25 CONDENSER                           | 2-5135               | AUXILIARY     | 587   | 15 GPM WASTE EVAP RM      | S         | CCW      | Seismic Only      |              |               | N           |                                 |   |
| 3        | 12    | 0       | 12-HE-25B     | 0      | RADIOACTIVE WASTE EVAPORATOR (15GPM) / 15 GPM RADIOACTIVE WASTE EVAPORATOR HE-25 DISTILLATE COOLER                  | 2-5135               | AUXILIARY     | 587   | 15 GPM WASTE EVAP RM      | S         | CCW      | Seismic Only      |              |               | N           |                                 |   |
| 4        | 12    | 0       | 12-HE-25C     | 0      | RADIOACTIVE WASTE EVAPORATOR (15GPM) / 15 GPM RADIOACTIVE WASTE EVAPORATOR HE-25 CONCENTRATES COOLER                | 2-5135               | AUXILIARY     | 587   | 15 GPM WASTE EVAP RM      | S         | CCW      | Seismic Only      |              |               | N           |                                 |   |
| 5        | 12    | 0       | 2-HV-ACFD-1   | 0      | CONTROL ROOM VENTILATION / PLANT PROCESS COMPUTER ROOM VENTILATION EXHAUST NORTH FIRE DAMPER                        | 2-5149               | U-2 AUXILIARY | 650   | PLANT PROCESS COMPUTER RM | S         | HVAC     | Relay Only        |              |               |             |                                 |   |
| 6        | 12    | 0       | 2-HV-ACFD-2   | 0      | CONTROL ROOM VENTILATION / PLANT PROCESS COMPUTER ROOM, VENTILATION EXHAUST SOUTH FIRE DAMPER                       | 2-5149               | U-2 AUXILIARY | 650   | PLANT PROCESS COMPUTER RM | S         | HVAC     | Relay Only        |              |               |             |                                 |   |
| 7        | 12    | 0       | 2-HV-ACFD-3   | 0      | CONTROL ROOM VENTILATION / CONTROL ROOM VENT UNITS HV-ACRA-1 & HV-ACRA-2 TO PLANT PROCESS COMPUTER ROOM FIRE DAMPER | 2-5149               | U-2 AUXILIARY | 650   | PLANT PROCESS COMPUTER RM | S         | HVAC     | Relay Only        |              |               |             |                                 |   |
| 8        | 2     | 0       | 2-HV-DGS-FD-1 | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FIRE DAMPER                         | 2-5148C              | U-2 AUXILIARY | 587   | CD EMER DSL GEN RM        | S         | HVAC     | Relay Only        |              |               |             |                                 |   |
| 9        | 1     | 0       | 2-HV-DGS-FD-2 | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FIRE DAMPER                         | 2-5148C              | U-2 AUXILIARY | 587   | AB EMER DSL GEN RM        | S         | HVAC     | Relay Only        |              |               |             |                                 |   |
| 10       | 2     | 0       | 2-HV-DGX-FD-1 | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FIRE DAMPER                        | 2-5148C              | U-2 AUXILIARY | 587   | CD EMER DSL GEN RM        | S         | HVAC     | Relay Only        |              |               |             |                                 |   |
| 11       | 1     | 0       | 2-HV-DGX-FD-2 | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FIRE DAMPER                        | 2-5148C              | U-2 AUXILIARY | 587   | AB EMER DSL GEN RM        | S         | HVAC     | Relay Only        |              |               |             |                                 |   |
| 12       | 2     | 0       | 2-MRV-210     | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 STOP VALVE   | 2-5105D              | AUXILIARY     | 633   | E MAIN STM STOP ENCL      | P         | D        | Seismic Only      | OP           | CL            | Y           | 2-12041 2-98538 2-98512         | BOP 2-EZC-CN-6B                           |
| 13       | 1     | 0       | 2-MRV-220     | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2 STOP VALVE   | 2-5105D              | AUXILIARY     | 633   | W MN STM STOP ENCL        | P         | D        | Seismic Only      | OP           | CL            | Y           | 2-12020 2-98538 2-98512         | BOP 2-AM-B-4D                             |
| 14       | 1     | 0       | 2-MRV-230     | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3 STOP VALVE   | 2-5105D              | AUXILIARY     | 633   | W MN STM STOP ENCL        | P         | D        | Seismic Only      | OP           | CL            | Y           | 2-12041 2-98538 2-98512         | BOP 2-EZC-CS-R3D                          |
| 15       | 2     | 0       | 2-MRV-240     | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 STOP VALVE   | 2-5105D              | AUXILIARY     | 633   | E MAIN STM STOP ENCL      | P         | D        | Seismic Only      | OP           | CL            | Y           | 2-12021 2-98538                 | BOP 2-EZC-BN-6C                           |
| 16       | 2     | 0       | 2-OME-34E     | 0      | ESSENTIAL SERVICE WATER / EAST ESSENTIAL SERVICE WATER PUMP PP. 7E DISCHARGE STRAINER                               | 2-5113               | SCREENHOUSE   | 591   | E ESSNTL SERV WTR PMP RM  | S         | ESW      | Seismic and Relay |              |               |             | 2-12033, 2-98415                | 2-PS-D-3C                                 |
| 17       | 1     | 0       | 2-OME-34W     | 0      | ESSENTIAL SERVICE WATER / WEST ESSENTIAL SERVICE WATER PUMP PP. 7W DISCHARGE STRAINER                               | 2-5113               | SCREENHOUSE   | 591   | W ESSNTL SERV WTR PMP RM  | S         | ESW      | Seismic and Relay |              |               |             | 2-12014, 2-98415                | 2-PS-A-1C                                 |
| 18       | 12    | 0       | 2-OME-39      | 0      | MAIN STEAM / AUXILIARY FEED PUMP TURBINE  | 2-5105B              | TURBINE       | 591   | TB DRIVEN AUX FWDTR PMP   | P         | D        | Seismic Only      |              |               |             |                                 |   |
| 19       | 1     | 0       | 2-POV-1-AB    | 0      | STARTING AIR / PILOT OPERATED 4 WAY VALVE FOR AIR START XRV'S FOR DIESEL ENGINE                                     | 12-MM-253            | AUXILIARY     | 587   | AB EMER DSL GEN RM        | S         | EDG      | Seismic Only      |              |               |             |                                 |   |
| 20       | 2     | 0       | 2-POV-1-CD    | 0      | STARTING AIR / PILOT OPERATED 4 WAY VALVE FOR AIR START XRV'S FOR DIESEL ENGINE                                     | 12-MM-253            | AUXILIARY     | 587   | CD EMER DSL GEN RM        | S         | EDG      | Seismic Only      |              |               |             |                                 |   |
| 21       | 1     | 0       | 2-POV-2-AB    | 0      | STARTING AIR SYSTEM / PILOT OPERATED 4-WAY VALVE FOR AIR START XRV'S FOR DIESEL ENGINE                              | 12-MM-253            | AUXILIARY     | 587   | AB DIESEL GENERATOR ROOM  | S         | EDG      | Seismic Only      |              |               |             |                                 |   |





DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID       | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.     | FIEL | Rm or Rwf/CI                       | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|--------------|--------|--|----------------------|-----------|------|------------------------------------|-----------|----------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 22       | 2     | 0      | 2-POV-2-CD   | 0      | STARTING AIR SYSTEM / PILOT OPERATED 4-WAY VALVE FOR AIR START XRV'S FOR DIESEL ENGINE | 12-MM-253            | AUXILIARY | 587  | CD EMERGENCY DIESEL GENERATOR ROOM | S         | EDG      | Seismic Only      |              |               |             |                                 |   |
| 23       | 12    | 0      | 2-QC-12      | 0      | BORON MAKEUP (CYCS) / SOUTH BORIC ACID FILTER  | 12-5131              | AUXILIARY | 587  | BORIC ACID STOR TANK AREA          | P         | RI       | Seismic Only      |              |               |             |                                 |   |
| 24       | 1     | 0      | 2-QT-100-AB  | 0      | DIESEL COMBUSTION AIR / AB EMERGENCY DIESEL AIR INTAKE FILTER                          | 2-5151B              | GROUND    | 609  | INNER PLANT GROUND                 | S         | EDG      | Seismic and Relay |              |               |             | 2-98013                         | 2-ABD-B-3B                                |
| 25       | 2     | 0      | 2-QT-100-CD  | 0      | DIESEL COMBUSTION AIR / CD EMERGENCY DIESEL AIR INTAKE FILTER                          | 2-5151D              | GROUND    | 609  | INNER PLANT GROUND                 | S         | EDG      | Seismic and Relay |              |               |             | 2-98014                         | 2-ABD-C-3B                                |
| 26       | 1     | 0      | 2-QT-101-AB  | 0      | DIESEL COMBUSTION AIR / AB EMERGENCY DIESEL AIR INTAKE SILENCER                        | 2-5151B              | AUXILIARY | 587  | AB EMER DSL GEN RM                 | S         | EDG      | Seismic Only      |              |               |             |                                 |   |
| 27       | 2     | 0      | 2-QT-101-CD  | 0      | DIESEL COMBUSTION AIR / CD EMERGENCY DIESEL AIR INTAKE SILENCER                        | 2-5151D              | AUXILIARY | 587  | CD EMER DSL GEN RM                 | S         | EDG      | Seismic Only      |              |               | N           |                                 |   |
| 28       | 1     | 0      | 2-QT-104-AB  | 0      | DIESEL COMBUSTION AIR / AB EMERGENCY DIESEL EXHAUST SILENCER                           | 2-5151B              | GROUND    | 609  | INNER PLANT GROUND                 | S         | EDG      | Seismic Only      |              |               | N           |                                 |   |
| 29       | 2     | 0      | 2-QT-104-CD  | 0      | DIESEL COMBUSTION AIR / CD EMERGENCY DIESEL EXHAUST SILENCER                           | 2-5151D              | GROUND    | 609  | INNER PLANT GROUND                 | S         | EDG      | Seismic Only      |              |               | N           |                                 |   |
| 30       | 1     | 0      | 2-QT-112-AB  | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL FULL FLOW LUBE OIL FILTER                        | 2-5151A              | AUXILIARY | 579  | AB EMER DSL LUBE OIL PIT           | S         | EDG      | Seismic Only      |              |               | N           |                                 |   |
| 31       | 2     | 0      | 2-QT-112-CD  | 0      | DIESEL LUBE OIL / CD EMERGENCY DIESEL FULL FLOW LUBE OIL FILTER                        | 2-5151C              | AUXILIARY | 579  | CD EMER DSL LUBE OIL PIT           | S         | EDG      | Seismic Only      |              |               | N           |                                 |   |
| 32       | 1     | 0      | 2-QT-113-AB1 | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL FULL FLOW LUBE OIL STRAINER #1                   | 2-5151A              | AUXILIARY | 579  | AB EMER DSL LUBE OIL PIT           | S         | EDG      | Seismic Only      |              |               | N           |                                 |   |
| 33       | 1     | 0      | 2-QT-113-AB2 | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL FULL FLOW LUBE OIL STRAINER #2                   | 2-5151A              | AUXILIARY | 579  | AB EMER DSL LUBE OIL PIT           | S         | EDG      | Seismic Only      |              |               | N           |                                 |   |
| 34       | 2     | 0      | 2-QT-113-CD1 | 0      | DIESEL LUBE OIL / CD EMERGENCY DIESEL FULL FLOW LUBE OIL STRAINER #1                   | 2-5151C              | AUXILIARY | 579  | CD EMER DSL LUBE OIL PIT           | S         | EDG      | Seismic Only      |              |               | N           |                                 |   |
| 35       | 2     | 0      | 2-QT-113-CD2 | 0      | DIESEL LUBE OIL / CD EMERGENCY DIESEL FULL FLOW LUBE OIL STRAINER #2                   | 2-5151C              | AUXILIARY | 579  | CD EMER DSL LUBE OIL PIT           | S         | EDG      | Seismic Only      |              |               | N           |                                 |   |
| 36       | 2     | 0      | 2-QT-116-AB  | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL LUBE OIL HEATER TANK                             | 2-5151A              | AUXILIARY | 579  | AB EMER DSL LUBE OIL PIT           | S         | EDG      | Seismic Only      |              |               | Y           | 2-12010, 2-98013                | 2-ABD-B-2B                                |
| 37       | 2     | 0      | 2-QT-116-CD  | 0      | DIESEL LUBE OIL / CD EMERGENCY DIESEL LUBE OIL HEATER TANK                             | 2-5151C              | AUXILIARY | 579  | CD EMER DSL LUBE OIL PIT           | S         | EDG      | Seismic Only      |              |               | Y           | 2-98014                         | 2-ABD-C-2B                                |
| 38       | 1     | 0      | 2-QT-118-AB  | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL BYPASS LUBE OIL FILTER                           | 2-5151A              | AUXILIARY | 579  | AB EMER DSL LUBE OIL PIT           | S         | EDG      | Seismic and Relay |              |               |             | 2-98013                         | 2-ABD-A-2B                                |
| 39       | 2     | 0      | 2-QT-118-CD  | 0      | DIESEL LUBE OIL / CD EMERGENCY DIESEL BYPASS LUBE OIL FILTER                           | 2-5151C              | AUXILIARY | 579  | CD EMER DSL LUBE OIL PIT           | S         | EDG      | Seismic and Relay |              |               |             | 2-98014                         | 2-ABD-D-2B                                |
| 40       | 1     | 0      | 2-QT-143-AB1 | 0      | DIESEL CONTROL AIR / AB EMERGENCY DIESEL CONTROL AIR DRYER #1                          | 2-5151B              | AUXILIARY | 587  | AB EMER DSL GEN RM                 | S         | EDG      | Seismic Only      |              |               | N           |                                 |   |
| 41       | 1     | 0      | 2-QT-143-AB2 | 0      | DIESEL CONTROL AIR / AB EMERGENCY DIESEL CONTROL AIR DRYER #2                          | 2-5151B              | AUXILIARY | 587  | AB EMER DSL GEN RM                 | S         | EDG      | Seismic Only      |              |               | N           |                                 |   |
| 42       | 2     | 0      | 2-QT-143-CD1 | 0      | DIESEL CONTROL AIR / CD EMERGENCY DIESEL CONTROL AIR DRYER #1                          | 2-5151D              | AUXILIARY | 587  | CD EMER DSL GEN RM                 | S         | EDG      | Seismic Only      |              |               | N           |                                 |   |
| 43       | 2     | 0      | 2-QT-143-CD2 | 0      | DIESEL CONTROL AIR / CD EMERGENCY DIESEL CONTROL AIR DRYER #2                          | 2-5151D              | AUXILIARY | 587  | CD EMER DSL GEN RM                 | S         | EDG      | Seismic Only      |              |               | N           |                                 |   |
| 44       | 1     | 0      | 2-QT-144-AB  | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL TRANSFER FILTER                         | 2-5151A              | AUXILIARY | 587  | AB EMER DSL GEN RM                 | S         | EDG      | Seismic Only      |              |               | N           |                                 | 2-ABD-A-2D                                |
| 45       | 2     | 0      | 2-QT-144-CD  | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL FUEL OIL TRANSFER FILTER                         | 2-5151C              | AUXILIARY | 587  | CD EMER DSL GEN RM                 | S         | EDG      | Seismic Only      |              |               | N           |                                 |   |



DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. Cl. | Eq. ID     | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.        | Fl EL | Rm or Rm/Cl               | Flow Path | Function       | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|---------|------------|--------|---|----------------------|--------------|-------|---------------------------|-----------|----------------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 46       | 12    | 0       | 2-TK-253-1 | 0      | CONTROL AIR / PRESSURIZER TRAIN 'A' PRESSURE RELIEF VLV NRV-153 RESERVE CONTROL AIR BOTTLE RACK | 2-51200              | CONTAINME NT | 612   | LOWER CONT, QUAD NO. 3    | S         | CONTROL AIR/N2 | Seismic Only      |              |               |             |                                 |   |
| 47       | 12    | 0       | 2-TK-253-2 | 0      | CONTROL AIR / PRESSURIZER TRAIN 'A' PRESSURE RELIEF VLV NRV-153 RESERVE CONTROL AIR BOTTLE RACK | 2-51200              | CONTAINME NT | 612   | LOWER CONT, QUAD NO. 4    | S         | CONTROL AIR/N2 | Seismic Only      |              |               |             |                                 |   |
| 48       | 12    | 0       | 2-TK-253-3 | 0      | CONTROL AIR / PRESSURIZER TRAIN 'B' PRESSURE RELIEF VLV NRV-152 EMERGENCY AIR BOTTLE RACK       | 2-51200              | CONTAINME NT | 650   | UPPER CONT, QUAD 4        | S         | CONTROL AIR/N2 | Seismic Only      |              |               |             |                                 |   |
| 49       | 12    | 0       | 2-TK-253-4 | 0      | CONTROL AIR / PRESSURIZER TRAIN 'A' PRESSURE RELIEF VLV NRV-153 EMERGENCY AIR BOTTLE RACK       | 2-51200              | CONTAINME NT | 650   | UPPER CONT, QUAD 4        | S         | CONTROL AIR/N2 | Seismic Only      |              |               |             |                                 |   |
| 50       | 1     | 0       | 2-TT-DGAB  | 0      | STARTING AIR / 2AB DIESEL GENERATOR TUBE TRACK  | NONE                 | AUXILIARY    | 587   | AB EMER DSL GEN RM        | S         | EDG            | Seismic Only      |              |               |             |                                 |   |
| 51       | 2     | 0       | 2-TT-DGCD  | 0      | STARTING AIR / 2CD DIESEL GENERATOR TUBE TRACK  | NONE                 | AUXILIARY    | 587   | CD EMER DSL GEN RM        | S         | SUPPORT        | Seismic Only      |              |               |             |                                 |   |
| 52       | 1     | 1       | 2-AB-A     | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER AB-A                              | 2-12001, 2-12010     | AUXILIARY    | 587   | 587 HALLWAY               | E         | 600 VAC SYSTEM | Seismic and Relay |              |               |             | 2-12010                         |   |
| 53       | 2     | 1       | 2-AB-D     | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER AB-D                              | 2-12002, 2-12030     | AUXILIARY    | 587   | 587 HALLWAY               | E         | 600 VAC SYSTEM | Seismic and Relay |              |               |             | 2-12002, 2-12030                |   |
| 54       | 12    | 1       | 2-AB-N     | 0      | 250VDC CONTROL AND INSTRUMENTATION / CONTROL CENTER VALVE                                       | 2-12003, 2-12085     | AUXILIARY    | 587   | 587 HALLWAY               | E         | 250 VDC SYSTEM | Seismic and Relay |              |               |             | 2-12085                         |   |
| 55       | 1     | 1       | 2-ABD-A    | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER ABD-A                             | 2-12001, 2-12010     | AUXILIARY    | 587   | AB EMER DSL GEN RM        | E         | 600 VAC SYSTEM | Seismic and Relay |              |               |             | 2-12010                         |   |
| 56       | 1     | 1       | 2-ABD-B    | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER ABD-B                             | 2-12001, 2-12010     | AUXILIARY    | 587   | AB EMER DSL GEN RM        | E         | 600 VAC SYSTEM | Seismic and Relay |              |               |             |                                 |   |
| 57       | 2     | 1       | 2-ABD-C    | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER ABD-C                             | 2-12002, 2-12030     | AUXILIARY    | 587   | CD EMER DSL GEN RM        | E         | 600 VAC SYSTEM | Seismic and Relay |              |               |             | 2-12030, 2-12002                |   |
| 58       | 2     | 1       | 2-ABD-D    | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER ABD-D                             | 2-12002, 2-12030     | AUXILIARY    | 587   | CD EMER DSL GEN RM        | E         | 600 VAC SYSTEM | Seismic and Relay |              |               |             | 2-12030, 2-12002                |   |
| 59       | 2     | 1       | 2-ABV-A    | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC VALVE CONTROL CENTER ABV-A                             | 2-12001, 2-12011     | AUXILIARY    | 587   | 587 HALLWAY               | E         | 600 VAC SYSTEM | Seismic and Relay |              |               |             | 2-12011                         |   |
| 60       | 2     | 1       | 2-ABV-D    | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC VALVE CONTROL CENTER ABV-D                             | 2-12002, 2-12031     | AUXILIARY    | 587   | 587 HALLWAY               | E         | 600 VAC SYSTEM | Seismic and Relay |              |               |             | 2-12031, 2-12002                |   |
| 61       | 1     | 1       | 2-AM-A     | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER AM-A                              | 2-12001, 2-12011     | AUXILIARY    | 633   | 633 HALLWAY               | E         | 600 VAC SYSTEM | Seismic and Relay |              |               |             | 2-12011                         |   |
| 62       | 2     | 1       | 2-AM-D     | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER AM-D                              | 2-12002, 2-12031     | AUXILIARY    | 633   | 633 HALLWAY               | E         | 600 VAC SYSTEM | Seismic and Relay |              |               |             | 2-12002, 2-12031                |   |
| 63       | 1     | 1       | 2-AZV-A    | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC VALVE CONTROL CENTER AZV-A                             | 2-12001, 2-12012     | AUXILIARY    | 609   | 609 HALLWAY               | E         | 600 VAC SYSTEM | Seismic and Relay |              |               |             | 2-12012                         |   |
| 64       | 1     | 1       | 2-EZC-A    | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER EZC-A                             | 2-12001, 2-12013     | AUXILIARY    | 613   | 4KV ROOM - MEZZANINE AREA | E         | 600 VAC SYSTEM | Seismic and Relay |              |               |             | 2-12013                         |   |
| 65       | 1     | 1       | 2-EZC-B    | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER EZC-B                             | 2-12001, 2-12013     | AUXILIARY    | 613   | 4KV ROOM - MEZZANINE AREA | E         | 600 VAC SYSTEM | Seismic and Relay |              |               |             | 2-12013                         |   |
| 66       | 2     | 1       | 2-EZC-C    | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER EZC-C                             | 2-12002, 2-12032     | AUXILIARY    | 613   | 4KV ROOM - MEZZANINE AREA | E         | 600 VAC SYSTEM | Seismic and Relay |              |               |             | 2-12032, 2-12002                |   |
| 67       | 2     | 1       | 2-EZC-D    | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER EZC-D                             | 2-12002, 2-12033     | AUXILIARY    | 613   | 4KV ROOM - MEZZANINE AREA | E         | 600 VAC SYSTEM | Seismic and Relay |              |               |             | 2-12033, 2-12002                |   |

DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. Cl. | Eq. ID  | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.        | Ft EL | Rm or Rm/Cl               | Flow Path | Function       | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev.             | Required Supporting Systems or Components |
|----------|-------|---------|---------|--------|---|----------------------|--------------|-------|---------------------------|-----------|----------------|-------------------|--------------|---------------|-------------|---|---|
| 68       | 1     | 1       | 2-PS-A  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER PS-A  | 2-12001, 2-12014     | SCREENHOU SE | 594   | TRAVEL SCRNM MCC UPPER RM | E         | 600 VAC SYSTEM | Seismic and Relay |              |               |             | 2-12014, 2-12001                            |   |
| 69       | 2     | 1       | 2-PS-D  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER PS-D  | 2-12002, 2-12033     | SCREENHOU SE | 594   | TRAVEL SCRNM MCC UPPER RM | E         | 600 VAC SYSTEM | Seismic and Relay |              |               |             | 2-12033, 2-12002                            |   |
| 70       | 1     | 2       | 2-21A   | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21A SWITCHGEAR   | 2-12001, 2-12063     | AUXILIARY    | 609   | 4KV RM - 600V SWGR AREA   | E         | SUPPORT        | Seismic Only      |              |               |             |   |   |
| 71       | 1     | 2       | 2-21A1  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / REACTOR ROD CONTROL SOUTH MOTOR-GENERATOR SET CRDMG-2S SUPPLY BREAKER         | 2-12001, 2-12063     | AUXILIARY    | 609   | 4KV RM - 600V SWGR AREA   | E         | EDG            | Seismic and Relay |              |               |             |   |   |
| 72       | 1     | 2       | 2-21A10 | 0      | ELECTRICAL DISTRIBUTION, 600VAC / WEST TURBINE AUXILIARY COOLING WATER PUMP PP-14V SUPPLY BREAKER               | 2-12001, 2-12063     | AUXILIARY    | 609   | 4KV RM - 600V SWGR AREA   | E         | EDG            | Seismic and Relay |              |               |             |   |   |
| 73       | 1     | 2       | 2-21A11 | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC BUS 21A SUPPLY BREAKER   | 2-12001, 2-12063     | AUXILIARY    | 609   | 4KV RM - 600V SWGR AREA   | E         | 600 VAC SYSTEM | Seismic and Relay |              |               |             | 2-98045, 2-98051, 2-98052, 2-12001, 2-12063 |   |
| 74       | 1     | 2       | 2-21A2  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MCC AM-A SUPPLY BREAKER  | 2-12001, 2-12063     | AUXILIARY    | 609   | 4KV RM - 600V SWGR AREA   | E         | 600 VAC SYSTEM | Seismic Only      |              |               | Y           | 2-12001, 2-12063                            |   |
| 75       | 1     | 2       | 2-21A4  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / SOUTH PLANT LIGHTING TRANSFORMER TR-LTG-9S SUPPLY BREAKER                     | 2-12001, 2-12063     | AUXILIARY    | 609   | 4KV RM - 600V SWGR AREA   | E         | EDG            | Seismic and Relay |              |               |             |   |   |
| 76       | 1     | 2       | 2-21A5  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MCC ABD-A SUPPLY BREAKER   | 2-12001, 2-12063     | AUXILIARY    | 609   | 4KV RM - 600V SWGR AREA   | E         | 600 VAC SYSTEM | Seismic Only      |              |               | Y           | 2-12001, 2-12063                            |   |
| 77       | 1     | 2       | 2-21A6  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MCCS AB-A, PS-A, TPP-A, AND VCCS ABV-A, AZV-A SUPPLY BREAKER           | 2-12001, 2-12063     | AUXILIARY    | 609   | 4KV RM - 600V SWGR AREA   | E         | 600 VAC SYSTEM | Seismic Only      |              |               | Y           | 2-12001, 2-12063                            |   |
| 78       | 1     | 2       | 2-21A8  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC BORIC ACID HEAT TRACE CONTROL CENTER BHT-A SUPPLY BREAKER              | 2-12001              | AUXILIARY    | 609   | 4KV RM - 600V SWGR AREA   | E         | EDG            | Seismic Only      |              |               | Y           |   |   |
| 79       | 1     | 2       | 2-21A9  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MCC EZC-A SUPPLY BREAKER   | 2-12001, 2-12063     | AUXILIARY    | 609   | 4KV RM - 600V SWGR AREA   | E         | 600 VAC SYSTEM | Seismic Only      |              |               | Y           | 2-12001, 2-12063                            |   |
| 80       | 1     | 2       | 2-21AC  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21A TO 600V BUS 21C TIE BREAKER                                      | 2-12001, 2-12063     | AUXILIARY    | 609   | 4KV RM - 600V SWGR AREA   | E         | EDG            | Seismic and Relay |              |               |             |   |   |
| 81       | 1     | 2       | 2-21B   | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21B SWITCHGEAR   | 2-12001, 2-12063     | AUXILIARY    | 609   | 4KV RM - 600V SWGR AREA   | E         | SUPPORT        | Seismic Only      |              |               |             |   |   |
| 82       | 1     | 2       | 2-21B1  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MCC ABD-B SUPPLY BREAKER (2-ELSC)                                      | 2-12001, 2-12063     | AUXILIARY    | 609   | 4KV RM - 600V SWGR AREA   | E         | 600 VAC SYSTEM | Seismic Only      |              |               | Y           | 2-12001, 2-12063                            |   |
| 83       | 1     | 2       | 2-21B10 | 0      | ELECTRICAL DISTRIBUTION, 600VAC / PLANT AIR COMPRESSOR OME-41 SUPPLY BREAKER                                    | 2-12001, 2-12063     | AUXILIARY    | 609   | 4KV RM - 600V SWGR AREA   | E         | EDG            | Seismic and Relay |              |               |             |   |   |
| 84       | 1     | 2       | 2-21B11 | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC BUS 21B SUPPLY BREAKER   | 2-12001, 2-12063     | AUXILIARY    | 609   | 4KV RM - 600V SWGR AREA   | E         | 600 VAC SYSTEM | Seismic and Relay |              |               |             | 2-12001, 2-12063                            |   |
| 85       | 1     | 2       | 2-21B12 | 0      | ELECTRICAL DISTRIBUTION, 600VAC / SOUTH NON-ESSENTIAL SERVICE WATER PUMP PP-8S SUPPLY BREAKER                   | 2-12001, 2-12063     | AUXILIARY    | 609   | 4KV RM - 600V SWGR AREA   | E         | EDG            | Seismic and Relay |              |               | Y           |   |   |
| 86       | 1     | 2       | 2-21B13 | 0      | ELECTRICAL DISTRIBUTION, 600VAC / TURBINE ROOM INDUCTION HEATING, STRESS RELIEF AND BOLT HEATERS SUPPLY BREAKER | 2-12001, 2-12063     | AUXILIARY    | 609   | 4KV RM - 600V SWGR AREA   | E         | EDG            | Seismic and Relay |              |               | Y           |   |   |
| 87       | 1     | 2       | 2-21B2  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MCC EZC-B SUPPLY BREAKER   | 2-12001, 2-12063     | AUXILIARY    | 609   | 4KV RM - 600V SWGR AREA   | E         | 600 VAC SYSTEM | Seismic Only      |              |               | Y           | 2-12001, 2-12063                            |   |
| 88       | 1     | 2       | 2-21B3  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21B SPARE CIRCUIT BREAKER  | 2-12001, 2-12063     | AUXILIARY    | 609   | 4KV RM - 600V SWGR AREA   | E         | EDG            | Seismic Only      |              |               |             |   |   |
| 89       | 1     | 2       | 2-21B5  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V MOTOR CONTROL CENTERS TBG-BW AND TBP-BN SUPPLY BREAKER                   | 2-12001, 2-12063     | AUXILIARY    | 609   | 4KV RM - 600V SWGR AREA   | E         | EDG            | Seismic and Relay |              |               |             |   |   |

DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID  | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.     | FIEL | Rm or Rm/CI                              | Flow Path | Function       | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev.             | Required Supporting Systems or Components |
|----------|-------|--------|---------|--------|--|----------------------|-----------|------|--|-----------|----------------|-------------------|--------------|---------------|-------------|---|---|
| 90       | 1     | 2      | 2-21B8  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / EAST TURBINE AUXILIARY COOLING WATER PUMP PP-14E SUPPLY BREAKER                        | 2-12001, 2-12063     | AUXILIARY | 609  | 4KV RM - 600V SWGR AREA                  | E         | EDG            | Seismic and Relay |              |               |             |   |   |
| 91       | 2     | 2      | 2-21B0  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21B TO 600V BUS 21D TIE BREAKER   | 2-12002, 2-12001     | AUXILIARY | 609  | 4KV RM - 600V SWGR AREA                  | E         | EDG            | Seismic and Relay |              |               |             |   |   |
| 92       | 2     | 2      | 2-21C   | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21C SWITCHGEAR  | 2-12002, 2-12072     | AUXILIARY | 609  | 4KV RM - 600V SWGR AREA                  | E         | SUPPORT        | Seismic Only      |              |               |             |   |   |
| 93       | 2     | 2      | 2-21C1  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21C SUPPLY BREAKER  | 2-12002, 2-12072     | AUXILIARY | 609  | 4KV RM - 600V SWGR AREA                  | E         | 600 VAC SYSTEM | Seismic and Relay |              |               |             | 2-98045, 2-98051, 2-98052, 2-12002, 2-12072 |   |
| 94       | 2     | 2      | 2-21C10 | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MCC ABD-C AND 2-AFW SUPPLY BREAKER  | 2-12002, 2-12072     | AUXILIARY | 609  | 4KV RM - 600V SWGR AREA                  | E         | 600 VAC SYSTEM | Seismic Only      |              |               | Y           | 2-12002, 2-12072                            |   |
| 95       | 2     | 2      | 2-21C11 | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21C SPARE CIRCUIT BREAKER   | 2-12002, 2-12072     | AUXILIARY | 609  | 4KV RM - 600V SWGR AREA                  | E         | EDG            | Seismic Only      |              |               |             |   |   |
| 96       | 2     | 2      | 2-21C12 | 0      | ELECTRICAL DISTRIBUTION, 600VAC / SOUTH SPENT FUEL PIT PUMP 12-PP-31S SUPPLY BREAKER                                     | 2-12002, 2-12072     | AUXILIARY | 609  | 4KV RM - 600V SWGR AREA                  | E         | EDG            | Seismic and Relay |              |               |             |   |   |
| 97       | 2     | 2      | 2-21C13 | 0      | ELECTRICAL DISTRIBUTION, 600VAC / RECIPROCATING CHARGING PUMP PP-49 SUPPLY BREAKER                                       | 2-12002              | AUXILIARY | 609  | 4KV RM - 600V SWGR AREA                  | E         | 600 VAC SYSTEM | Seismic and Relay |              |               |             | 2-12002, 2-12072, 2-98273                   |   |
| 98       | 2     | 2      | 2-21C14 | 0      | ELECTRICAL DISTRIBUTION, 600VAC / FIRE PROTECTION WATER HIGH DEMAND PUMP PP-11 SUPPLY BREAKER                            | 2-12002, 2-12072     | AUXILIARY | 609  | 4KV RM - 600V SWGR AREA                  | E         | EDG            | Seismic and Relay |              |               |             |   |   |
| 99       | 2     | 2      | 2-21C16 | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MOTOR CONTROL CENTER TBC-CN SUPPLY BREAKER                                      | 2-12002, 2-12072     | AUXILIARY | 609  | 4KV RM - 600V SWGR AREA                  | E         | EDG            | Seismic and Relay |              |               |             |   |   |
| 100      | 2     | 2      | 2-21C17 | 0      | ELECTRICAL DISTRIBUTION, 600VAC / NORTH NON-ESSENTIAL SERVICE WATER PUMP PP-8N SUPPLY BREAKER                            | 2-12002, 2-12072     | AUXILIARY | 609  | 4KV RM - 600V SWGR AREA                  | E         | EDG            | Seismic and Relay |              |               |             |   |   |
| 101      | 2     | 2      | 2-21C18 | 0      | ELECTRICAL DISTRIBUTION, 600VAC / MAIN TURBINE AUXILIARY LUBE OIL PUMP QT-201 SUPPLY BREAKER                             | 2-12002, 2-12072     | AUXILIARY | 609  | 4KV RM - 600V SWGR AREA                  | E         | EDG            | Seismic and Relay |              |               |             |   |   |
| 102      | 2     | 2      | 2-21C2  | 0      | CONTAINMENT POLAR CR / ELECTRICAL DISTRIBUT  | 2-12002, 2-12072     | AUXILIARY | 609  | AIR COOLED CIRCUIT BREAKER (METAL FRAME) | E         | EDG            | Seismic and Relay |              |               |             |   |   |
| 103      | 2     | 2      | 2-21C3  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21C SPARE CIRCUIT BREAKER   | 2-12002, 2-12072     | AUXILIARY | 609  | 4KV RM - 600V SWGR AREA                  | E         | EDG            | Seismic Only      |              |               |             |   |   |
| 104      | 2     | 2      | 2-21C4  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / CIRCULATING WATER TRAVELING SCREEN SOUTH WASH PUMP PP-15S SUPPLY BREAKER               | 2-12002, 2-12072     | AUXILIARY | 609  | 4KV RM - 600V SWGR AREA                  | E         | EDG            | Seismic and Relay |              |               |             |   |   |
| 105      | 2     | 2      | 2-21C6  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MCC EZC-C SUPPLY BREAKER  | 2-12002, 2-12072     | AUXILIARY | 609  | 4KV RM - 600V SWGR AREA                  | E         | 600 VAC SYSTEM | Seismic Only      |              |               | Y           | 2-12002, 2-12072                            |   |
| 106      | 2     | 2      | 2-21C7  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21C SPARE CIRCUIT BREAKER   | 2-12002, 2-12072     | AUXILIARY | 609  | 4KV RM - CD 4KV SWGR AREA                | E         | EDG            | Seismic Only      |              |               |             |   |   |
| 107      | 2     | 2      | 2-21C8  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / PLANT AND CNMT STANDBY LIGHTING TRANSFORMER TR-LTG-8 SUPPLY BREAKER                    | 2-12002, 2-12072     | AUXILIARY | 609  | 4KV RM - 600V SWGR AREA                  | E         | EDG            | Seismic and Relay |              |               |             |   |   |
| 108      | 2     | 2      | 2-21C9  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / MAIN AND SPARE TRANSFORMER AUXILIARIES NORMAL DISTRIBUTION CABINET TCSN SUPPLY BREAKER | 2-12002, 2-12072     | AUXILIARY | 609  | 4KV RM - 600V SWGR AREA                  | E         | EDG            | Seismic and Relay |              |               |             |   |   |
| 109      | 2     | 2      | 2-21D   | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21D SWITCHGEAR  | 2-12002, 2-12072     | AUXILIARY | 609  | 4KV RM - 600V SWGR AREA                  | E         | SUPPORT        | Seismic Only      |              |               |             |   |   |
| 110      | 2     | 2      | 2-21D1  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21D SUPPLY BREAKER  | 2-12002, 2-12072     | AUXILIARY | 609  | 4KV RM - 600V SWGR AREA                  | E         | 600 VAC SYSTEM | Seismic and Relay |              |               |             | 2-98046, 2-98051, 2-98052, 2-12002, 2-12072 |   |



**DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**

| Line No. | Train | Eq. CL | Eq. ID   | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.     | FIEL | Rm or Rm/CI               | Flow Path | Function         | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. No. / Rev.                  | Dwg. No. | Required Supporting Systems or Components |
|----------|-------|--------|----------|--------|---|----------------------|-----------|------|---------------------------|-----------|------------------|-------------------|--------------|---------------|-------------|---|----------|---|
| 111      | 2     | 2      | 2-21D10  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / NORTH PLANT LIGHTING TRANSFORMER TR-1TG-9N SUPPLY BREAKER                                 | 2-12002, 2-12072     | AUXILIARY | 609  | 4KV RM - 600V SWGR AREA   | E         | EDG              | Seismic and Relay |              |               |             |   |          |   |
| 112      | 2     | 2      | 2-21D11  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BORIC ACID HEAT TRACE CONTROL CENTER BHT-D SUPPLY BREAKER                            | 2-12002, 2-12072     | AUXILIARY | 609  | 4KV RM - 600V SWGR AREA   | E         | EDG              | Seismic Only      |              |               | Y           |   |          |   |
| 113      | 2     | 2      | 2-21D13  | 0      | ELECTRICAL DISTRIBUTION, 600VAC / REACTOR ROD CONTROL NORTH MOTOR-GENERATOR SET CRDMG-2N SUPPLY BREAKER                     | 2-12002, 2-12072     | AUXILIARY | 609  | 4KV RM - 600V SWGR AREA   | E         | EDG              | Seismic and Relay |              |               |             |   |          |   |
| 114      | 2     | 2      | 2-21D14  | 0      | 600VAC DISTRIBUTION / 600VAC MCC 2-AB-D, VCC 2-ABV-D, MCC 2-PS-D SUPPLY BREAKER   | 2-12002, 2-12072     | AUXILIARY | 609  | 4KV RM - 600V SWGR AREA   | E         | 600 VAC SYSTEM   | Seismic Only      |              |               | Y           | 2-12002, 2-12072                            |          |   |
| 115      | 2     | 2      | 2-21D3   | 0      | ELECTRICAL DISTRIBUTION, 600VAC / CONTAINMENT LIGHTING TRANSFORMER TR-1TG-10 SUPPLY BREAKER                                 | 2-12002, 2-12072     | AUXILIARY | 609  | 4KV RM - 600V SWGR AREA   | E         | EDG              | Seismic and Relay |              |               |             |   |          |   |
| 116      | 2     | 2      | 2-21D4   | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21D SPARE CIRCUIT BREAKER  | 2-12002, 2-12072     | AUXILIARY | 609  | 4KV RM - 600V SWGR AREA   | E         | EDG              | Seismic Only      |              |               | Y           |   |          |   |
| 117      | 2     | 2      | 2-21D5   | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MCC ABD-D SUPPLY BREAKER   | 2-12002, 2-12072     | AUXILIARY | 609  | 4KV RM - 600V SWGR AREA   | E         | 600 VAC SYSTEM   | Seismic Only      |              |               | Y           | 2-12002, 2-12072                            |          |   |
| 118      | 2     | 2      | 2-21D6   | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MCC EZC-D SUPPLY BREAKER   | 2-12002, 2-12072     | AUXILIARY | 609  | 4KV RM - 600V SWGR AREA   | E         | 600 VAC SYSTEM   | Seismic Only      |              |               | Y           | 2-12002, 2-12072                            |          |   |
| 119      | 2     | 2      | 2-21D8   | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600VAC MCC AM-D SUPPLY BREAKER  | 2-12002, 2-12072     | AUXILIARY | 609  | 4KV RM - 600V SWGR AREA   | E         | 600 VAC SYSTEM   | Seismic Only      |              |               | Y           | 2-12002, 2-12072                            |          |   |
| 120      | 2     | 2      | 2-21D9   | 0      | ELECTRICAL DISTRIBUTION, 600VAC / MAIN AND SPARE TRANSFORMER AUXILIARIES EMERGENCY DISTRIBUTION CABINET TCSE SUPPLY BREAKER | 2-12002, 2-12072     | AUXILIARY | 609  | 4KV RM - 600V SWGR AREA   | E         | EDG              | Seismic and Relay |              |               |             |   |          |   |
| 121      | 2     | 2      | 2-52-BYA | 0      | REACTOR TRIP BREAKER (ROD CONTROL & INST.) / REACTOR ROD CONTROL TR-A REACTOR TRIP BYPASS CIRCUIT BREAKER                   | NONE                 | AUXILIARY | 609  | CRD EQUIP RM              | E         | SUPPORT          | Seismic and Relay |              |               |             |   |          |   |
| 122      | 1     | 2      | 2-52-BYB | 0      | REACTOR TRIP BREAKER (ROD CONTROL & INST.) / REACTOR ROD CONTROL TRAIN B REACTOR TRIP BYPASS CIRCUIT BREAKER                | NONE                 | AUXILIARY | 609  | CRD EQUIP RM              | E         | SUPPORT          | Seismic and Relay |              |               |             |   |          |   |
| 123      | 2     | 2      | 2-52-RTA | 0      | ROD CONTROL AND INSTRUMENTATION / REACTOR ROD CONTROL TRAIN 'A' REACTOR TRIP CIRCUIT BREAKER                                | NONE                 | AUXILIARY | 609  | CRD EQUIP RM              | E         | SUPPORT          | Seismic and Relay |              |               |             | 2-98221, 2-98223, 2-98512                   |          |   |
| 124      | 1     | 2      | 2-52-RTB | 0      | ROD CONTROL AND INSTRUMENTATION / REACTOR ROD CONTROL TRAIN 'B' REACTOR TRIP CIRCUIT BREAKER                                | NONE                 | AUXILIARY | 609  | CRD EQUIP RM              | E         | SUPPORT          | Seismic and Relay |              |               |             | 2-98223, 2-98512, 2-98221, 2-98367          |          |   |
| 125      | 1     | 3      | 2-T21A   | 0      | 4KV ELECTRICAL DISTRIBUTION / 4KV BUS T21A SWITCHGEAR   | 2-12001              | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR AREA | E         | 4KV DISTRIBUTION | Seismic Only      |              |               |             |   |          |   |
| 126      | 1     | 3      | 2-T21A1  | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / SOUTH SAFETY INJECTION PUMP PP-26S SUPPLY BREAKER  | 2-12001, 2-12063     | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR AREA | E         | 4KV DISTRIBUTION | Seismic and Relay |              |               |             |   |          |   |
| 127      | 1     | 3      | 2-T21A10 | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 600V BUS 21A SUPPLY TRANSFORMER TR21A SUPPLY BREAKER                                     | 2-12001, 2-12063     | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR AREA | E         | 4KV SYSTEM       | Seismic and Relay |              |               |             | 5-12001, 2-12063, 2-98045, 2-98051, 2-98052 |          |   |
| 128      | 1     | 3      | 2-T21A11 | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / AB EMERGENCY DIESEL GENERATOR TO 4KV BUS T21A SUPPLY BREAKER                             | 2-12001, 2-12063     | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR AREA | E         | 4KV SYSTEM       | Seismic and Relay |              |               |             | 2-12001, 2-12063, 2-98043, 2-98051, 2-98052 |          |   |
| 129      | 1     | 3      | 2-T21A12 | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / CIRCUIT BREAKER FROM 69KV TO BUS T21A  | 2-12001, 2-12063     | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR AREA | E         | 4KV SYSTEM       | Seismic and Relay |              |               |             | 2-12001, 2-12063, 2-98045, 2-98051, 2-98052 |          |   |
| 130      | 1     | 3      | 2-T21A2  | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / WEST MOTOR DRIVEN AUX FEEDWATER PUMP PP-3W SUPPLY BREAKER                                | 2-12001, 2-12063     | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR AREA | E         | 4KV SYSTEM       | Seismic Only      |              |               | Y           | 2-98220, 2-12001, 2-12063                   |          |   |





DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. Cl. | Eq. ID   | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.     | FIEL | Rm or RwrCl               | Flow Path | Function         | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev.             | Required Supporting Systems or Components |
|----------|-------|---------|----------|--------|---|----------------------|-----------|------|---------------------------|-----------|------------------|-------------------|--------------|---------------|-------------|---|---|
| 131      | 1     | 3       | 2-T21A3  | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC / WEST CONTAINMENT SPRAY PUMP PP-9W SUPPLY BREAKER                                      | 2-12001, 2-12063     | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR AREA | E         | 4KV DISTRIBUTION | Seismic and Relay |              |               |             |   |   |
| 132      | 1     | 3       | 2-T21A4  | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / WEST RESIDUAL HEAT REMOVAL PUMP PP-35W SUPPLY BREAKER                                  | 2-12001, 2-12063     | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR AREA | E         | 4KV SYSTEM       | Seismic Only      |              |               | Y           | 2-98284, 2-12001, 2-12063                   |   |
| 133      | 1     | 3       | 2-T21A5  | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / WEST ESSENTIAL SERVICE WATER PUMP PP-7W SUPPLY BREAKER                                 | 2-12001, 2-12063     | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR AREA | E         | 4KV SYSTEM       | Seismic Only      |              |               | Y           | 2-98415, 12-98461, 2-12001, 2-12063         |   |
| 134      | 1     | 3       | 2-T21A6  | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC / 4KV BUS T21A TO 480V PRESSURIZER HEATER BUS SUPPLY TRANSFORMER TR21PHA SUPPLY BREAKER | 2-12001, 2-12063     | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR AREA | E         | 4KV DISTRIBUTION | Seismic and Relay |              |               |             |   |   |
| 135      | 1     | 3       | 2-T21A7  | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / WEST COMPONENT COOLING WATER PUMP PP-10W SUPPLY BREAKER                                | 2-12001, 2-12063     | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR AREA | E         | 4KV SYSTEM       | Seismic Only      |              |               | Y           | 2-12001, 2-12063, 2-98405                   |   |
| 136      | 1     | 3       | 2-T21A8  | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / WEST CENTRIFUGAL CHARGING PUMP PP-50W SUPPLY BREAKER                                   | 2-12001, 2-12063     | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR AREA | E         | 4KV SYSTEM       | Seismic Only      |              |               | Y           | 2-98273, 2-12001, 2-12063                   |   |
| 137      | 1     | 3       | 2-T21A9  | 0      | ELECTRICAL DISTRIBUTION 4160VAC / 4KV BUS 2A TO BUS T21A TIE BREAKER  | 2-12001, 2-12063     | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR AREA | E         | 4KV DISTRIBUTION | Seismic and Relay | CL           | OP            | Y           |   |   |
| 138      | 1     | 3       | 2-T21B   | 0      | 4KV ELECTRICAL DISTRIBUTION / 4KV BUS T21A SWITCHGEAR   | 2-12001              | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR AREA | E         | 4KV DISTRIBUTION | Seismic Only      |              |               |             |   |   |
| 139      | 1     | 3       | 2-T21B1  | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 4KV BUS 2B TO 4KV BUS T21B TIE BREAKER   | 2-12001, 2-12063     | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR AREA | E         | 4KV DISTRIBUTION | Seismic and Relay | CL           | OP            | Y           |   |   |
| 140      | 1     | 3       | 2-T21B2  | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / CIRCUIT BREAKER FROM 69KV BUS TO BUS T21B  | 2-12001, 2-12063     | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR AREA | E         | 4KV SYSTEM       | Seismic and Relay |              |               |             | 2-12001, 2-12063, 2-98046, 2-98051, 2-98052 |   |
| 141      | 1     | 3       | 2-T21B4  | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / AB EMERGENCY DIESEL GENERATOR TO 4KV BUS T21B SUPPLY BREAKER                           | 2-12001, 2-12063     | AUXILIARY | 609  | 4KV RM - AB 4KV SWGR AREA | E         | 4KV SYSTEM       | Seismic and Relay |              |               |             | 2-98043, 2-98051, 2-98052, 2-12001, 2-12063 |   |
| 142      | 2     | 3       | 2-T21C   | 0      | 4KV ELECTRICAL DISTRIBUTION / 4KV BUS T21C SWITCHGEAR   | 2-12002              | AUXILIARY | 609  | 4KV RM - CD 4KV SWGR AREA | E         | 4KV DISTRIBUTION | Seismic Only      |              |               |             |   |   |
| 143      | 2     | 3       | 2-T21C1  | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 4KV BUS 2C TO 4KV BUS T21C TIE BREAKER   | 2-12002, 2-12072     | AUXILIARY | 609  | 4KV RM - CD 4KV SWGR AREA | E         | 4KV DISTRIBUTION | Seismic and Relay | CL           | OP            | Y           |   |   |
| 144      | 2     | 3       | 2-T21C2  | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / CIRCUIT BREAKER - 4KV FROM 69KV TO BUS T21C  | 2-12002, 2-12072     | AUXILIARY | 609  | 4KV RM - 600V SWGR AREA   | E         | 4KV SYSTEM       | Seismic and Relay |              |               |             | 2-12002, 2-12072, 2-98046, 2-98051, 2-98052 |   |
| 145      | 2     | 3       | 2-T21C3  | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / CD EMERGENCY DIESEL GENERATOR TO 4KV BUS T21C SUPPLY BREAKER                           | 2-12002, 2-12072     | AUXILIARY | 609  | 4KV RM - CD 4KV SWGR AREA | E         | 4KV SYSTEM       | Seismic and Relay |              |               |             | 2-98044, 2-98051, 2-98052, 2-12002, 2-12072 |   |
| 146      | 2     | 3       | 2-T21D   | 0      | 4KV ELECTRICAL DISTRIBUTION / 4KV BUS T21D SWITCHGEAR   | 2-12002              | AUXILIARY | 609  | 4KV RM - CD 4KV SWGR AREA | E         | 4KV DISTRIBUTION | Seismic Only      |              |               |             |   |   |
| 147      | 2     | 3       | 2-T21D1  | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 4KV EMERGENCY POWER BUS EP TO 4KV BUS T21D SUPPLY BREAKER                              | 2-12002              | AUXILIARY | 609  | 4KV RM - CD 4KV SWGR AREA | E         | 4KV SYSTEM       | Seismic and Relay |              |               |             | 2-12002, 2-12072, 2-98046, 2-98051, 2-98052 |   |
| 148      | 2     | 3       | 2-T21D10 | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / EAST ESSENTIAL SERVICE WATER PUMP PP-7E SUPPLY BREAKER                                 | 2-12002, 2-12072     | AUXILIARY | 609  | 4KV RM - CD 4KV SWGR AREA | E         | 4KV SYSTEM       | Seismic Only      |              |               | Y           | 2-12002, 2-12072, 2-98415, 2-98416          |   |
| 149      | 2     | 3       | 2-T21D11 | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP PP-3E SUPPLY BREAKER                        | 2-12002, 2-12072     | AUXILIARY | 609  | 4KV RM - CD 4KV SWGR AREA | E         | 4KV SYSTEM       | Seismic Only      |              |               | Y           | 2-98214, 2-12002, 2-12072                   |   |
| 150      | 2     | 3       | 2-T21D12 | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 4KV BUS 2D TO 4KV BUS T21D TIE BREAKER   | 2-12002              | AUXILIARY | 609  | 4KV RM - CD 4KV SWGR AREA | E         | 4KV DISTRIBUTION | Seismic and Relay | CL           | OP            | Y           |   |   |
| 151      | 2     | 3       | 2-T21D2  | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / 600V BUS 21D SUPPLY TRANSFORMER TR21D SUPPLY BREAKER                                   | 2-12002, 2-12072     | AUXILIARY | 609  | 4KV RM - CD 4KV SWGR AREA | E         | 4KV SYSTEM       | Seismic and Relay |              |               |             | 2-98046, 2-98051, 2-98052, 2-12002, 2-12072 |   |

DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID         | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.     | Fl EL | Rm or Rm/Cl               | Flow Path | Function         | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev.             | Required Supporting Systems or Components |
|----------|-------|--------|----------------|--------|---|----------------------|-----------|-------|---------------------------|-----------|------------------|-------------------|--------------|---------------|-------------|---|---|
| 152      | 2     | 3      | 2-T21D3        | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / EAST COMPONENT COOLING WATER PUMP PP-10E SUPPLY BREAKER                                | 2-12002, 2-12072     | AUXILIARY | 609   | 4KV RM - CD 4KV SWGR AREA | E         | 4KV SYSTEM       | Seismic Only      |              |               | Y           | 2-98405, 2-12002, 2-12072                   |   |
| 153      | 2     | 3      | 2-T21D4        | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC / EAST CONTAINMENT SPRAY PUMP PP-9E SUPPLY BREAKER                                      | 2-12002, 2-12072     | AUXILIARY | 609   | 4KV RM - CD 4KV SWGR AREA | E         | 4KV DISTRIBUTION | Seismic and Relay |              |               |             |   |   |
| 154      | 2     | 3      | 2-T21D5        | 0      | ELECTRICAL DISTRIBUTION PANEL, 4160 VAC / NORTH SAFETY INJECTION PUMP PP-28N SUPPLY BREAKER                               | 2-12002, 2-12072     | AUXILIARY | 609   | 4KV RM - CD 4KV SWGR AREA | E         | 4KV DISTRIBUTION | Seismic and Relay |              |               |             |   |   |
| 155      | 2     | 3      | 2-T21D6        | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / EAST RHR PUMP PP-3SE SUPPLY BREAKER  | 2-12002, 2-12072     | AUXILIARY | 609   | 4KV RM - 600V SWGR AREA   | E         | 4KV SYSTEM       | Seismic Only      |              |               | Y           | 2-12072, 2-12002, 2-98284                   | MCCD-4                                    |
| 156      | 2     | 3      | 2-T21D7        | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / EAST CENTRIFUGAL CHARGING PUMP PP-50E SUPPLY BREAKER                                   | 2-12002, 2-12072     | AUXILIARY | 609   | 4KV RM - CD 4KV SWGR AREA | E         | 4KV SYSTEM       | Seismic Only      |              |               | Y           | 2-98273, 2-12002, 2-12072                   |   |
| 157      | 2     | 3      | 2-T21D8        | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / CD EMERGENCY DIESEL GENERATOR TO 4KV BUS T21D SUPPLY BREAKER                           | 2-12002, 2-12072     | AUXILIARY | 609   | 4KV RM - CD 4KV SWGR AREA | E         | 4KV SYSTEM       | Seismic and Relay |              |               |             | 2-98044, 2-98051, 2-98052, 2-12002, 2-12072 |   |
| 158      | 2     | 3      | 2-T21D9        | 0      | ELECTRICAL DISTRIBUTION, 4160 VAC / 4KV BUS T21D TO 480V PRESSURIZER HEATER BUS SUPPLY TRANSFORMER TR21PHC SUPPLY BREAKER | 2-12002, 2-12072     | AUXILIARY | 609   | 4KV RM - CD 4KV SWGR AREA | E         | 4KV DISTRIBUTION | Seismic and Relay |              |               |             |   |   |
| 159      | 2     | 4      | 2-CRID-I-CVT   | 0      | 120V CONTROL ROOM INSTRUMENTATION DISTRIBUTION / 10KVA TRANSFORMER - CONSTANT VOLTAGE                                     | 2-12050              | AUXILIARY | 609   | 4KV RM - 600V SWGR AREA   | E         | 120 VAC SYSTEM   | Seismic and Relay |              |               |             | 2-98077, 2-12050                            |   |
| 160      | 2     | 4      | 2-CRID-II-CVT  | 0      | 120VAC DISTRIBUTION / 120V AC CR INST DISTR CH-II ISOL CONT VOLT TRANSFORMER  | 2-12050              | AUXILIARY | 609   | 4KV RM - 600V SWGR AREA   | E         | 120 VAC SYSTEM   | Seismic and Relay |              |               |             | 2-98081, 2-12050                            | 2-EZC-D-AL                                |
| 161      | 1     | 4      | 2-CRID-III-CVT | 0      | 120V CONTROL ROOM INSTRUMENTATION DISTR / 10KVA ISOLIMETER - CONSTANT VOLTAGE - TRANSFORMER                               | 2-12050, 2-12013     | AUXILIARY | 609   | 4KV RM - 600V SWGR AREA   | E         | 120 VAC SYSTEM   | Seismic and Relay |              |               |             | 2-98085, 2-12013                            | 2-EZC-A-SAR                               |
| 162      | 1     | 4      | 2-CRID-IV-CVT  | 0      | 120V CONTROL ROOM INSTRUMENTATION DISTR / 10KVA ISOLIMETER - CONSTANT VOLTAGE - TRANSFORMER                               | 2-12050              | AUXILIARY | 609   | 4KV RM - 600V SWGR AREA   | E         | 120 VAC SYSTEM   | Seismic and Relay |              |               |             | 2-98089, 2-12050                            | 2-EZC-B-1AL, 2-MCAB-12                    |
| 163      | 1     | 4      | 2-DGAB-FFCKT   | 0      | DIESEL GENERATION, CONTROL AND INSTRUMENTATION / AB EMERGENCY DIESEL GENERATOR OME-150-AB FIELD FLASH CIRCUIT TRANSFORMER | 2-12001              | AUXILIARY | 587   | AB EMER DSL GEN RM        | E         | EDG              | Seismic and Relay |              |               |             | 2-98032, 2-12001                            |   |
| 164      | 2     | 4      | 2-DGCD-FFCKT   | 0      | DIESEL GENERATION, CONTROL AND INSTRUMENTATION / CD EMERGENCY DIESEL GENERATOR OME-150-CD FIELD FLASH CKT TRANSFORMER     | 2-12002              | AUXILIARY | 587   | CD EMER DSL GEN RM        | E         | EDG              | Seismic and Relay |              |               |             | 2-12002, 2-98033                            |   |
| 165      | 2     | 4      | 2-TR-AFW       | 0      | 120V/220 CONTROL AND INSTRUMENTATION / AUXILIARY FEEDWATER 120/208VAC DISTRIBUTION PANEL AFW SUPPLY TRANSFORMER           | 2-12035, 2-12030     | AUXILIARY | 587   | CD EMER DSL GEN RM        | E         | 120 VAC SYSTEM   | Seismic Only      |              |               | Y           | 2-12035, 2-12030, 2-98215                   |   |
| 166      | 1     | 4      | 2-TR-ELSC      | 0      | 120V/220 CONTROL AND INSTRUMENTATION / 120/208VAC EMERGENCY LOCAL SHUTDOWN DISTRIBUTION TRANSFORMER                       | 2-12015, 2-12010     | AUXILIARY | 587   | AB EMER DSL GEN RM        | E         | 120 VAC SYSTEM   | Seismic Only      |              |               | Y           | 2-12015, 2-12010                            |   |
| 167      | 1     | 4      | 2-TR21A        | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21A SUPPLY TRANSFORMER   | 2-12001              | AUXILIARY | 609   | 4KV RM - 600V SWGR AREA   | E         | 600 VAC SYSTEM   | Seismic and Relay |              |               |             | 2-98051, 2-98052, 2-98045, 2-12001          |   |
| 168      | 1     | 4      | 2-TR21B        | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21B SUPPLY TRANSFORMER   | 2-12001              | AUXILIARY | 609   | 4KV RM - 600V SWGR AREA   | E         | 600 VAC SYSTEM   | Seismic and Relay |              |               |             | 2-98051, 2-98052, 2-98048, 2-12001          |   |
| 169      | 2     | 4      | 2-TR21C        | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21C SUPPLY TRANSFORMER   | 2-12002, 2-12072     | AUXILIARY | 609   | 4KV RM - CD 4KV SWGR AREA | E         | 600 VAC SYSTEM   | Seismic and Relay |              |               |             | 2-12002, 2-12072, 2-98045, 2-98051, 2-98052 |   |
| 170      | 2     | 4      | 2-TR21D        | 0      | ELECTRICAL DISTRIBUTION, 600VAC / 600V BUS 21D SUPPLY TRANSFORMER   | 2-12002              | AUXILIARY | 609   | 4KV RM - 600V SWGR AREA   | E         | 600 VAC SYSTEM   | Seismic and Relay |              |               |             | 2-98048, 2-98051, 2-98052, 2-12002          |   |

**DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**

| Line No. | Train | Eq. Cl. | Eq. ID       | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.         | FIEL | Rm or Rwh/Cl                  | Flow Path | Function               | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|---------|--------------|--------|--|----------------------|---------------|------|-------------------------------|-----------|------------------------|-------------------|--------------|---------------|-------------|----------------------------|---|
| 171      | 12    | 5       | 12-PP-31S    | 0      | SPENT FUEL PIT COOLING/CLEANUP / SOUTH SPENT FUEL PIT PUMP   | 12-5138              | UW2 AUXILIARY | 609  | SPENT FUEL PIT HEAT XCHGR RM  | S         | SPENT FUEL PIT COOLING | Seismic and Relay |              |               |             |                            |   |
| 172      | 2     | 5       | 2-PP-10E     | 0      | COMPONENT COOLING WATER / EAST COMPONENT COOLING WATER PUMP  | 2-5135A              | AUXILIARY     | 609  | 609 HALLWAY                   | S         | CCW                    | Seismic and Relay | NR/R         | R             | Y           | 2-12002, 2-98405           | 2-T21D3                                   |
| 173      | 1     | 5       | 2-PP-10W     | 0      | COMPONENT COOLING WATER / WEST COMPONENT COOLING WATER PUMP  | 2-5135A              | AUXILIARY     | 609  | 609 HALLWAY                   | S         | CCW                    | Seismic and Relay | R/NR         | R             | Y           | 2-12001, 2-98405           | 2-T21A7                                   |
| 174      | 2     | 5       | 2-PP-28N     | 0      | SAFETY INJECTION / NORTH SAFETY INJECTION PUMP   | 2-5142 2-5135A       | AUXILIARY     | 587  | N SAFETY INJ PMP RM           | P         | RI                     | Seismic and Relay | NR           | NR            | N           | 2-12002 2-98281]           | 2-T21D5                                   |
| 175      | 1     | 5       | 2-PP-28S     | 0      | SAFETY INJECTION / SOUTH SAFETY INJECTION PUMP   | 2-5142 2-5135A       | AUXILIARY     | 587  | S SAFETY INJ PMP RM           | P         | RI                     | Seismic and Relay | NR           | NR            | N           | 2-12001 2-98281            | 2-T21A1                                   |
| 176      | 2     | 5       | 2-PP-3E      | 0      | AUXILIARY FEEDWATER / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP   | 2-5108A              | TURBINE       | 591  | E MTR DRIV AUX FEEDWTR PMP    | P         | D                      | Seismic and Relay | NR/R         | R             | Y           | 2-12002 2-98214            | 2-T21D11 2-MCCD-4                         |
| 177      | 1     | 5       | 2-PP-3W      | 0      | AUXILIARY FEEDWATER / WEST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP   | 2-5108A              | TURBINE       | 591  | W MTR DRIVEN AUX FEEDWTR PMP  | P         | D                      | Seismic and Relay | R/NR         | R             | Y           | 2-12001 2-98220            | 2-T21A2 2-MCAB-3                          |
| 178      | 12    | 5       | 2-PP-4       | 0      | AUXILIARY FEEDWATER / TURBINE DRIVEN AUXILIARY FEED PUMP   | 2-5108A              | TURBINE       | 591  | TB DRIVEN AUX FEEDWTR PMP     | P         | D                      | Seismic and Relay | NR           | R             | Y           | 2-98215                    | 2-DCN-6                                   |
| 179      | 2     | 5       | 2-PP-46-3    | 0      | BORON MAKEUP (CVCS) / BORIC ACID STORAGE TANKS TRANSFER PUMP #3  | 12-5131 12-5131A     | AUXILIARY     | 587  | BORIC ACID STOR TANK AREA     | P         | RI                     | Seismic and Relay | NR           | R             | Y           | 2-12030 2-98272            | 2-AB-D-1C                                 |
| 180      | 1     | 5       | 2-PP-46-4    | 0      | BORON MAKEUP (CVCS) / BORIC ACID STORAGE TANKS TRANSFER PUMP #4  | 12-5131 12-5131A     | AUXILIARY     | 587  | BORIC ACID STOR TANK AREA     | P         | RI                     | Seismic and Relay | NR           | R             | Y           | 2-12010 2-98272            | 2-AB-A-1D                                 |
| 181      | 12    | 5       | 2-PP-49      | 0      | CHARGING (CVCS) / RECIPROCATING CHARGING PUMP  | 2-5129 2-5135        | AUXILIARY     | 587  | RECIPROCATIN G CHARG PMP RM   | P         | RIP                    | Seismic and Relay | NR           | NR            | N           |                            |   |
| 182      | 2     | 5       | 2-PP-50E     | 0      | CHARGING (CVCS) / EAST CENTRIFUGAL CHARGING PUMP   | 2-5129 2-5135A       | AUXILIARY     | 587  | E CENTRIFUGAL CHARG PMP ROOM  | P         | RIP                    | Seismic and Relay | NR/R         | R             | Y           | 2-12002 2-98273            | 2-T21D7                                   |
| 183      | 1     | 5       | 2-PP-50W     | 0      | CHARGING (CVCS) / WEST CENTRIFUGAL CHARGING PUMP   | 2-5129 2-5135A       | AUXILIARY     | 587  | W CENTRIFUGAL CHARG PMP RM    | P         | RIP                    | Seismic and Relay | R/NR         | R             | Y           | 2-12001 2-98273            | 2-T21A8                                   |
| 184      | 2     | 5       | 2-PP-82N     | 0      | CONTROL ROOM AIR CONDITIONING CHILL WATER / CONTROL ROOM AIR CONDITIONING NORTH CHILL WATER CIRCULATION PUMP | 2-5149               | AUXILIARY     | 650  | CTRL RM AIR CONDIT RM         | S         | HVAC                   | Seismic and Relay | NR/R         | R             | Y           | 2-12030 2-98742            | BOP 2-AB-D-2D                             |
| 185      | 1     | 5       | 2-PP-82S     | 0      | CONTROL ROOM AIR CONDITIONING CHILL WATER / CONTROL ROOM AIR CONDITIONING SOUTH CHILL WATER CIRCULATION PUMP | 2-5149               | AUXILIARY     | 650  | CTRL RM AIR CONDIT RM         | S         | HVAC                   | Seismic and Relay | R/NR         | R             | Y           | 2-12011 2-98742            | BOP 2-AM-A-5D                             |
| 186      | 1     | 5       | 2-QT-105-AB1 | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL TRANSFER PUMP #1  | 2-5151A              | AUXILIARY     | 587  | AB EMER DSL FUEL OIL XFER PMP | S         | EDG                    | Seismic and Relay | NR           | R             | Y           | 2-98013                    | 2-ABD-B-3D                                |
| 187      | 1     | 5       | 2-QT-105-AB2 | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL TRANSFER PUMP #2  | 2-5151A              | AUXILIARY     | 587  | AB EMER DSL FUEL OIL XFER PMP | S         | EDG                    | Seismic and Relay | NR           | R             | Y           | 2-98013                    | 2-94205                                   |
| 188      | 2     | 5       | 2-QT-105-CD1 | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL FUEL OIL TRANSFER PUMP #1  | 2-5151C              | AUXILIARY     | 587  | CD EMER DSL FUEL OIL XFER PMP | S         | EDG                    | Seismic and Relay | NR           | R             | Y           | 2-12030, 2-98014           | 2-ABD-C-3D                                |
| 189      | 2     | 5       | 2-QT-105-CD2 | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL FUEL OIL TRANSFER PUMP #2  | 2-5151C              | AUXILIARY     | 587  | CD EMER DSL FUEL OIL XFER PMP | S         | EDG                    | Seismic and Relay | NR           | R             | Y           | 2-98014                    | 2-ABD-D-2D                                |
| 190      | 1     | 5       | 2-QT-111-AB  | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL LUBE OIL BEFORE AND AFTER PUMP   | 2-5151A              | AUXILIARY     | 579  | AB EMER DSL LUBE OIL PIT      | S         | EDG                    | Seismic and Relay | R            | NR            | Y           | 2-12010, 2-98013           | 2-ABD-B-3C                                |
| 191      | 2     | 5       | 2-QT-111-CD  | 0      | DIESEL LUBE OIL / CD EMERGENCY DIESEL LUBE OIL BEFORE AND AFTER PUMP   | 2-5151C              | AUXILIARY     | 579  | CD EMER DSL LUBE OIL PIT      | S         | EDG                    | Seismic and Relay | R            | NR            | Y           | 2-98014                    | 2-ABD-C-3C                                |



DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID       | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.       | FIEL | Rm or Rm/CL                 | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|--------------|--------|---|----------------------|-------------|------|-----------------------------|-----------|----------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 192      | 1     | 5      | 2-QT-117-AB  | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL LUBE OIL HEATER QT-116-AB PUMP                      | 2-5151A              | AUXILIARY   | 579  | AB EMER DSL LUBE OIL PIT    | S         | EDG      | Seismic and Relay | NR           | R             | Y           | 2-12010, 2-98013                | 2-ABD-B-3E                                |
| 193      | 2     | 6      | 2-QT-117-CD  | 0      | DIESEL LUBE OIL / CD EMERGENCY DIESEL LUBE OIL HEATER QT-116-CD PUMP                      | 2-5151C              | AUXILIARY   | 579  | CD EMER DSL LUBE OIL PIT    | S         | EDG      | Seismic and Relay | NR           | R             | Y           | 2-98014                         | 2-ABD-C-3E                                |
| 194      | 1     | 5      | 2-QT-119-AB  | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL BYPASS LUBE OIL FILTER QT-118-AB PUMP               | 2-5151A              | AUXILIARY   | 579  | AB EMER DSL LUBE OIL PIT    | S         | EDG      | Seismic and Relay | NR           | R             | Y           | 2-98013, 2-12010                | 2-ABD-A-2A                                |
| 195      | 2     | 5      | 2-QT-119-CD  | 0      | DIESEL LUBE OIL / CD EMERGENCY DIESEL BYPASS LUBE OIL FILTER QT-118-CD PUMP               | 2-5151C              | AUXILIARY   | 579  | CD EMER DSL LUBE OIL PIT    | S         | EDG      | Seismic and Relay | NR           | R             | Y           | 2-12030, 2-98014                | 2-ABD-D-2A                                |
| 196      | 1     | 5      | 2-QT-130-AB1 | 0      | DIESEL JACKET WATER / AB EMERGENCY DIESEL JACKET WATER PUMP #1                            | 2-5151B              | AUXILIARY   | 587  | AB EMER DSL GEN RM          | S         | EDG      | Seismic and Relay | R/NR         | R             | Y           | 2-12010, 2-98013                | 2-ABD-A-2C                                |
| 197      | 1     | 5      | 2-QT-130-AB2 | 0      | DIESEL JACKET WATER / AB EMERGENCY DIESEL JACKET WATER PUMP #2                            | 2-5151B              | AUXILIARY   | 587  | AB EMER DSL GEN RM          | S         | EDG      | Seismic and Relay | R/NR         | R             | Y           | 2-12010, 2-98013                | 2-ABD-B-2C                                |
| 198      | 2     | 5      | 2-QT-130-CD1 | 0      | DIESEL JACKET WATER / CD EMERGENCY DIESEL JACKET WATER PUMP 1                             | 2-5151D              | AUXILIARY   | 587  | CD EMER DSL GEN RM          | S         | EDG      | Seismic and Relay | R/NR         | R             | Y           | 2-12030, 2-98014                | 2-ABD-D-2C                                |
| 199      | 2     | 5      | 2-QT-130-CD2 | 0      | DIESEL JACKET WATER / CD EMERGENCY DIESEL JACKET WATER PUMP 2                             | 2-5151D              | AUXILIARY   | 587  | CD EMER DSL GEN RM          | S         | EDG      | Seismic and Relay | R/NR         | R             | Y           | 2-12030, 2-98014                | 2-ABD-C-2C                                |
| 200      | 1     | 5      | 2-QT-135-AB  | 0      | DIESEL JACKET WATER / AB EMERGENCY DIESEL AUXILIARY JACKET WATER PUMP                     | 2-5151B              | AUXILIARY   | 587  | AB EMER DSL GEN RM          | S         | EDG      | Seismic and Relay | NR           | R             | Y           | 2-12010, 2-98013                | 2-ABD-B-1B                                |
| 201      | 2     | 5      | 2-QT-135-CD  | 0      | DIESEL JACKET WATER / CD EMERGENCY DIESEL AUXILIARY JACKET WATER PUMP                     | 2-5151D              | AUXILIARY   | 587  | CD EMER DSL GEN RM          | S         | EDG      | Seismic and Relay | NR           | R             | Y           | 2-12030, 2-98014                | 2-ABD-C-1B                                |
| 202      | 2     | 6      | 2-PP-35E     | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL PUMP                                   | 2-5143 2-5135A       | AUXILIARY   | 573  | EAST RHR PMP RM             | P         | DRIP     | Seismic and Relay | R/NR         | R             | Y           | 2-12002 2-98284                 | 2-T21D6, 2-MCCD-4                         |
| 203      | 1     | 6      | 2-PP-35W     | 0      | RESIDUAL HEAT REMOVAL / WEST RESIDUAL HEAT REMOVAL PUMP                                   | 2-5143 2-5135A       | AUXILIARY   | 573  | W RHR PMP RM                | P         | DRIP     | Seismic and Relay | R/NR         | R             | Y           | 2-12001 2-98284                 | 2-T21A4, 2-MCAB-3                         |
| 204      | 2     | 6      | 2-PP-7E      | 0      | ESSENTIAL SERVICE WATER / EAST ESSENTIAL SERVICE WATER PUMP                               | 2-5113               | SCREENHOUSE | 591  | E ESSENTIAL SERV WTR PMP RM | S         | ESW      | Seismic and Relay | R/NR         | R             | Y           | 2-12002 2-98415 2-98721         | 2-T21D10                                  |
| 205      | 1     | 6      | 2-PP-7W      | 0      | ESSENTIAL SERVICE WATER / WEST ESSENTIAL SERVICE WATER PUMP                               | 2-5113               | SCREENHOUSE | 591  | W ESSENTIAL SERV WTR PMP RM | S         | ESW      | Seismic and Relay | R/NR         | R             | Y           | 2-12001 2-98415 2-98721         | 2-T21A5                                   |
| 206      | 2     | 6      | 2-PP-9E      | 0      | CONTAINMENT SPRAY / EAST CONTAINMENT SPRAY PUMP   | 2-5144 2-5135A       | AUXILIARY   | 573  | E CONT SPRAY PMP RM         | P         | DRI      | Seismic and Relay | NR           | NR            | N           | 2-12002 2-98285                 | 2-T21D4                                   |
| 207      | 1     | 6      | 2-PP-9W      | 0      | CONTAINMENT SPRAY / WEST CONTAINMENT SPRAY PUMP   | 2-5144               | AUXILIARY   | 573  | W CONT SPRAY PMP RM         | P         | DRI      | Seismic and Relay | NR           | NR            | N           | 2-12001 2-98285                 | 2-T21A3                                   |
| 208      |       | 7      | 2-CRV-410    | 0      | DEMINEALIZED MAKEUP /   |                      | AUXILIARY   | 650  |                             |           |          | Seismic Only      |              |               |             |                                 |   |
| 209      |       | 7      | 2-CRV-411    | 0      | DEMINEALIZED MAKEUP /   |                      | AUXILIARY   | 650  |                             |           |          | Seismic Only      |              |               |             |                                 |   |
| 210      | 2     | 7      | 2-DCR-301    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #1 BLOWDOWN SAMPLE DSR-301 CONTAINMENT ISOLATION VALVE | 2-5141A              | AUXILIARY   | 591  | VESTIBULE                   | P         | D        | Seismic and Relay | OP           | CL            | A           | 2-98464                         | 2-SSV-A1-14                               |
| 211      | 1     | 7      | 2-DCR-302    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #2 BLOWDOWN SAMPLE DSR-302 CONTAINMENT ISOLATION VALVE | 2-5141A              | AUXILIARY   | 591  | VESTIBULE                   | P         | D        | Seismic and Relay | OP           | CL            | A           | 2-98464                         | 2-SSV-A1-20                               |
| 212      | 1     | 7      | 2-DCR-303    | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #3 BLOWDOWN SAMPLE DSR-303 CONTAINMENT ISOLATION VALVE | 2-5141A              | AUXILIARY   | 591  | VESTIBULE                   | P         | D        | Seismic and Relay | OP           | CL            | A           | 2-98464                         | 2-SSV-A1-13                               |

**DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**

| Line No. | Train | Eq. CL | Eq. ID        | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.       | FI EL | Rm or Rm/CI                   | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|---------------|--------|--|----------------------|-------------|-------|-------------------------------|-----------|----------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 213      | 2     | 7      | 2-DCR-304     | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #4 BLOWDOWN SAMPLE DSR-304 CONTAINMENT ISOLATION VALVE                                      | 2-5141A              | AUXILIARY   | 591   | VESTIBULE                     | P         | D        | Seismic and Relay | OP           | CL            | A           | 2-98484                         | 2-SSV-A1-15                               |
| 214      | 2     | 7      | 2-DCR-310     | 0      | BLOWDOWN / STEAM GENERATOR OME-3-1 BLOWDOWN CONTAINMENT ISOLATION VALVE  | 2-5105E              | AUXILIARY   | 591   | STARTUP BLOWDOWN FLASHTANK RM | P         | D        | Seismic and Relay | OP           | CL            | A           | 2-98208                         | 2-CCV-CD-42                               |
| 215      | 1     | 7      | 2-DCR-320     | 0      | BLOWDOWN / STEAM GENERATOR OME-3-2 BLOWDOWN CONTAINMENT ISOLATION VALVE  | 2-5105E              | AUXILIARY   | 591   | STARTUP BLOWDOWN FLASHTANK RM | P         | D        | Seismic and Relay | OP           | CL            | A           | 2-98208                         | 2-CCV-AB-42                               |
| 216      | 1     | 7      | 2-DCR-330     | 0      | BLOWDOWN / STEAM GENERATOR OME-3-3 BLOWDOWN CONTAINMENT ISOLATION VALVE  | 2-5105B              | AUXILIARY   | 591   | STARTUP BLOWDOWN FLASHTANK RM | P         | D        | Seismic and Relay | OP           | CL            | A           | 2-98208                         | 2-CCV-AB-44                               |
| 217      | 2     | 7      | 2-DCR-340     | 0      | BLOWDOWN / STEAM GENERATOR OME-3-4 BLOWDOWN CONTAINMENT ISOLATION VALVE  | 2-5105B              | AUXILIARY   | 591   | STARTUP BLOWDOWN FLASHTANK RM | P         | D        | Seismic and Relay | OP           | CL            | A           | 2-98208                         | 2-CCV-CD-44                               |
| 218      | 12    | 7      | 2-DRV-407     | 0      | STEAM LINE DRAINS / MAIN STEAM LEADS CONDENSATION DRAIN TANK TK-150 OUTLET SHUTOFF VALVE                                       | 2-5110B              | AUXILIARY   | 600   | MN STM LINES VERT PIPE CHASE  | P         | D        | Seismic and Relay | OP           | CL            | A           | 2-98533                         | 2-VDCD-1-14                               |
| 219      | 1     | 7      | 2-FRV-245     | 0      | AUXILIARY FEEDWATER / WEST MOTOR DRIVEN AUXILIARY FEED PUMP PP-3W 2 In AIR OPERATED TEST VALVE                                 | 2-5106A              | TURBINE     | 591   | W MTR DRIVEN AUX FDWTR PMP    | P         | D        | Seismic Only      | CL           | CL            | N           | 2-98220                         | 2-CCV-AB-40 2-CCV-AB-83                   |
| 220      | 1     | 7      | 2-FRV-247     | 0      | AUXILIARY FEEDWATER / WEST MOTOR DRIVEN AUXILIARY FEED PUMP PP-3W EMERGENCY 1 In AIR OPERATED LEAKOFF GLOBE VALVE              | 2-5106A              | TURBINE     | 591   | W MTR DRIVEN AUX FDWTR PMP    | P         | D        | Seismic and Relay | OP           | OP            | N           | 2-98220                         | 2-ELSC-4                                  |
| 221      | 2     | 7      | 2-FRV-255     | 0      | AUXILIARY FEEDWATER / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP PP-3E 2 In AIR OPERATED TEST VALVE                            | 2-5106A              | TURBINE     | 591   | E MTR DRIV AUX FEEDWTR PMP    | P         | D        | Seismic Only      | CL           | CL            | N           | 2-98214                         | 2-CCV-CD-6                                |
| 222      | 12    | 7      | 2-FRV-256     | 0      | AUXILIARY FEEDWATER / TURBINE DRIVEN AUXILIARY FEED PUMP PP-4 2 In AIR OPERATED TEST VALVE                                     | 2-5106A              | TURBINE     | 591   | TB DRIVEN AUX FDWTR PMP       | P         | D        | Seismic Only      | CL           | CL            | N           | 2-98215                         | 2-DCN-8                                   |
| 223      | 2     | 7      | 2-FRV-257     | 0      | AUXILIARY FEEDWATER / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP PP-3E EMERGENCY 1 In AIR OPERATED LEAKOFF VALVE               | 2-5106A              | TURBINE     | 591   | E MTR DRIV AUX FEEDWTR PMP    | P         | D        | Seismic and Relay | OP           | OP            | N           | 2-98214                         | 2-AFW-1                                   |
| 224      | 12    | 7      | 2-FRV-258     | 0      | AUXILIARY FEEDWATER / TURBINE DRIVEN AUXILIARY FEED PUMP EMERGENCY 1 In AIR OPERATED LEAKOFF GLOBE VALVE                       | 2-5106A              | TURBINE     | 591   | TB DRIVEN AUX FDWTR PMP       | P         | D        | Seismic and Relay | OP           | OP            | N           | 2-98215                         | 2-DCN-8                                   |
| 225      | 12    | 7      | 2-GCR-314     | 0      | NITROGEN (REACTOR PLANT SERVICE) / NITROGEN SUPPLY TO ACCUMULATOR TANKS CONTAINMENT ISOLATION VALVE                            | 2-5143               | AUXILIARY   | 591   | STARTUP BLOWDOWN FLASHTANK RM | S         | SUPPORT  | Seismic and Relay | CL           | CL            | Y           | 2-98283                         | 2-CCV-CD-14                               |
| 226      | 12    | 7      | 2-GRV-341     | 0      | NITROGEN (REACTOR PLANT SERVICE) / NITROGEN SUPPLY TO ACCUMULATOR TANKS VENT VALVE   | 2-5143, 2-5120D      | CONTAINMENT | 598   | ANNULUS, QUAD NO. 2           | S         | AIR/N2   | Seismic and Relay | CL           | CL            |             | 2-98569                         |   |
| 227      | 12    | 7      | 2-HV-SGR-MD-1 | 0      | AUXILIARY BUILDING VENTILATION / CONTROL ROD DRIVE EQUIPMENT ROOM AND INVERTER AREA VENTILATION RECIRCULATING AIR INLET DAMPER | 2-5148C              | AUXILIARY   | 609   | 4KV RM - 600V SWGR AREA       | S         | HVAC     | Seismic and Relay | CL           | NA            | N           |                                 |   |
| 228      | 12    | 7      | 2-HV-SGR-MD-2 | 0      | AUXILIARY BUILDING VENTILATION / CONTROL ROD DRIVE EQUIPMENT ROOM AND INVERTER AREA VENTILATION OUTSIDE AIR INLET DAMPER       | 2-5148C              | AUXILIARY   | 609   | 4KV RM - 600V SWGR AREA       | S         | HVAC     | Seismic and Relay | OP           | NA            | N           |                                 |   |
| 229      | 2     | 7      | 2-IRV-112     | 0      | NITROGEN (REACTOR PLANT SERVICE) / ACCUMULATOR TANK OME-6-1 NITROGEN SUPPLY/VENT VALVE   | 2-5143, 2-5120D      | CONTAINMENT | 612   | ACCUMULATOR TANK #1 AREA      | S         | AIR/N2   | Seismic and Relay | CL           | CL            | N           | 2-98283                         | 2-CCV-CD-69                               |
| 230      | 1     | 7      | 2-IRV-122     | 0      | NITROGEN (REACTOR PLANT SERVICE) / ACCUMULATOR TANK OME-6-2 NITROGEN SUPPLY/VENT VALVE   | 2-5143, 2-5120D      | CONTAINMENT | 612   | ACCUMULATOR TANK #2 AREA      | S         | AIR/N2   | Seismic and Relay | CL           | CL            |             | 2-98283                         | 2-CCV-AB-69                               |
| 231      | 12    | 7      | 2-IRV-132     | 0      | NITROGEN (REACTOR PLANT SERVICE) / ACCUMULATOR TANK OME-6-3 NITROGEN SUPPLY/VENT VALVE   | 2-5143, 2-5120D      | CONTAINMENT | 612   | ACCUMULATOR TANK #3 AREA      | S         | AIR/N2   | Seismic and Relay | CL           | CL            |             | 2-98283                         | 2-CCV-CD-72                               |

DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID    | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone  | Bldg.        | Fl EL | Rm or RwfCl              | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|-----------|--------|---|-----------------------|--------------|-------|--------------------------|-----------|----------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 232      | 12    | 7      | 2-IRV-142 | 0      | NITROGEN (REACTOR PLANT SERVICE) / ACCUMULATOR TANK OME-6-4 NITROGEN SUPPLY/VENT VALVE  | 2-5143                | CONTAINME NT | 612   | ACCUMULATOR TANK #4 AREA | S         | AIR/12   | Seismic and Relay | CL           | CL            | A           | 2-98283                         | 2-CCV-AB-72                               |
| 233      | 1     | 7      | 2-IRV-149 | 0      | RESIDUAL HEAT REMOVAL / WEST RESIDUAL HEAT REMOVAL TO REACTOR COOLANT LOOPS #2 AND #3 0.75 IN AIR OPERATED TEST (GLOBE) VALVE       | 2-5143 2-5120D        | CONTAINME NT | 612   | HV-CEQ-2 FAN RM          | P         | DRIP     | Seismic and Relay | CL           | CL            | N           | 2-98281                         | 2-VDAB-2-3                                |
| 234      | 2     | 7      | 2-IRV-150 | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL TO REACTOR COOLANT LOOPS #1 AND #4 0.75 IN AIR OPERATED TEST VALVE               | 2-5143 2-5120E        | CONTAINME NT | 612   | HV-CEQ-2 FAN RM          | P         | DRIP     | Seismic and Relay | CL           | CL            | N           | 2-98281                         | 2-VDAB-2-1                                |
| 235      | 2     | 7      | 2-IRV-156 | 0      | RESIDUAL HEAT REMOVAL / ACCUMULATOR TANK OME-6-1 0.75 IN AIR OPERATED OUTLET AND SAFETY INJECTION TO RC LOOP #1 COLD LEG TEST VALVE | 2-5143                | CONTAINME NT | 598   | ANNULUS, QUAD NO. 1      | P         | DRIP     | Seismic and Relay | CL           | CL            | N           | 2-98283                         | 2-VDAB-2-1                                |
| 236      | 1     | 7      | 2-IRV-157 | 0      | RESIDUAL HEAT REMOVAL / WEST RHR AND SAFETY INJECTION TO REACTOR COOLANT LOOPS #2 AND #3 0.75 IN AIR OPERATED TEST VALVE            | 2-5143                | CONTAINME NT | 612   | HV-CEQ-2 FAN RM          | P         | DRIP     | Seismic and Relay | CL           | CL            | N           | 2-98281                         | 2-VDAB-2-1                                |
| 237      | 2     | 7      | 2-IRV-158 | 0      | RESIDUAL HEAT REMOVAL / EAST RHR AND NORTH SAFETY INJECTION TO REACTOR COOLANT PUMPS #1 AND #4 0.75 IN AIR OPERATED TEST VALVE      | 2-5143                | CONTAINME NT | 612   | HV-CEQ-2 FAN RM          | P         | DRIP     | Seismic and Relay | CL           | CL            | N           | 2-98281                         | 2-VDAB-2-1                                |
| 238      | 1     | 7      | 2-IRV-166 | 0      | RESIDUAL HEAT REMOVAL / ACCUMULATOR TANK OME-6-2 0.75 IN AIR OPERATED OUTLET AND SAFETY INJECTION TO RC LOOP #2 COLD LEG TEST VALVE | 2-5143                | CONTAINME NT | 598   | ANNULUS, QUAD NO. 2      | P         | DRIP     | Seismic and Relay | CL           | CL            | N           | 2-98283                         | BOP 2-VDAB-1-18                           |
| 239      | 2     | 7      | 2-IRV-176 | 0      | RESIDUAL HEAT REMOVAL / ACCUMULATOR TANK OME-6-3 0.75 IN AIR OPERATED OUTLET AND SAFETY INJECTION TO RC LOOP #3 COLD LEG TEST VALVE | 2-5143 2-5120E 2-5660 | CONTAINME NT | 598   | ANNULUS, QUAD NO. 3      | P         | DRIP     | Seismic and Relay | CL           | CL            | N           | 2-98283                         | 2-VDAB-1-22                               |
| 240      | 1     | 7      | 2-IRV-186 | 0      | RESIDUAL HEAT REMOVAL / ACCUMULATOR TANK OME-6-4 1 IN AIR OPERATED OUTLET AND SAFETY INJECTION TO RC LOOP #4 COLD LEG TEST VALVE    | 2-5143 2-5120D        | CONTAINME NT | 598   | ANNULUS, QUAD NO. 4      | P         | DRIP     | Seismic and Relay | CL           | CL            | N           | 2-98283                         | 2-VDAB-1-22                               |
| 241      | 12    | 7      | 2-IRV-260 | 0      | SAFETY INJECTION / SAFETY INJECTION TEST LINE SHUTOFF VALVE   | 2-5142                | AUXILIARY    | 587   | S SAFETY INJ PMP RM      | P         | RI       | Seismic and Relay | CL           | CL            | N           | 2-98281                         | 2-VDAB-1-24                               |
| 242      | 2     | 7      | 2-IRV-310 | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17E 8 IN AIR OPERATED OUTLET FLOW CONTROL VALVE                | 2-5143                | AUXILIARY    | 609   | E RHR HEAT XCHGR RM      | P         | DRIP     | Seismic and Relay | OP           | OP            | N           | 2-98566                         |   |
| 243      | 12    | 7      | 2-IRV-311 | 0      | RESIDUAL HEAT REMOVAL / RESIDUAL HEAT REMOVAL HEAT EXCHANGERS BYPASS FLOW 8 IN AIR OPERATED CONTROL VALVE                           | 2-5143                | AUXILIARY    | 609   | E RHR HEAT XCHGR RM      | P         | DRIP     | Seismic and Relay | CL           | CL/OP         | N           | 2-98566                         |   |
| 244      | 1     | 7      | 2-IRV-320 | 0      | RESIDUAL HEAT REMOVAL / WEST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17W 8 IN AIR OPERATED OUTLET FLOW CONTROL VALVE                | 2-5143                | AUXILIARY    | 609   | W RHR HEAT XCHGR RM      | P         | DRIP     | Seismic and Relay | OP           | OP            | N           | 2-98566                         |   |
| 245      | 12    | 7      | 2-IRV-50  | 0      | BORON INJECTION / BORON INJECTION TO ACCUMULATOR FILL LINE CONTROL VALVE  | 2-5142 2-5120D        | CONTAINME NT | 598   | ANNULUS, QUAD NO. 2      | P         | RI       | Seismic and Relay | CL           | CL            | N           | 2-98281                         | BOP 2-VDAB-2-2                            |
| 246      | 12    | 7      | 2-IRV-60  | 0      | SAFETY INJECTION / SAFETY INJECTION TO ACCUMULATOR FILL LINE CONTROL VALVE  | 2-5142 2-5120D        | CONTAINME NT | 598   | ANNULUS, QUAD NO. 2      | P         | RI       | Seismic and Relay | CL           | CL            | N           | 2-98281                         | 2-VDAB-2-4                                |
| 247      | 2     | 7      | 2-MCR-251 | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #1 STEAM SAMPLE MSX-101 CONTAINMENT ISOLATION VALVE  | 2-5141A               | AUXILIARY    | 591   | VESTIBULE                | P         | D        | Seismic and Relay | CL           | CL            | A           | 2-98464                         | 2-SSV-A1-10                               |





DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID    | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.       | FIEL | Rm or RwfCl          | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|-----------|--------|--|----------------------|-------------|------|----------------------|-----------|----------|-------------------|--------------|---------------|-------------|----------------------------|---|
| 248      | 1     | 7      | 2-MCR-252 | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #2 STEAM SAMPLE MSX-102 CONTAINMENT ISOLATION VALVE | 2-5141A              | AUXILIARY   | 591  | VESTIBULE            | P         | D        | Seismic and Relay | CL           | CL            | N           | 2-98464                    | 2-SSV-A1-12                               |
| 249      | 1     | 7      | 2-MCR-253 | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #3 STEAM SAMPLE MSX-103 CONTAINMENT ISOLATION VALVE | 2-5141A              | AUXILIARY   | 591  | VESTIBULE            | P         | D        | Seismic and Relay | CL           | CL            | N           | 2-98464                    | 2-SSV-A1-9                                |
| 250      | 2     | 7      | 2-MCR-254 | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #4 STEAM SAMPLE MSX-104 CONTAINMENT ISOLATION VALVE | 2-5141A              | AUXILIARY   | 591  | VESTIBULE            | P         | D        | Seismic and Relay | CL           | CL            | N           | 2-98464                    | 2-SSV-A1-11                               |
| 251      | 2     | 7      | 2-MRV-151 | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #1 STEAM SAMPLE MSX-101 SAMPLE SHUTOFF VALVE        | 2-5141A              | CONTAINMENT | 612  | E CONT LOWER VENT RM | P         | D        | Seismic and Relay | CL           | CL            | N           | 2-98464                    | 2-SSV-A2-8                                |
| 252      | 1     | 7      | 2-MRV-152 | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #2 STEAM SAMPLE MSX-102 SAMPLE SHUTOFF VALVE        | 2-5141A              | CONTAINMENT | 612  | W CONT LOWER VENT RM | P         | D        | Seismic and Relay | CL           | CL            | N           | 2-98464                    | 2-SSV-A2-7                                |
| 253      | 1     | 7      | 2-MRV-153 | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #3 STEAM SAMPLE MSX-103 SAMPLE SHUTOFF VALVE        | 2-5141A              | CONTAINMENT | 612  | W CONT LOWER VENT RM | P         | D        | Seismic and Relay | CL           | CL            | N           | 2-98464                    | 2-SSV-A2-6                                |
| 254      | 2     | 7      | 2-MRV-154 | 0      | NUCLEAR SAMPLING / STEAM GENERATOR #4 STEAM SAMPLE MSX-104 SAMPLE SHUTOFF VALVE        | 2-5141A              | CONTAINMENT | 612  | E CONT LOWER VENT RM | P         | D        | Seismic and Relay | CL           | CL            | N           | 2-98464                    | 2-SSV-A2-5                                |
| 255      | 2     | 7      | 2-MRV-211 | 0      | MAIN STEAM / STEAM GENERATOR #1 STOP VALVE MRV-210 STEAM CYLINDER TRAIN 'A' DUMP VALVE | 2-5105D              | AUXILIARY   | 633  | E MAIN STM STOP ENCL | P         | D        | Seismic and Relay | CL           | CL            | Y           | 2-98393 2-98538 2-98512    | 2-CCV-CD-1                                |
| 256      | 2     | 7      | 2-MRV-212 | 0      | MAIN STEAM / STEAM GENERATOR #1 STOP VALVE MRV-210 STEAM CYLINDER TRAIN 'B' DUMP VALVE | 2-5105D              | AUXILIARY   | 633  | E MAIN STM STOP ENCL | P         | D        | Seismic and Relay | CL           | CL            | Y           | 2-98393 2-98538 2-98512    | 2-CCV-AB-1                                |
| 257      | 2     | 7      | 2-MRV-213 | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 POWER OPERATED RELIEF VALVE                       | 2-5105D              | AUXILIARY   | 633  | E MAIN STM STOP ENCL | P         | D        | Seismic Only      | CL           | MAN C         | N           | 2-98584                    | 2-AFC-1-12                                |
| 258      | 1     | 7      | 2-MRV-221 | 0      | MAIN STEAM / STEAM GENERATOR #2 STOP VALVE MRV-220 STEAM CYLINDER TRAIN 'A' DUMP VALVE | 2-5105D              | AUXILIARY   | 633  | W MN STM STOP ENCL   | P         | D        | Seismic and Relay | CL           | CL            | Y           | 2-98393 2-98512 2-98538    | 2-CCV-CD-3                                |
| 259      | 1     | 7      | 2-MRV-222 | 0      | MAIN STEAM / STEAM GENERATOR #2 STOP VALVE MRV-220 STEAM CYLINDER TRAIN 'B' DUMP VALVE | 2-5105D              | AUXILIARY   | 633  | W MN STM STOP ENCL   | P         | D        | Seismic and Relay | CL           | CL            | Y           | 2-98393 2-98538 2-98512    | 2-CCV-AB-3                                |
| 260      | 1     | 7      | 2-MRV-223 | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2 POWER OPERATED RELIEF VALVE                       | 2-5105D              | AUXILIARY   | 633  | W MN STM STOP ENCL   | P         | D        | Seismic Only      | CL           | MAN C         | N           | 2-98584                    | 2-AFC-1-12                                |
| 261      | 1     | 7      | 2-MRV-231 | 0      | MAIN STEAM / STEAM GENERATOR #3 STOP VALVE MRV-230 STEAM CYLINDER TRAIN 'A' DUMP VALVE | 2-5105D              | AUXILIARY   | 633  | W MN STM STOP ENCL   | P         | D        | Seismic and Relay | CL           | CL            | Y           | 2-98538 2-98393 2-98512    | 2-CCV-CD-5                                |
| 262      | 1     | 7      | 2-MRV-232 | 0      | MAIN STEAM / STEAM GENERATOR #3 STOP VALVE MRV-230 STEAM CYLINDER TRAIN 'B' DUMP VALVE | 2-5105D              | AUXILIARY   | 633  | W MN STM STOP ENCL   | P         | D        | Seismic and Relay | CL           | CL            | Y           | 2-98538 2-98393 2-98512    | 2-CCV-AB-5                                |
| 263      | 1     | 7      | 2-MRV-233 | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3 POWER OPERATED RELIEF VALVE                       | 2-5105D              | AUXILIARY   | 633  | W MN STM STOP ENCL   | P         | D        | Seismic Only      | CL           | MAN C         | N           | 2-98584                    | 2-AFC-1-12                                |
| 264      | 2     | 7      | 2-MRV-241 | 0      | MAIN STEAM / STEAM GENERATOR #4 STOP VALVE MRV-240 STEAM CYLINDER TRAIN 'A' DUMP VALVE | 2-5105D              | AUXILIARY   | 633  | E MAIN STM STOP ENCL | P         | D        | Seismic and Relay | CL           | CL            | Y           | 2-98393 2-98538 2-98512    | 2-CCV-CD-7                                |
| 265      | 2     | 7      | 2-MRV-242 | 0      | MAIN STEAM / STEAM GENERATOR #4 STOP VALVE MRV-240 STEAM CYLINDER TRAIN 'B' DUMP VALVE | 2-5105D              | AUXILIARY   | 633  | E MAIN STM STOP ENCL | P         | D        | Seismic and Relay | CL           | CL            | Y           | 2-98393 2-98538 2-98512    | 2-CCV-AB-7                                |
| 266      | 2     | 7      | 2-MRV-243 | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 POWER OPERATED RELIEF VALVE                       | 2-5105D              | AUXILIARY   | 633  | E MAIN STM STOP ENCL | P         | D        | Seismic Only      | CL           | MAN C         | N           | 2-98584                    | 2-AFC-1-12                                |
| 267      | 2     | 7      | 2-NRV-101 | 0      | NUCLEAR SAMPLING / REACTOR COOLANT LOOP #1 HOT LEG SAMPLE NSX-101 SHUTOFF VALVE        | 2-5141               | CONTAINMENT | 598  | ANNULUS, QUAD NO. 1  | P         | I        | Seismic and Relay | CL           | CL            | A           | 2-98463                    | 2-SSV-A1-4                                |
| 268      | 12    | 7      | 2-NRV-102 | 0      | NUCLEAR SAMPLING / PRESSURIZER LIQUID SPACE SAMPLE NSX-102 SHUTOFF VALVE               | 2-5141               | CONTAINMENT | 612  | INSTRUMENTATION RM   | P         | I        | Seismic and Relay | CL           | CL            | A           | 2-98463                    | 2-SSV-A2-1                                |
| 269      | 1     | 7      | 2-NRV-103 | 0      | NUCLEAR SAMPLING / REACTOR COOLANT LOOP #3 HOT LEG SAMPLE NSX-103 SHUTOFF VALVE        | 2-5141               | CONTAINMENT | 598  | ANNULUS, QUAD NO. 3  | P         | I        | Seismic and Relay | CL           | CL            | A           | 2-98463                    | 2-SSV-B-17                                |



DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID    | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.        | FI EL | Rm or Rm/CL                | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|-----------|--------|---|----------------------|--------------|-------|----------------------------|-----------|----------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 270      | 12    | 7      | 2-NRV-104 | 0      | NUCLEAR SAMPLING / PRESSURIZER STEAM SPACE SAMPLE NSX-104 SHUTOFF VALVE   | 2-5141               | CONTAINME NT | 612   | INSTRUMENTATION RM         | P         | I        | Seismic and Relay | CL           | CL            | N           | 2-98463                         | 2-SSV-A2-3                                |
| 271      | 1     | 7      | 2-NRV-151 | 0      | PRESSURIZER / PRESSURIZER TRAIN 'B' PRESSURE RELIEF VALVE   | 2-5128A 2-51200      | CONTAINME NT | 650   | PRESSURIZER ENCL. INTERIOR | P         | RIP      | Seismic and Relay | CL           | MAN C         | A           | 2-98204                         | 2-CCV-AB-79                               |
| 272      | 1     | 7      | 2-NRV-152 | 0      | PRESSURIZER / PRESSURIZER TRAIN 'B' PRESSURE RELIEF VALVE   | 2-5128A 2-51200      | CONTAINME NT | 650   | PRESSURIZER ENCL. INTERIOR | P         | RIP      | Seismic and Relay | CL           | MAN C         | A           | 2-98204                         | 2-CCV-AB-80                               |
| 273      | 2     | 7      | 2-NRV-153 | 0      | PRESSURIZER / PRESSURIZER OME-4 TRAIN 'A' PRESSURE RELIEF VALVE   | 2-5128A 2-51200      | CONTAINME NT | 650   | PRESSURIZER ENCL. INTERIOR | P         | RIP      | Seismic and Relay | CL           | MAN C         | A           | 2-98204 2-98514                 | 2-CCV-CD-79                               |
| 274      | 1     | 7      | 2-NRV-183 | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP #3 TO PRESSURIZER SPRAY CONTROL 4 IN AIR OPERATED GLOBE VALVE  | 2-5128A              | CONTAINME NT | 612   | LOWER CONT, QUAD NO. 3     | P         | RIP      | Seismic Only      | OP/CL        | CL            | N           | 2-98553                         |   |
| 275      | 2     | 7      | 2-NRV-184 | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP #4 TO PRESSURIZER SPRAY CONTROL 4 IN AIR OPERATED GLOBE VALVE  | 2-5128A              | CONTAINME NT | 612   | LOWER CONT, QUAD NO. 3     | P         | RIP      | Seismic Only      | OP/CL        | CL            | N           | 2-98553                         |   |
| 276      | 12    | 7      | 2-QRV-10  | 0      | REACTOR COOLANT PUMP SEAL WATER IN/LEAKOFF / REACTOR COOLANT PUMP #1 SEAL #1 LEAKOFF TO RCP SEAL WATER RETURN FILTER QC-109 2 IN AIR OPERATED SHUTOFF VALVE         | 2-5128A              | CONTAINME NT | 617   | LOWER CONT, QUAD NO. 1     | P         | RIP      | Seismic and Relay | OP           | OP            | N           | 2-98201                         | 2-VDAB-1-4                                |
| 277      | 2     | 7      | 2-QRV-111 | 0      | LETDOWN (CVCS) / REACTOR COOLANT NORMAL LETDOWN TRAIN 'A' SHUTOFF VALVE   | 2-5129               | CONTAINME NT | 612   | LOWER CONT, QUAD NO. 4     | P         | RIP      | Seismic and Relay | OP           | OP            | A           | 2-98274 2-98514                 | 2-CCV-CD-74                               |
| 278      | 2     | 7      | 2-QRV-112 | 0      | LETDOWN (CVCS) / REACTOR COOLANT NORMAL LETDOWN TRAIN 'B' SHUTOFF VALVE   | 2-5129               | CONTAINME NT | 612   | LOWER CONT, QUAD NO. 4     | P         | RIP      | Seismic and Relay | OP           | OP            | A           | 2-98274 2-98514                 | 2-CCV-AB-75                               |
| 279      | 1     | 7      | 2-QRV-113 | 0      | LETDOWN (CVCS) / REACTOR COOLANT EXCESS LETDOWN TO EXCESS LETDOWN HEAT EXCHANGER HE-13 1 IN AIR OPERATED TRAIN 'B' SHUTOFF VALVE                                    | 2-5129A              | CONTAINME NT | 612   | LOWER CONT, QUAD NO. 4     | P         | RI       | Seismic and Relay | CL           | CL            | N           | 2-98274                         | 2-VDAB-2-16                               |
| 280      | 2     | 7      | 2-QRV-114 | 0      | LETDOWN (CVCS) / REACTOR COOLANT EXCESS LETDOWN TO EXCESS LETDOWN HEAT EXCHANGER HE-13 1 IN AIR OPERATED TRAIN 'A' SHUTOFF VALVE                                    | 2-5129A              | CONTAINME NT | 612   | LOWER CONT, QUAD NO. 4     | P         | RI       | Seismic and Relay | CL           | CL            | N           | 2-98274                         | BOP 2-VDAB-2-18                           |
| 281      | 12    | 7      | 2-QRV-150 | 0      | REACTOR COOLANT PUMP SEAL WATER IN/LEAKOFF / REACTOR COOLANT PUMPS STARTUP SEAL SYSTEM BYPASS TO SEAL WATER RETURN FILTER QC-109 0.75 IN AIR OPERATED SHUTOFF VALVE | 2-5128A              | CONTAINME NT | 598   | ANNULUS, QUAD NO. 2        | P         | RIP      | Seismic and Relay | CL           | CL            | N           | 2-98201                         | 2-VDAB-1-5                                |
| 282      | 12    | 7      | 2-QRV-170 | 0      | LETDOWN (CVCS) / EXCESS LETDOWN HEAT EXCHANGER HE-13 1 IN AIR OPERATED OUTLET PRESSURE CONTROL VALVE  | 2-5129A              | CONTAINME NT | 612   | REGEN HEAT XCHGR RM        | P         | RI       | Seismic and Relay | CL           | CL            | N           | 2-98561                         |   |
| 283      | 12    | 7      | 2-QRV-171 | 0      | LETDOWN (CVCS) / EXCESS LETDOWN HEAT EXCHANGER HE-13 1 IN AIR OPERATED OUTLET DIVERSION VALVE   | 2-5129A              | CONTAINME NT | 612   | REGEN HEAT XCHGR RM        | P         | RI       | Seismic and Relay | MAN C        | CL            | N           | 2-98274                         | 2-VDAB-2-18                               |
| 284      | 12    | 7      | 2-QRV-20  | 0      | REACTOR COOLANT PUMP SEAL WATER IN/LEAKOFF / REACTOR COOLANT PUMP #2 SEAL #1 LEAKOFF TO RCP SEAL WATER RETURN FILTER QC-109 2 IN AIR OPERATED SHUTOFF GLOBE VALVE   | 2-5128A              | CONTAINME NT | 625   | LOWER CONT, QUAD NO. 2     | P         | RIP      | Seismic and Relay | OP           | OP            | N           | 2-98201                         | BOP 2-VDAB-1-8                            |
| 285      | 12    | 7      | 2-QRV-251 | 0      | CHARGING (CVCS) / CVCS CENTRIFUGAL CHARGING PUMPS DISCHARGE FLOW 3 IN AIR OPERATED CONTROL GLOBE VALVE  | 2-5129               | AUXILIARY    | 587   | RECIPROCATING CHARG PMP RM | P         | RIP      | Seismic and Relay | OP           | OP            | N           | 2-98514 2-98554                 |   |

DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID      | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.        | Fl EL | Rm or Rw/CL                     | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|-------------|--------|---|----------------------|--------------|-------|---------------------------------|-----------|----------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 288      | 12    | 7      | 2-QRV-30    | 0      | REACTOR COOLANT PUMP SEAL WATER IN/LEAKOFF / REACTOR COOLANT PUMP #3 SEAL #1 LEAKOFF TO RCP SEAL WATER RETURN FILTER QC-109 2 IN AIR OPERATED SHUTOFF GLOBE VALVE | 2-5128A              | CONTAINME NT | 612   | LOWER CONT, QUAD NO. 3          | P         | RIP      | Seismic and Relay | OP           | OP            | N           | 2-98201                         | BOP 2-VDOD-1-7                            |
| 287      | 12    | 7      | 2-QRV-40    | 0      | REACTOR COOLANT PUMP SEAL WATER IN/LEAKOFF / REACTOR COOLANT PUMP #4 SEAL #1 LEAKOFF TO RCP SEAL WATER RETURN FILTER QC-109 2 IN AIR OPERATED SHUTOFF GLOBE VALVE | 2-5128A              | CONTAINME NT | 612   | LOWER CONT, QUAD NO. 4          | P         | RIP      | Seismic and Relay | OP           | OP            | N           | 2-98201                         | BOP 2-VDAB-1-8                            |
| 288      | 12    | 7      | 2-QRV-400   | 0      | BORON MAKEUP (CVCS) / SOUTH BORIC ACID BLENDER QP-21 2 IN AIR OPERATED TO CVCS CHARGING PUMPS SUCTION SHUTOFF VALVE   | 2-5129A              | AUXILIARY    | 609   | VOL CTRL TANK E HALLWAY         | P         | RI       | Seismic and Relay | MAN C        | CL            | N           | 2-98271                         | 2-CCV-CD-85                               |
| 289      | 12    | 7      | 2-QRV-421   | 0      | BORON MAKEUP (CVCS) / SOUTH BORIC ACID FILTER TO CVCS CHARGING PUMPS AND SOUTH BORIC ACID BLENDER 1 IN AIR OPERATED FLOW CONTROL GLOBE VALVE                      | 12-5131              | AUXILIARY    | 587   | BORIC ACID STOR TANK AREA       | P         | RI       | Seismic and Relay | MAN C        | CL            | N           | 2-98271 2-98577                 | 2-CCV-CD-83                               |
| 290      | 12    | 7      | 2-QRV-430   | 0      | BORON MAKEUP (CVCS) / SOUTH BORIC ACID STORAGE TANK TK-12S 2 IN AIR OPERATED INLET FLOW CONTROL GLOBE VALVE   | 12-5131              | AUXILIARY    | 587   | BORIC ACID STOR TANK AREA       | P         | RI       | Seismic and Relay | OP           | OP            | N           | 2-98559                         |   |
| 291      | 12    | 7      | 2-QRV-451   | 0      | BORON MAKEUP (CVCS) / SOUTH BORIC ACID BLENDER QP-21 TO REACTOR COOLANT LETDOWN VOLUME CONTROL TANK SHUTOFF VALVE   | 2-5129A              | AUXILIARY    | 609   | VOL CTRL TANK E HALLWAY         | P         | RI       | Seismic and Relay | OP           | MAN C         | Y           | 2-98271                         | 2-CCV-CD-86                               |
| 292      | 12    | 7      | 2-SV-101    | 0      | NITROGEN (REACTOR PLANT SERVICE) / NITROGEN SUPPLY HEADER TO ACCUMULATOR TANKS SAFETY VALVE   | 2-5143               | AUXILIARY    | 591   | STARTUP BLOWDOWN FLASHTANK RM   | S         | DRIP     | Seismic Only      | CL           | CL            | N           |                                 |   |
| 293      | 12    | 7      | 2-SV-102    | 0      | RESIDUAL HEAT REMOVAL / RESIDUAL HEAT REMOVAL TO REACTOR COOLANT LOOPS #2 & #3 COLD LEGS SAFETY VALVE   | 2-5143               | CONTAINME NT | 598   | ANNULUS, QUAD NO. 2             | P         | DRIP     | Seismic Only      | CL           | CL            | N           |                                 |   |
| 294      | 12    | 7      | 2-SV-103    | 0      | RESIDUAL HEAT REMOVAL / REACTOR COOLANT LOOP #2 HOT LEG TO RESIDUAL HEAT REMOVAL PUMPS SAFETY VALVE   | 2-5143               | CONTAINME NT | 598   | ANNULUS, QUAD NO. 2             | P         | DRIP     | Seismic Only      | CL           | CL            | N           |                                 |   |
| 295      | 2     | 7      | 2-SV-104E   | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17E OUTLET SAFETY VALVE  | 2-5143               | AUXILIARY    | 609   | E RHR HEAT XCHGR RM             | P         | DRIP     | Seismic Only      | CL           | CL            | N           |                                 |   |
| 296      | 1     | 7      | 2-SV-104W   | 0      | RESIDUAL HEAT REMOVAL / WEST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17W OUTLET SAFETY VALVE  | 2-5143               | AUXILIARY    | 609   | W RHR HEAT XCHGR RM             | P         | DRIP     | Seismic Only      | CL           | CL            | N           |                                 |   |
| 297      | 1     | 7      | 2-SV-120-AB | 0      | DIESEL STARTING AIR / 2-XTC-301 & 2-XTC-302 CONTROL AIR SAFETY VALVE  | 2-5151B              | AUXILIARY    | 587   | AB EMER DSL GEN RM              | S         | EDG      | Seismic Only      | CL           | CL            | N           |                                 |   |
| 298      | 2     | 7      | 2-SV-120-CD | 0      | DIESEL STARTING AIR / 2-XTC-303 AND 2-XTC-307 CONTROL AIR SAFETY VALVE  | 2-5151D              | AUXILIARY    | 587   | CD EMER DSL GEN RM              | S         | EDG      | Seismic Only      | CL           | CL            | N           |                                 |   |
| 299      | 12    | 7      | 2-SV-121    | 0      | COMPONENT COOLING WATER / 2-DRA-300 SAMPLE HEAT EXCHANGERS CCW RETURN HEADER SAFETY VALVE   | 2-5135               | AUXILIARY    | 591   | STARTUP BLOWDOWN FLASHTANK ROOM | S         | CCW      | Seismic Only      |              |               | N           |                                 |   |
| 300      | 12    | 7      | 2-SV-122-23 | 0      | CCW / REACTOR SUPPORT COOLERS CCW RETURN HEADER SAFETY VALVE  | 2-5135               | CONTAINME NT | 598   | ANNULUS, QUAD NO. 3             | S         | CCW      | Seismic Only      | CL           | CL            | N           |                                 |   |
| 301      | 1     | 7      | 2-SV-122-3  | 0      | CCW / CCW TO CONT VENTILATION FAN HV-CEQ-2 MOTOR AIR COOLER CCW OUTLET SAFETY VALVE   | 2-5135B              | CONTAINME NT | 625   | HV-CEQ-2 FAN RM                 | S         | CCW      | Seismic Only      | CL           | CL            | N           |                                 |   |
| 302      | 2     | 7      | 2-SV-122-4  | 0      | CCW / CONTAINMENT VENT FAN HV-CEQ-1 MOTOR AIR COOLER CCW OUTLET SAFETY VALVE  | 2-5135B              | CONTAINME NT | 625   | HV-CEQ-1 FAN RM                 | S         | CCW      | Seismic Only      | CL           | CL            | N           |                                 |   |



DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID      | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.     | Fl EL | Rm or Rm/CL                | Flow Path | Function | Eval Type    | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|-------------|--------|---|----------------------|-----------|-------|----------------------------|-----------|----------|--------------|--------------|---------------|-------------|---------------------------------|---|
| 303      | 1     | 7      | 2-SV-139-AB | 0      | DIESEL STARTING AIR / AB EMERGENCY DIESEL STARTING AIR TO TURBOCHARGER SAFETY VALVE                                     | 2-5151B              | AUXILIARY | 587   | AB EMER DSL GEN RM         | S         | EDG      | Seismic Only | CL           | CL            | N           |                                 |   |
| 304      | 2     | 7      | 2-SV-139-CD | 0      | DIESEL STARTING AIR / CD EMERGENCY DIESEL STARTING AIR TO TURBOCHARGER SAFETY VALVE                                     | 2-5151D              | AUXILIARY | 587   | CD EMER DSL GEN RM         | S         | EDG      | Seismic Only | CL           | CL            | N           |                                 |   |
| 305      | 12    | 7      | 2-SV-140-1  | 0      | AUXILIARY FEEDWATER / TURBINE DRIVEN AUX FEED PUMP GOVERNOR OIL COOLER COOLING WATER INLET SAFETY VALVE                 | 2-5106A              | TURBINE   | 591   | TB DRIVEN AUX FDWTR PMP    | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 306      | 12    | 7      | 2-SV-140-2  | 0      | AUXILIARY FEEDWATER / TURBINE DRIVEN AUX FEED PUMP OIL COOLER COOLING WATER INLET SAFETY VALVE                          | 2-5106A              | TURBINE   | 591   | TB DRIVEN AUX FDWTR PMP    | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 307      | 2     | 7      | 2-SV-14E    | 0      | ESSENTIAL SERVICE WATER / EAST CONTAINMENT SPRAY HEAT EXCHANGER HE-18E SHELL SIDE SAFETY VALVE                          | 2-5113               | AUXILIARY | 609   | E CONT SPRAY HEAT XCHGR RM | S         | ESW      | Seismic Only | CL           | CL            | N           |                                 |   |
| 308      | 1     | 7      | 2-SV-14W    | 0      | ESSENTIAL SERVICE WATER / WEST CONTAINMENT SPRAY HEAT EXCHANGER HE-18W SHELL SIDE SAFETY VALVE                          | 2-5113               | AUXILIARY | 609   | W CONT SPRAY HEAT XCHGR RM | S         | ESW      | Seismic Only | CL           | CL            | N           |                                 |   |
| 309      | 2     | 7      | 2-SV-15E    | 0      | ESSENTIAL SERVICE WATER / EAST COMPONENT COOLING WATER HEAT EXCHANGER HE-15E TUBE SIDE SAFETY VALVE                     | 2-5113               | AUXILIARY | 609   | 609 HALLWAY                | S         | ESW      | Seismic Only | CL           | CL            | N           |                                 |   |
| 310      | 1     | 7      | 2-SV-15W    | 0      | ESSENTIAL SERVICE WATER / WEST COMPONENT COOLING WATER HEAT EXCHANGER HE-15W TUBE SIDE SAFETY VALVE                     | 2-5113               | AUXILIARY | 609   | 609 HALLWAY                | S         | ESW      | Seismic Only | CL           | CL            | N           |                                 |   |
| 311      | 1     | 7      | 2-SV-18-AB  | 0      | ESSENTIAL SERVICE WATER / AB EMERGENCY DIESEL JACKET WATER COOLER QT-131-AB ESSENTIAL SERVICE WATER OUTLET SAFETY VALVE | 2-5113               | AUXILIARY | 587   | AB EMER DSL GEN RM         | S         | ESW      | Seismic Only | CL           | CL            | N           |                                 |   |
| 312      | 2     | 7      | 2-SV-18-CD  | 0      | ESSENTIAL SERVICE WATER / CD EMERGENCY DIESEL JACKET WATER COOLER QT-131-CD ESSENTIAL SERVICE WATER OUTLET SAFETY VALVE | 2-5113               | AUXILIARY | 587   | CD EMER DSL GEN RM         | S         | ESW      | Seismic Only | CL           | CL            | N           |                                 |   |
| 313      | 12    | 7      | 2-SV-166    | 0      | CCW / POST-ACCIDENT SAMPLE HEAT EXCHANGER CCW RETURN HEADER SAFETY VALVE  | 2-5135               | AUXILIARY | 587   | NUCLEAR SAMPLING RM        | S         | CCW      | Seismic Only | CL           | CL            | N           |                                 |   |
| 314      | 2     | 7      | 2-SV-169E   | 0      | AUXILIARY FEEDWATER / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP PP-3E SUCTION SAFETY VALVE                             | 2-5106A              | TURBINE   | 591   | E MTR DRIV AUX FEEDWTR PMP | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 315      | 1     | 7      | 2-SV-169W   | 0      | AUXILIARY FEEDWATER / WEST MOTOR DRIVEN AUXILIARY FEED PUMP PP-3W SUCTION SAFETY VALVE                                  | 2-5106A              | TURBINE   | 591   | W MTR DRIVEN AUX FDWTR PMP | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 316      | 2     | 7      | 2-SV-1A-1   | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 SAFETY VALVE 1A  | 2-5105D              | AUXILIARY | 633   | E MAIN STM STOP ENCL       | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 317      | 1     | 7      | 2-SV-1A-2   | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2 SAFETY VALVE 1A  | 2-5105D              | AUXILIARY | 633   | W MN STM STOP ENCL         | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 318      | 1     | 7      | 2-SV-1A-3   | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3 SAFETY VALVE 1A  | 2-5105D              | AUXILIARY | 633   | W MN STM STOP ENCL         | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 319      | 2     | 7      | 2-SV-1A-4   | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 SAFETY VALVE #1A   | 2-5105D 2-5104F      | AUXILIARY | 633   | E MAIN STM STOP ENCL       | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 320      | 2     | 7      | 2-SV-1B-1   | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 SAFETY VALVE 1B  | 2-5105D              | AUXILIARY | 633   | E MAIN STM STOP ENCL       | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 321      | 1     | 7      | 2-SV-1B-2   | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2 SAFETY VALVE 1B  | 2-5105D              | AUXILIARY | 633   | W MN STM STOP ENCL         | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 322      | 1     | 7      | 2-SV-1B-3   | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3 SAFETY VALVE 1B  | 2-5105D              | AUXILIARY | 633   | W MN STM STOP ENCL         | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 323      | 2     | 7      | 2-SV-1B-4   | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 SAFETY VALVE 1B  | 2-5105D              | AUXILIARY | 633   | E MAIN STM STOP ENCL       | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |



DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID       | Rev No | Sys/Eq. Desc   | Drawing No. RevZone | Bldg.       | Fl. El. | Rm or Rm/Cl                 | Flow Path | Function | Eval Type    | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|--------------|--------|--|---------------------|-------------|---------|-----------------------------|-----------|----------|--------------|--------------|---------------|-------------|---------------------------------|---|
| 324      | 1     | 7      | 2-SV-200-AB  | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL MANIFOLDS TO FUEL OIL DAY TANK SAFETY VALVE   | 2-5151A             | AUXILIARY   | 587     | AB EMER DSL GEN RM          | S         | EDG      | Seismic Only | CL           | CL            | N           |                                 |   |
| 325      | 2     | 7      | 2-SV-200-CD  | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL FUEL OIL MANIFOLDS TO FUEL OIL DAY TANK SAFETY VALVE   | 2-5151C             | AUXILIARY   | 587     | CD EMER DSL GEN RM          | S         | EDG      | Seismic Only | CL           | CL            | N           |                                 |   |
| 326      | 1     | 7      | 2-SV-201-AB1 | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FRONT BANK FUEL OIL MANIFOLD SAFETY VALVE  | 2-5151A             | AUXILIARY   | 587     | AB EMER DSL GEN RM          | S         | EDG      | Seismic Only | CL           | CL            | N           |                                 |   |
| 327      | 1     | 7      | 2-SV-201-AB2 | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL REAR BANK FUEL OIL MANIFOLD SAFETY VALVE   | 2-5151A             | AUXILIARY   | 587     | AB EMER DSL GEN RM          | S         | EDG      | Seismic Only | CL           | CL            | N           |                                 |   |
| 328      | 2     | 7      | 2-SV-201-CD1 | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL FRONT BANK FUEL OIL MANIFOLD SAFETY VALVE  | 2-5151C             | AUXILIARY   | 587     | CD EMER DSL GEN RM          | S         | EDG      | Seismic Only | CL           | CL            | N           |                                 |   |
| 329      | 2     | 7      | 2-SV-201-CD2 | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL REAR BANK FUEL OIL MANIFOLD SAFETY VALVE   | 2-5151C             | AUXILIARY   | 587     | CD EMER DSL GEN RM          | S         | EDG      | Seismic Only | CL           | CL            | N           |                                 |   |
| 330      | 2     | 7      | 2-SV-2A-1    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 SAFETY VALVE 2A   | 2-5105D             | AUXILIARY   | 633     | E MAIN STM STOP ENCL        | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 331      | 1     | 7      | 2-SV-2A-2    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2 SAFETY VALVE 2A   | 2-5105D             | AUXILIARY   | 633     | W MN STM STOP ENCL          | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 332      | 1     | 7      | 2-SV-2A-3    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3 SAFETY VALVE 2A   | 2-5105D             | AUXILIARY   | 633     | W MN STM STOP ENCL          | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 333      | 2     | 7      | 2-SV-2A-4    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 SAFETY VALVE 2A   | 2-5105D 2-5104F     | AUXILIARY   | 633     | E MAIN STM STOP ENCL        | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 334      | 2     | 7      | 2-SV-2B-1    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 SAFETY VALVE 2B   | 2-5105D             | AUXILIARY   | 633     | E MAIN STM STOP ENCL        | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 335      | 1     | 7      | 2-SV-2B-2    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2 SAFETY VALVE 2B   | 2-5105D             | AUXILIARY   | 633     | W MN STM STOP ENCL          | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 336      | 1     | 7      | 2-SV-2B-3    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3 SAFETY VALVE 2B   | 2-5105D             | AUXILIARY   | 633     | W MN STM STOP ENCL          | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 337      | 2     | 7      | 2-SV-2B-4    | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 SAFETY VALVE 2B   | 2-5105D             | AUXILIARY   | 633     | E MAIN STM STOP ENCL        | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 338      | 2     | 7      | 2-SV-3-1     | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 SAFETY VALVE #3   | 2-5105D             | AUXILIARY   | 633     | E MAIN STM STOP ENCL        | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 339      | 1     | 7      | 2-SV-3-2     | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2 SAFETY VALVE #3   | 2-5105D             | AUXILIARY   | 633     | W MN STM STOP ENCL          | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 340      | 1     | 7      | 2-SV-3-3     | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3 SAFETY VALVE #3   | 2-5105D             | AUXILIARY   | 633     | W MN STM STOP ENCL          | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 341      | 2     | 7      | 2-SV-3-4     | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 SAFETY VALVE #3   | 2-5105D             | AUXILIARY   | 633     | E MAIN STM STOP ENCL        | P         | D        | Seismic Only | CL           | CL            | N           |                                 |   |
| 342      | 12    | 7      | 2-SV-45A     | 0      | PRESSURIZER / PRESSURIZER OME-4 SAFETY VALVE 'A'   | 2-5128A             | CONTAINMENT | 650     | PRESSURIZER ENCL, INTERIOR  | P         | RIP      | Seismic Only | CL           | CL            | N           | 2-98564                         |   |
| 343      | 12    | 7      | 2-SV-45B     | 0      | PRESSURIZER / PRESSURIZER OME-4 SAFETY VALVE 'B'   | 2-5128A             | CONTAINMENT | 650     | PRESSURIZER ENCL, INTERIOR  | P         | RIP      | Seismic Only | CL           | CL            | N           | 2-98564                         |   |
| 344      | 12    | 7      | 2-SV-45C     | 0      | PRESSURIZER / PRESSURIZER OME-4 SAFETY VALVE 'C'   | 2-5128A             | CONTAINMENT | 650     | PRESSURIZER ENCL, INTERIOR  | P         | RIP      | Seismic Only | CL           | CL            | N           | 2-98564                         |   |
| 345      | 12    | 7      | 2-SV-50      | 0      | REACTOR COOLANT PUMP SEAL WATER IN/LEAKOFF / RC PUMPS SEAL #1 AND STARTUP SEAL SYSTEM BYPASS TO SEAL WATER RETURN FILTERS SAFETY VALVE | 2-5128A             | CONTAINMENT | 598     | ANNULUS, QUAD NO. 3         | P         | RIP      | Seismic Only | CL           | CL            | N           |                                 |   |
| 346      | 12    | 7      | 2-SV-51      | 0      | LETDOWN (CVCS) / REGENERATIVE HEAT EXCHANGER HE-12 LETDOWN OUTLET SAFETY VALVE   | 2-5129              | CONTAINMENT | 598     | ANNULUS, QUAD NO. 4         | P         | RIP      | Seismic Only | CL           | CL            | N           |                                 |   |
| 347      | 12    | 7      | 2-SV-54      | 0      | REACTOR COOLANT PUMP SEAL WATER IN/LEAKOFF / REACTOR COOLANT PUMP SEAL WATER HEAT EXCHANGER HE-11 SAFETY VALVE                         | 2-5129A             | AUXILIARY   | 609     | SEAL WTR HEAT XCHGR RM      | P         | RI       | Seismic Only | CL           | CL            | N           |                                 |   |
| 348      | 12    | 7      | 2-SV-56      | 0      | LETDOWN (CVCS) / CVCS CHARGING PUMPS SUCTION HEADER SAFETY VALVE   | 2-5129              | AUXILIARY   | 587     | RECIPROCATIN G CHARG PMP RM | P         | RIP      | Seismic Only | CL           | CL            | N           |                                 |   |
| 349      | 12    | 7      | 2-SV-60      | 0      | COMPONENT COOLING WATER / COMPONENT COOLING WATER SURGE TANK TK-37 SAFETY VALVE  | 2-5135A             | AUXILIARY   | 650     | 650 HALLWAY                 | S         | CCW      | Seismic Only | CL           | CL            | N           |                                 |   |



# DONALD C. COOK NUCLEAR PLANT UNIT # 2 SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID      | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.       | FIEL | Rm or Rwf/Cl                   | Flow Path | Function | Eval Type    | Normal State | Desired State | Power Req'd | Supporting Sys. No. / Rev. | Dwg. No. | Required Supporting Systems or Components |
|----------|-------|--------|-------------|--------|--|----------------------|-------------|------|--------------------------------|-----------|----------|--------------|--------------|---------------|-------------|----------------------------|----------|---|
| 350      | 1     | 7      | 2-SV-61-AB  | 0      | DIESEL JACKET WATER / AB EMERGENCY DIESEL AUXILIARY JACKET WATER HEATER QT-134-AB SAFETY VALVE                         | 2-5151B              | AUXILIARY   | 587  | AB EMER DSL GEN RM             | S         | EDG      | Seismic Only | CL           | CL            | N           |                            |          |   |
| 351      | 2     | 7      | 2-SV-61-CD  | 0      | DIESEL JACKET WATER / CD EMERGENCY DIESEL AUXILIARY JACKET WATER HEATER QT-134-CD SAFETY VALVE                         | 2-5151D              | AUXILIARY   | 587  | CD EMER DSL GEN RM             | S         | EDG      | Seismic Only | CL           | CL            | N           |                            |          |   |
| 352      | 12    | 7      | 2-SV-62-1   | 0      | CCW / REACTOR COOLANT PUMP PP-45-1 THERMAL BARRIER CCW OUTLET SAFETY VALVE   | 2-5135               | CONTAINMENT | 617  | LOWER CONT, QUAD 1 AZ 48       | S         | CCW      | Seismic Only | CL           | CL            | N           |                            |          |   |
| 353      | 12    | 7      | 2-SV-62-2   | 0      | CCW / REACTOR COOLANT PUMPS PP-45-2 THERMAL BARRIER CCW OUTLET SAFETY VLV  | 2-5135               | CONTAINMENT | 617  | LOWER CONT, QUAD NO. 2, AZ 132 | S         | CCW      | Seismic Only | CL           | CL            | N           |                            |          |   |
| 354      | 12    | 7      | 2-SV-62-3   | 0      | CCW / REACTOR COOLANT PUMP PP-45-3 THERMAL BARRIER CCW OUTLET SAFETY VALVE   | 2-5135               | CONTAINMENT | 617  | LOWER CONT., QUAD 3 AZ 231     | S         | CCW      | Seismic Only | CL           | CL            | N           |                            |          |   |
| 355      | 12    | 7      | 2-SV-62-4   | 0      | CCW / REACTOR COOLANT PUMP PP-45-4 THERMAL BARRIER CCW OUTLET SAFETY VALVE   | 2-5135               | CONTAINMENT | 617  | LOWER CONT., QUAD 4, AZ 302    | S         | CCW      | Seismic Only | CL           | CL            | N           |                            |          |   |
| 356      | 12    | 7      | 2-SV-63     | 0      | CCW / REACTOR COOLANT PUMP MOTORS BEARING OIL COOLERS CCW RETURN HEADER SAFETY VALVE                                   | 2-5135               | CONTAINMENT | 612  | W CONT LOWER VENT RM           | S         | CCW      | Seismic Only | CL           | CL            | N           |                            |          |   |
| 357      | 12    | 7      | 2-SV-64     | 0      | CCW / EXCESS LETDOWN HEAT EXCHANGER HE-13 CCW OUTLET SAFETY VALVE  | 2-5135               | CONTAINMENT | 612  | REGEN HEAT XCHGR RM            | S         | CCW      | Seismic Only | CL           | CL            | N           |                            |          |   |
| 358      | 12    | 7      | 2-SV-65     | 0      | CCW / LETDOWN HEAT EXCHANGER HE-14 CCW OUTLET SAFETY VALVE   | 2-5135               | AUXILIARY   | 633  | 633 HALLWAY                    | S         | CCW      | Seismic Only | CL           | CL            | N           |                            |          |   |
| 359      | 12    | 7      | 2-SV-66     | 0      | CCW / CCW TO SOUTH BORIC ACID EVAP DRUM 12-HE-10-DS SAFETY VALVE   | 2-5135               | AUXILIARY   | 587  | 587 HALLWAY                    | S         | CCW      | Seismic Only | CL           | CL            | N           |                            |          |   |
| 360      | 12    | 7      | 2-SV-67-1   | 0      | CCW / FAILED NUCLEAR FUEL DETECTOR SAMPLE HEAT EXCHANGER QC-501-13 CCW OUTLET SAFETY VALVE                             | 2-5135               | AUXILIARY   | 587  | REFUEL WTR PURIFICATION PMP RM | S         | CCW      | Seismic Only | CL           | CL            | N           |                            |          |   |
| 361      | 12    | 7      | 2-SV-67-2   | 0      | CCW / NUCLEAR SAMPLING SAMPLE RACK 'A' CCW RETURN HEADER SAFETY VLV  | 2-5135               | AUXILIARY   | 587  | NUCLEAR SAMPLING RM            | S         | SUPPORT  | Seismic Only | CL           | CL            | N           |                            |          |   |
| 362      | 12    | 7      | 2-SV-67-3   | 0      | CCW / NUCLEAR SAMPLING SAMPLE RACK 'B' CCW RETURN HEADER SAFETY VALVE  | 2-5135               | AUXILIARY   | 587  | NUCLEAR SAMPLING RM            | S         | CCW      | Seismic Only | CL           | CL            | N           |                            |          |   |
| 363      | 12    | 7      | 2-SV-68-15  | 0      | CCW / RCP SEAL WATER HEAT EXCHANGER HE-11 CCW OUTLET SAFETY VALVE  | 2-5135               | AUXILIARY   | 609  | 609 HALLWAY                    | S         | CCW      | Seismic Only | CL           | CL            | N           |                            |          |   |
| 364      | 12    | 7      | 2-SV-71     | 0      | CCW / SOUTH SPENT FUEL PIT HEAT EXCHANGER 12-HE-16S CCW OUTLET SAFETY VALVE  | 2-5135               | AUXILIARY   | 609  | SPENT FUEL PIT HEAT XCHGR RM   | S         | CCW      | Seismic Only | CL           | CL            | N           |                            |          |   |
| 365      | 2     | 7      | 2-SV-72E    | 0      | COMPONENT COOLING WATER / EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17E COMPONENT COOLING WATER OUTLET SAFETY VALVE | 2-5135A              | AUXILIARY   | 609  | 609 HALLWAY                    | S         | CCW      | Seismic Only | CL           | CL            | N           |                            |          |   |
| 366      | 1     | 7      | 2-SV-72W    | 0      | COMPONENT COOLING WATER / WEST RESIDUAL HEAT REMOVAL HEAT EXCHANGER COMPONENT COOLING WATER OUTLET SAFETY VALVE        | 2-5135A              | AUXILIARY   | 633  | 633 HALLWAY                    | S         | CCW      | Seismic Only | CL           | CL            | N           |                            |          |   |
| 367      | 1     | 7      | 2-SV-78-AB1 | 0      | DIESEL STARTING AIR / AB EMERGENCY DIESEL STARTING AIR RECEIVER QT-141-AB1 SAFETY VALVE                                | 2-5151B              | AUXILIARY   | 587  | AB EMER DSL GEN RM             | S         | EDG      | Seismic Only | CL           | CL            | N           |                            |          |   |
| 368      | 1     | 7      | 2-SV-78-AB2 | 0      | DIESEL STARTING AIR / AB EMERGENCY DIESEL STARTING AIR RECEIVER QT-141-AB2 SAFETY VALVE                                | 2-5151B              | AUXILIARY   | 587  | AB EMER DSL GEN RM             | S         | EDG      | Seismic Only | CL           | CL            | N           |                            |          |   |
| 369      | 2     | 7      | 2-SV-78-CD1 | 0      | DIESEL STARTING AIR / CD EMERGENCY DIESEL STARTING AIR RECEIVER QT-141-CD1 SAFETY VALVE                                | 2-5151D              | AUXILIARY   | 587  | CD EMER DSL GEN RM             | S         | EDG      | Seismic Only | CL           | CL            | N           |                            |          |   |

DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID       | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.       | FIEL | Rm or Rm/CL                 | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No./Rev. | Required Supporting Systems or Components |
|----------|-------|--------|--------------|--------|--|----------------------|-------------|------|-----------------------------|-----------|----------|-------------------|--------------|---------------|-------------|-------------------------------|---|
| 370      | 2     | 7      | 2-SV-78-CD2  | 0      | DIESEL STARTING AIR / CD EMERGENCY DIESEL STARTING AIR RECEIVER QT-141-CD2 SAFETY VALVE  | 2-5151D              | AUXILIARY   | 587  | CD EMER DSL GEN RM          | S         | EDG      | Seismic Only      | CL           | CL            | N           |                               |   |
| 371      | 1     | 7      | 2-SV-79-AB1  | 0      | DIESEL STARTING AIR / AB EMERGENCY DIESEL CONTROL AIR DRYER QT-143-AB1 SAFETY VALVE  | 2-5151B              | AUXILIARY   | 587  | AB EMER DSL GEN RM          | S         | EDG      | Seismic Only      | CL           | CL            | N           |                               |   |
| 372      | 1     | 7      | 2-SV-79-AB2  | 0      | DIESEL STARTING AIR / AB EMERGENCY DIESEL CONTROL AIR DRYER QT-143-AB2 SAFETY VALVE  | 2-5151B              | AUXILIARY   | 587  | AB EMER DSL GEN RM          | S         | EDG      | Seismic Only      | CL           | CL            | N           |                               |   |
| 373      | 2     | 7      | 2-SV-79-CD1  | 0      | DIESEL STARTING AIR / CD EMERGENCY DIESEL CONTROL AIR DRYER QT-143-CD1 SAFETY VALVE  | 2-5151D              | AUXILIARY   | 587  | CD EMER DSL GEN RM          | S         | EDG      | Seismic Only      | CL           | CL            | N           |                               |   |
| 374      | 2     | 7      | 2-SV-79-CD2  | 0      | DIESEL STARTING AIR / CD EMERGENCY DIESEL CONTROL AIR DRYER QT-143-CD2 SAFETY VALVE  | 2-5151D              | AUXILIARY   | 587  | CD EMER DSL GEN RM          | S         | EDG      | Seismic Only      | CL           | CL            | N           |                               |   |
| 375      | 2     | 7      | 2-SV-94N     | 0      | CONTROL ROOM AIR CONDITIONING CHILL WATER / CONTROL ROOM AIR CONDITIONING NORTH CHILL WATER EXPANSION TANK TK-76N SAFETY VALVE | 2-5149               | AUXILIARY   | 650  | CTRL RM AIR CONDIT RM       | S         | HVAC     | Seismic Only      | CL           | CL            | N           |                               |   |
| 376      | 1     | 7      | 2-SV-94S     | 0      | CONTROL ROOM AIR CONDITIONING CHILL WATER / CONTROL ROOM AIR CONDITIONING SOUTH CHILL WATER EXPANSION TANK TK-76S SAFETY VALVE | 2-5149               | AUXILIARY   | 650  | CTRL RM AIR CONDIT RM       | S         | HVAC     | Seismic Only      | CL           | CL            | N           |                               |   |
| 377      | 12    | 7      | 2-SV-96      | 0      | REFUELING WATER STORAGE TANK SUPPLY / SAFETY INJECTION PUMPS SUCTION HEADER SAFETY VALVE                                       | 2-5142               | AUXILIARY   | 587  | S SAFETY INJ PMP RM         | P         | RI       | Seismic Only      | CL           | CL            | N           |                               |   |
| 378      | 12    | 7      | 2-SV-97      | 0      | BORON INJECTION / BORON INJECTION TANK TK-11 OUTLET SAFETY VALVE   | 2-5142 12-5131A      | AUXILIARY   | 612  | BORON INJ TANK RM           | P         | RI       | Seismic Only      | CL           | CL            | N           |                               |   |
| 379      | 12    | 7      | 2-SV-98N     | 0      | SAFETY INJECTION / NORTH SAFETY INJECTION PUMP PP-28N DISCHARGE HEADER SAFETY VALVE  | 2-5142               | AUXILIARY   | 587  | N SAFETY INJ PMP RM         | P         | RI       | Seismic Only      | CL           | CL            | N           |                               |   |
| 380      | 12    | 7      | 2-SV-98S     | 0      | SAFETY INJECTION / SOUTH SAFETY INJECTION PUMP PP-28S DISCHARGE HEADER SAFETY VALVE  | 2-5142               | AUXILIARY   | 587  | S SAFETY INJ PMP RM         | P         | RI       | Seismic Only      | CL           | CL            | N           |                               |   |
| 381      | 2     | 7      | 2-VRV-315    | 0      | CONTROL ROOM AIR CONDITIONING CHILL WATER / CONTROL ROOM VENTILATION UNIT HV-ACRA-1 CHILL WATER INLET/BYPASS VALVE             | 2-5149               | AUXILIARY   | 650  | CTRL RM AIR CONDIT RM       | S         | HVAC     | Seismic and Relay | OP           | OP            | N           |                               |   |
| 382      | 1     | 7      | 2-VRV-325    | 0      | CONTROL ROOM AIR CONDITIONING CHILL WATER / CONTROL ROOM VENTILATION UNIT HV-ACRA-2 CHILL WATER INLET/BYPASS VALVE             | 2-5149               | AUXILIARY   | 650  | CTRL RM AIR CONDIT RM       | S         | HVAC     | Seismic and Relay | OP           | OP            | N           |                               |   |
| 383      | 2     | 7      | 2-WRV-722-CD | 0      | ESSENTIAL SERVICE WATER / CD EMERGENCY DIESEL NORTH COMBUSTION AIR AFTERCOOLER HE-47-CDN ESW INLET/BYPASS VALVE                | 2-5113               | AUXILIARY   | 587  | CD EMER DSL GEN RM          | S         | ESW      | Seismic Only      | I            | I             | N           |                               |   |
| 384      | 2     | 7      | 2-WRV-724-CD | 0      | ESSENTIAL SERVICE WATER / CD EMERGENCY DIESEL SOUTH COMBUSTION AIR AFTERCOOLER HE-47-CDS ESW INLET/BYPASS VALVE                | 2-5113               | AUXILIARY   | 587  | CD EMER DSL GEN RM          | S         | ESW      | Seismic Only      | I            | I             | N           |                               |   |
| 385      | 1     | 7      | 2-WRV-726-AB | 0      | ESSENTIAL SERVICE WATER / AB EMERGENCY DIESEL NORTH COMBUSTION AIR AFTERCOOLER HE-47-ABN ESW INLET/BYPASS VALVE                | 2-5113               | AUXILIARY   | 587  | AB EMER DSL GEN RM          | S         | ESW      | Seismic Only      | I            | I             | N           |                               |   |
| 386      | 1     | 7      | 2-WRV-728-AB | 0      | ESSENTIAL SERVICE WATER / AB EMERGENCY DIESEL SOUTH COMBUSTION AIR AFTERCOOLER HE-47-ABS ESW INLET/BYPASS VALVE                | 2-5113               | AUXILIARY   | 587  | AB EMER DSL GEN RM          | S         | ESW      | Seismic and Relay | I            | I             | N           |                               |   |
| 387      | 2     | 7      | 2-WRV-763    | 0      | ESSENTIAL SERVICE WATER / EAST ESSENTIAL SERVICE WATER PUMP PP-7E DISCHARGE STRAINER WEST BASKET BACKWASH OUTLET SHUTOFF VALVE | 2-5113               | SCREENHOUSE | 591  | E ESSENTIAL SERV WTR PMP RM | S         | ESW      | Seismic and Relay | CL           | CL            | A           | 2-98415, 2-12033              | 2-PS-D-3C                                 |



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DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

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| Line No. | Train | Eq. CL | Eq. ID    | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.        | FIEL | Rm or Rm/CL                   | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components  |
|----------|-------|--------|-----------|--------|--|----------------------|--------------|------|-------------------------------|-----------|----------|-------------------|--------------|---------------|-------------|---------------------------------|--|
| 388      | 1     | 7      | 2-WRV-764 | 0      | ESSENTIAL SERVICE WATER / WEST ESSENTIAL SERVICE WATER PUMP PP-7W DISCHARGE STRAINER WEST BASKET BACKWASH OUTLET SHUTOFF VALVE | 2-5113               | SCREENHOU SE | 591  | W ESSNTL SERV WTR PMP RM      | S         | ESW      | Seismic and Relay | CL           | CL            | A           | 2-98415, 2-12014                | 2-PS-A-1C                                  |
| 389      | 2     | 7      | 2-WRV-765 | 0      | ESSENTIAL SERVICE WATER / EAST ESSENTIAL SERVICE WATER PUMP PP-7E DISCHARGE STRAINER WEST BASKET BACKWASH INLET SHUTOFF VALVE  | 2-5113               | SCREENHOU SE | 591  | E ESSNTL SERV WTR PMP RM      | S         | ESW      | Seismic and Relay | CL           | OP            | N           | 2-98415                         | 2-PS-D-3C                                  |
| 390      | 1     | 7      | 2-WRV-769 | 0      | ESSENTIAL SERVICE WATER / WEST ESSENTIAL SERVICE WATER PUMP PP-7W DISCHARGE STRAINER WEST BASKET BACKWASH INLET SHUTOFF VALVE  | 2-5113               | SCREENHOU SE | 591  | W ESSNTL SERV WTR PMP RM      | S         | ESW      | Seismic and Relay | CL           | OP            | N           | 2-98415                         | 2-PS-A-1C                                  |
| 391      | 2     | 7      | 2-WRV-773 | 0      | ESSENTIAL SERVICE WATER / EAST ESSENTIAL SERVICE WATER PUMP PP-7E DISCHARGE STRAINER EAST BASKET BACKWASH OUTLET SHUTOFF VALVE | 2-5113               | SCREENHOU SE | 591  | E ESSNTL SERV WTR PMP RM      | S         | ESW      | Seismic and Relay | CL           | CL            | A           | 2-98415, 2-12033                | 2-PS-D-3C                                  |
| 392      | 1     | 7      | 2-WRV-774 | 0      | ESSENTIAL SERVICE WATER / WEST ESSENTIAL SERVICE WATER PUMP PP-7W DISCHARGE STRAINER EAST BASKET BACKWASH OUTLET SHUTOFF VALVE | 2-5113               | SCREENHOU SE | 591  | W ESSNTL SERV WTR PMP RM      | S         | ESW      | Seismic and Relay | CL           | CL            | A           | 2-98415, 2-12014                | 2-PS-A-1C                                  |
| 393      | 2     | 7      | 2-WRV-778 | 0      | ESSENTIAL SERVICE WATER / EAST ESSENTIAL SERVICE WATER PUMP PP-7E DISCHARGE STRAINER EAST BASKET BACKWASH INLET SHUTOFF VALVE  | 2-5113               | SCREENHOU SE | 591  | E ESSNTL SERV WTR PMP RM      | S         | ESW      | Seismic and Relay | CL           | CL            | N           | 2-98415                         | 2-PS-D-3C                                  |
| 394      | 1     | 7      | 2-WRV-779 | 0      | ESSENTIAL SERVICE WATER / WEST ESSENTIAL SERVICE WATER PUMP PP-7W DISCHARGE STRAINER EAST BASKET BACKWASH INLET SHUTOFF VALVE  | 2-5113               | SCREENHOU SE | 591  | W ESSNTL SERV WTR PMP RM      | S         | ESW      | Seismic and Relay | CL           | CL            | N           | 2-98415                         | 2-PS-A-1C                                  |
| 395      | 1     | 7      | 2-XRV-220 | 0      | DIESEL STARTING AIR / AB EMERGENCY DIESEL STARTING AIR JET ASSIST CONTROL VALVE  | 2-5151B              | AUXILIARY    | 587  | AB EMER DSL GEN RM            | S         | EDG      | Seismic and Relay | CL           | CL            | A           | 2-98034                         | 2-TDAB-2                                   |
| 396      | 1     | 7      | 2-XRV-221 | 0      | DIESEL STARTING AIR / AB EMERGENCY DIESEL FRONT BANK STARTING AIR SHUTOFF VALVE  | 2-5151B              | AUXILIARY    | 587  | AB EMER DSL GEN RM            | S         | EDG      | Seismic Only      | CL           | CL            | Y           | W-7000 51CH, 2-98034            | TRIM-LINE 4 WAY VALVE - 100# AIR, 2-TDAB-2 |
| 397      | 1     | 7      | 2-XRV-222 | 0      | DIESEL STARTING AIR / AB EMERGENCY DIESEL REAR BANK STARTING AIR SHUTOFF VALVE   | 2-5151B              | AUXILIARY    | 587  | AB EMER DSL GEN RM            | S         | EDG      | Seismic and Relay | CL           | CL            | A           | W-7000 51CH, 2-98034            | TRIM-LINE 4 WAY VALVE - 100# AIR, 2-TDAB-2 |
| 398      | 2     | 7      | 2-XRV-225 | 0      | DIESEL STARTING AIR / CD EMERGENCY DIESEL STARTING AIR JET ASSIST CONTROL VALVE  | 2-5151D              | AUXILIARY    | 587  | CD EMER DSL GEN RM            | S         | EDG      | Seismic and Relay | CL           | CL            | A           | 2-98035                         | 2-TDCD-2                                   |
| 399      | 2     | 7      | 2-XRV-228 | 0      | DIESEL STARTING AIR / CD EMERGENCY DIESEL FRONT BANK STARTING AIR SHUTOFF VALVE  | 2-5151D              | AUXILIARY    | 587  | CD EMER DSL GEN RM            | S         | EDG      | Seismic and Relay | CL           | CL            | A           | W-7000 51CH, 2-98035            | TRIM-LINE 4 WAY VALVE - 100# AIR, 2-TDCD-2 |
| 400      | 2     | 7      | 2-XRV-227 | 0      | DIESEL STARTING AIR / CD EMERGENCY DIESEL REAR BANK STARTING AIR SHUTOFF VALVE   | 2-5151D              | AUXILIARY    | 587  | CD EMER DSL GEN RM            | S         | EDG      | Seismic and Relay | CL           | CL            | A           | W-7000 51CH, 2-98035            | TRIM-LINE 4 WAY VALVE - 100# AIR, 2-TDCD-2 |
| 401      | 2     | 8      | 2-CCM-451 | 0      | COMPONENT COOLING WATER / RC PUMPS BEARING OIL COOLERS CCW RETURN HEADER TRAIN 'A' CONTAINMENT ISOLATION VALVE                 | 2-5135               | AUXILIARY    | 591  | STARTUP BLOWDOWN FLASHTANK RM | S         | CCW      | Seismic and Relay | OP           | OP            | Y           | 2-12031, 2-98408                | 2-AM-D-R8B                                 |
| 402      | 1     | 8      | 2-CCM-452 | 0      | COMPONENT COOLING WATER / RC PUMPS BEARING OIL COOLERS CCW RETURN HEADER TRAIN 'B' CONTAINMENT ISOLATION VALVE                 | 2-5135               | AUXILIARY    | 591  | STARTUP BLOWDOWN FLASHTANK RM | S         | CCW      | Seismic and Relay | OP           | OP            |             | 2-12011, 2-98408, 2-98654       | 2-AM-A-2B                                  |
| 403      | 2     | 8      | 2-CCM-453 | 0      | COMPONENT COOLING WATER / RCP THERMAL BARRIER COMPONENT COOLING WATER OUTLET TRAIN 'A' CONTAINMENT ISOLATION VALVE             | 2-5135               | AUXILIARY    | 591  | STARTUP BLOWDOWN FLASHTANK RM | S         | CCW      | Seismic and Relay | OP           | OP            | N           | 2-12031, 2-98408, 2-98394       | 2-AM-D-R7B                                 |

DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID    | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.     | Ft EL | Rm or Rwt/Cl                  | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|-----------|--------|--|----------------------|-----------|-------|-------------------------------|-----------|----------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 404      | 1     | 8      | 2-CCM-454 | 0      | COMPONENT COOLING WATER / RC PUMPS THERMAL BARRIER CCW RETURN HEADER TRAIN 'B' CONTAINMENT ISOLATION VALVE                           | 2-5135               | AUXILIARY | 591   | STARTUP BLOWDOWN FLASHTANK RM | S         | CCW      | Seismic and Relay | OP           | OP            | N           | 2-12011, 2-98408                | 2-AM-A-2C                                 |
| 405      | 2     | 8      | 2-CCM-458 | 0      | COMPONENT COOLING WATER / COMPONENT COOLING WATER TO REACTOR COOLANT PUMPS TRAIN 'A' CONTAINMENT ISOLATION VALVE                     | 2-5135               | AUXILIARY | 591   | STARTUP BLOWDOWN FLASHTANK RM | S         | CCW      | Seismic and Relay | OP           | OP            | Y           | 2-12031, 2-98408                | 2-AM-D-7C                                 |
| 406      | 1     | 8      | 2-CCM-459 | 0      | COMPONENT COOLING WATER / COMPONENT COOLING WATER TO REACTOR COOLANT PUMPS TRAIN 'B' CONTAINMENT ISOLATION VALVE                     | 2-5135               | AUXILIARY | 591   | STARTUP BLOWDOWN FLASHTANK RM | S         | CCW      | Seismic and Relay | OP           | OP            | Y           | 2-12011, 2-98408, 2-98394       | 2-AM-A-1C                                 |
| 407      | 2     | 8      | 2-CMO-410 | 0      | COMPONENT COOLING WATER / EAST COMPONENT COOLING WATER HEAT EXCHANGER HE-15E COMPONENT COOLING WATER OUTLET SHUTOFF VALVE            | 2-5135A              | AUXILIARY | 609   | 609 HALLWAY                   | S         | CCW      | Seismic and Relay | ASIS         | ASIS          | Y           | 2-12031, 2-98405                | 2-AM-D-8C                                 |
| 408      | 2     | 8      | 2-CMO-411 | 0      | COMPONENT COOLING WATER / COMPONENT COOLING WATER PUMPS SUCTION CROSSTIE TRAIN 'A' SHUTOFF VALVE                                     | 2-5135A              | AUXILIARY | 609   | 609 HALLWAY                   | S         | CCW      | Seismic and Relay | OP           | OP            | N           | 2-12031, 2-98405                | 2-AM-D-6B                                 |
| 409      | 2     | 8      | 2-CMO-412 | 0      | COMPONENT COOLING WATER / COMPONENT COOLING WATER PUMPS DISCHARGE CROSSTIE TRAIN 'A' SHUTOFF VALVE                                   | 2-5135A              | AUXILIARY | 609   | 609 HALLWAY                   | S         | CCW      | Seismic and Relay | OP           | OP            | N           | 2-12031, 2-98405                | 2-AM-D-7B                                 |
| 410      | 1     | 8      | 2-CMO-413 | 0      | COMPONENT COOLING WATER / COMPONENT COOLING WATER PUMPS SUCTION CROSSTIE TRAIN 'B' SHUTOFF VALVE                                     | 2-5135A              | AUXILIARY | 609   | 609 HALLWAY                   | S         | CCW      | Seismic and Relay | OP           | OP            | N           | 2-12011, 2-98405                | 2-AM-A-R4B                                |
| 411      | 1     | 8      | 2-CMO-414 | 0      | COMPONENT COOLING WATER / COMPONENT COOLING WATER PUMPS DISCHARGE CROSSTIE TRAIN 'B' SHUTOFF VALVE                                   | 2-5135A              | AUXILIARY | 609   | 609 HALLWAY                   | S         | CCW      | Seismic and Relay | OP           | OP            | N           | 2-12011, 2-98405                | 2-AM-A-R4C                                |
| 412      | 2     | 8      | 2-CMO-415 | 0      | COMPONENT COOLING WATER / COMPONENT COOLING WATER TO MISCELLANEOUS SERVICE TRAIN 'A' SHUTOFF VALVE                                   | 2-5135A              | AUXILIARY | 609   | 609 HALLWAY                   | S         | CCW      | Seismic and Relay | OP           | OP            | N           | 2-12031, 2-98405                | 2-AM-D-7C                                 |
| 413      | 1     | 8      | 2-CMO-416 | 0      | COMPONENT COOLING WATER / CCW TO MISCELLANEOUS SERVICE HEADER 'B' 18 In MOTOR OPERATED SHUTOFF VALVE                                 | 2-5135A              | AUXILIARY | 609   | 609 HALLWAY                   | S         | CCW      | Seismic and Relay | OP           | OP            | N           | 2-12011, 2-98405                | 2-AM-A-R3B                                |
| 414      | 2     | 8      | 2-CMO-419 | 0      | COMPONENT COOLING WATER / EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17E COMPONENT COOLING WATER OUTLET SHUTOFF VALVE              | 2-5135A              | AUXILIARY | 609   | 609 HALLWAY                   | S         | CCW      | Seismic and Relay | CL           | CL            | Y           | 2-12031, 2-98405                | 2-AM-D-8C                                 |
| 415      | 1     | 8      | 2-CMO-420 | 0      | COMPONENT COOLING WATER / WEST COMPONENT COOLING WATER HEAT EXCHANGER COMPONENT COOLING WATER OUTLET SHUTOFF VALVE                   | 2-5135A              | AUXILIARY | 609   | 609 HALLWAY                   | S         | CCW      | Seismic and Relay | ASIS         | ASIS          | Y           | 2-12011, 2-98405                | 2-AM-A-R3C                                |
| 416      | 1     | 8      | 2-CMO-429 | 0      | COMPONENT COOLING WATER / WEST RHR HEAT EXCHANGER HE-17W CCW OUTLET SHUTOFF VALVE  | 2-5135A              | AUXILIARY | 633   | 633 HALLWAY                   | S         | CCW      | Seismic and Relay | CL           | CL            | Y           | 2-12011, 2-98405                | 2-AM-A-R5B                                |
| 417      | 1     | 8      | 2-FMO-211 | 0      | AUXILIARY FEEDWATER / TURBINE DRIVEN AUXILIARY FEED PUMP PP-4 DISCHARGE TO STEAM GENERATOR OME-3-1 4 In MOTOR OPERATED CONTROL VALVE | 2-5106A              | AUXILIARY | 612   | E MAIN STM STOP ENCL          | P         | D        | Seismic and Relay | OP           | OP            | N           | 2-12065 2-98215 2-98511         | 2-AB-N-1A                                 |
| 418      | 1     | 8      | 2-FMO-212 | 0      | AUXILIARY FEEDWATER / WEST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP SUPPLY TO STEAM GENERATOR OME-3-1 4 In MOTOR OPERATED CONTROL VALVE | 2-5106A              | AUXILIARY | 612   | E MAIN STM STOP ENCL          | P         | D        | Seismic and Relay | OP           | OP            | N           | 2-12012 2-98219 2-98513         | VCC 2-AZV-A-6B                            |

DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. Cl. | Eq. ID        | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.     | Ft EL | Rm or Rm/Cl                   | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|---------|---------------|--------|--|----------------------|-----------|-------|-------------------------------|-----------|----------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 419      | 2     | 8       | 2-FMO-221     | 0      | AUXILIARY FEEDWATER / TURBINE DRIVEN AUXILIARY FEED PUMP PP-4 DISCHARGE TO STEAM GENERATOR OME-3-2 4 in MOTOR OPERATED CONTROL VALVE       | 2-5106A              | AUXILIARY | 591   | STARTUP BLOWDOWN FLASHTANK RM | P         | D        | Seismic and Relay | OP           | OP            | N           | 2-12065 2-98215 2-98511         | 2-AB-N-1B                                 |
| 420      | 2     | 8       | 2-FMO-222     | 0      | AUXILIARY FEEDWATER / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP PP-3E SUPPLY TO STEAM GENERATOR OME-3-2 4 in MOTOR OPERATED CONTROL VALVE | 2-5106A              | AUXILIARY | 591   | STARTUP BLOWDOWN FLASHTANK RM | P         | D        | Seismic and Relay | OP           | OP            | N           | 2-12033 2-98219 2-98510         | 2-EZC-D-R3B                               |
| 421      | 2     | 8       | 2-FMO-231     | 0      | AUXILIARY FEEDWATER / TURBINE DRIVEN AUXILIARY FEED PUMP SUPPLY TO STEAM GENERATOR OME-3-3 4 in MOTOR OPERATED CONTROL VALVE               | 2-5106A              | AUXILIARY | 591   | STARTUP BLOWDOWN FLASHTANK RM | P         | D        | Seismic and Relay | OP           | OP            | N           | 2-12065 2-98215                 | 2-AB-N-2A                                 |
| 422      | 2     | 8       | 2-FMO-232     | 0      | AUXILIARY FEEDWATER / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP PP-3E SUPPLY TO STEAM GENERATOR OME-3-3 4 in MOTOR OPERATED CONTROL VALVE | 2-5106A              | AUXILIARY | 591   | STARTUP BLOWDOWN FLASHTANK RM | P         | D        | Seismic and Relay | OP           | OP            | N           | 2-12033 2-98219 2-98548         | 2-EZC-D-R3C                               |
| 423      | 1     | 8       | 2-FMO-241     | 0      | AUXILIARY FEEDWATER / TURBINE DRIVEN AUXILIARY FEED PUMP SUPPLY TO STEAM GENERATOR OME-3-4 4 in MOTOR OPERATED CONTROL VALVE               | 2-5106A              | AUXILIARY | 612   | E MAIN STM STOP ENCL          | P         | D        | Seismic and Relay | OP           | OP            | N           | 2-12065 2-98215 2-98511         | 2-AB-N-2B                                 |
| 424      | 1     | 8       | 2-FMO-242     | 0      | AUXILIARY FEEDWATER / WEST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP SUPPLY TO STEAM GENERATOR OME-3-4 4 in MOTOR OPERATED CONTROL VALVE       | 2-5106A              | AUXILIARY | 612   | E MAIN STM STOP ENCL          | P         | D        | Seismic and Relay | OP           | OP            | N           | 2-12012 2-98219                 | 2-AZV-A-6C                                |
| 425      | 1     | 8       | 2-HV-DOP-AB1  | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FAN HV-DGX-2 TEMPERING AIR DAMPER                         | 2-5148C              | AUXILIARY | 587   | AB EMER DSL GEN RM            | S         | HVAC     | Seismic and Relay | AS IS        | AS IS         | Y           | 2-12010, 2-98016                | 2-ABD-B-R2D                               |
| 426      | 1     | 8       | 2-HV-DOP-AB2  | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN HV-DGS-2 TEMPERING AIR DAMPER                          | 2-5148C              | AUXILIARY | 587   | AB EMER DSL GEN RM            | S         | HVAC     | Seismic and Relay | AS IS        | AS IS         | Y           | 2-12010, 2-98016                | 2-ABD-A-R1C                               |
| 427      | 2     | 8       | 2-HV-DOP-CD1  | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FAN HV-DGX-1 TEMPERING AIR DAMPER                         | 2-5148C              | AUXILIARY | 587   | CD EMER DSL GEN RM            | S         | HVAC     | Seismic and Relay | AS IS        | AS IS         | Y           | 2-12030, 2-98017                | 2-ABD-D-R1B                               |
| 428      | 2     | 8       | 2-HV-DOP-CD2  | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN HV-DGS-1 TEMPERING AIR DAMPER                          | 2-5148C              | AUXILIARY | 587   | CD EMER DSL GEN RM            | S         | HVAC     | Seismic and Relay |              |               | Y           | 2-12030, 2-98017                | 2-ABD-C-R2D                               |
| 429      | 1     | 8       | 2-HV-DGS-DAB  | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN HV-DGS-1 OUTSIDE AIR SHUTOFF DAMPER                    | 2-5148C              | AUXILIARY | 596   | INNER PLANT GROUNDS           | S         | HVAC     | Seismic and Relay | AS IS        | AS IS         | Y           | 2-98016                         |   |
| 430      | 2     | 8       | 2-HV-DGS-DCD  | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN HV-DGS-2 OUTSIDE AIR SHUTOFF DAMPER                    | 2-5148C              | AUXILIARY | 596   | RCTR CABLE TUNN, QUAD 2       | S         | HVAC     | Seismic and Relay | AS IS        | AS IS         | Y           | 2-98017                         |   |
| 431      | 1     | 8       | 2-HV-SGR-MD-3 | 0      | AUXILIARY BUILDING VENTILATION / 4KV RM 600 VOLT SWITCHGEAR XFOMERS TR21A & TR21C AREA VENT SUPPLY FAN HV-SGRS-8 SUCTION DAMPER            | 2-5148C              | AUXILIARY | 609   | 4KV RM - 600V SWGR AREA       | S         | HVAC     | Seismic and Relay | AS IS        | AS IS         | Y           | 2-98741                         | 2-EZC-A-R4C                               |
| 432      | 2     | 8       | 2-HV-SGR-MD-4 | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600V SWITCHGEAR TRANSFORMERS AREA VENTILATION SUPPLY FAN HV-SGRS-7 SUCTION DAMPER                | 2-5148C              | AUXILIARY | 609   | 4KV RM - 600V SWGR AREA       | S         | HVAC     | Seismic and Relay | AS IS        | AS IS         | Y           | 2-98741                         | 2-EZC-D-R2B                               |
| 433      | 1     | 8       | 2-HV-SGR-MD-5 | 0      | AUXILIARY BUILDING VENTILATION / 600VAC MOTOR CONTROL CENTER MEZZANINE AREA VENTILATION SUPPLY FAN HV-SGRS-9 VENT DAMPER                   | 2-5148C              | AUXILIARY | 613   | 4KV ROOM - MEZZANINE AREA     | S         | HVAC     | Seismic and Relay | AS IS        | AS IS         | Y           | 2-98741                         | 2-EZC-B-3B                                |



**DONALD C. COOK NUCLEAR PLANT UNIT # 2**  
**SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**

| Line No. | Train | Eq. CL | Eq. ID    | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.       | F I EL | Rm or Rwf/Cl                 | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|-----------|--------|---|----------------------|-------------|--------|------------------------------|-----------|----------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 434      | 12    | 8      | 2-ICM-111 | 0      | RESIDUAL HEAT REMOVAL / RHR TO REACTOR COOLANT LOOPS #2 & #3 COLD LEGS CONTAINMENT ISOLATION VALVE                                      | 2-5143               | CONTAINMENT | 598    | ANNULUS, QUAD NO. 2          | P         | DRIP     | Seismic and Relay | CL           | CL            | Y           | 2-12032 2-98284                 | 2-EZC-C-R2D                               |
| 435      | 2     | 8      | 2-ICM-129 | 0      | RESIDUAL HEAT REMOVAL / REACTOR COOLANT LOOP #2 HOT LEG TO RESIDUAL HEAT REMOVAL PUMPS SUCTION CONTAINMENT ISOLATION VALVE              | 2-5143               | CONTAINMENT | 598    | ANNULUS, QUAD NO. 2          | P         | DRIP     | Seismic and Relay | CL           | CL            | Y           | 2-12032 2-98284                 | 2-EZC-C-3C                                |
| 436      | 2     | 8      | 2-ICM-250 | 0      | BORON INJECTION / BORON INJECTION TANK TRAIN 'A' OUTLET CONTAINMENT ISOLATION VALVE   | 2-5142               | AUXILIARY   | 612    | BORON INJ TANK OUTLET VLV RM | P         | RI       | Seismic and Relay | CL           | CL            | Y           | 2-12031 2-98282                 | 2-AM-D-2B                                 |
| 437      | 1     | 8      | 2-ICM-251 | 0      | BORON INJECTION / BORON INJECTION TANK TRAIN 'B' OUTLET CONTAINMENT ISOLATION VALVE   | 2-5142               | AUXILIARY   | 612    | BORON INJ TANK OUTLET VLV RM | P         | RI       | Seismic and Relay | CL           | CL            | N           | 2-12012 2-98282                 | VCC 2-AZV-A-2B                            |
| 438      | 2     | 8      | 2-ICM-260 | 0      | SAFETY INJECTION / NORTH SAFETY INJECTION PUMP PP-26N DISCHARGE CONTAINMENT ISOLATION VALVE   | 2-5142               | AUXILIARY   | 587    | N SAFETY INJ PMP RM          | P         | RI       | Seismic and Relay | OP           | OP            | N           | 2-12031 2-98288                 | 2-ABV-D-R1C                               |
| 439      | 1     | 8      | 2-ICM-265 | 0      | SAFETY INJECTION / SOUTH SAFETY INJECTION PUMP PP-26S DISCHARGE CONTAINMENT ISOLATION VALVE   | 2-5142               | AUXILIARY   | 587    | S SAFETY INJ PMP RM          | P         | RI       | Seismic and Relay | OP           | OP            | N           | 2-12011 2-98288                 | 2-ABV-A-R1C                               |
| 440      | 2     | 8      | 2-ICM-305 | 0      | RESIDUAL HEAT REMOVAL / RECIRCULATION SUMP TO EAST RHR/CTS PUMPS SUCTION CONTAINMENT ISOLATION VALVE                                    | 2-5143               | AUXILIARY   | 591    | VESTIBULE                    | P         | DRIP     | Seismic and Relay | CL           | CL            | N           | 2-12031 2-98284                 | MCC 2-ABV-D-1B                            |
| 441      | 1     | 8      | 2-ICM-306 | 0      | RESIDUAL HEAT REMOVAL / RECIRCULATION SUMP TO WEST RHR/CTS PUMPS SUCTION CONTAINMENT ISOLATION VALVE                                    | 2-5143               | AUXILIARY   | 591    | VESTIBULE                    | P         | DRIP     | Seismic and Relay | CL           | CL            | N           | 2-12011 2-98284                 | MCC 2-ABV-A-1B                            |
| 442      | 2     | 8      | 2-ICM-311 | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL TO RC LOOPS #1 AND #4 COLD LEGS CONTAINMENT ISOLATION VALVE                          | 2-5143               | AUXILIARY   | 609    | E RHR HEAT XCHGR RM          | P         | DRIP     | Seismic and Relay | OP           | OP            | N           | 2-98284 2-12031                 | VCC 2-ABV-D-4B                            |
| 443      | 1     | 8      | 2-ICM-321 | 0      | RESIDUAL HEAT REMOVAL / WEST RHR TO REACTOR COOLANT LOOPS #2 AND #3 COLD LEGS CONTAINMENT ISOLATION VALVE                               | 2-5143               | AUXILIARY   | 609    | W RHR HEAT XCHGR RM          | P         | DRIP     | Seismic and Relay | OP           | OP            | N           | 2-98284 2-12011                 | VCC 2-ABV-A-4C                            |
| 444      | 1     | 8      | 2-IMO-128 | 0      | RESIDUAL HEAT REMOVAL / REACTOR COOLANT LOOP #2 HOT LEG TO RESIDUAL HEAT REMOVAL PUMPS SUCTION SHUTOFF VALVE                            | 2-5143               | CONTAINMENT | 617    | LOWER CONT, QUAD NO. 2       | P         | DRIP     | Seismic and Relay | CL           | CL            | Y           | 2-12013 2-98284                 | MCC 2-EZC-B-4C                            |
| 445      | 2     | 8      | 2-IMO-210 | 0      | CONTAINMENT SPRAY / EAST CONTAINMENT SPRAY PUMP PP-9E 10 in MOTOR OPERATED DISCHARGE SHUTOFF VALVE                                      | 2-5144               | AUXILIARY   | 573    | E CONT SPRAY PMP RM          | P         | DRI      | Seismic and Relay | CL           | CL            | N           | 2-12031 2-98285                 | 2-ABV-D-2C                                |
| 446      | 2     | 8      | 2-IMO-211 | 0      | CONTAINMENT SPRAY / EAST CONTAINMENT SPRAY PUMP PP-9E 10 in MOTOR OPERATED DISCHARGE SHUTOFF VALVE                                      | 2-5144               | AUXILIARY   | 573    | E CONT SPRAY PMP RM          | P         | DRI      | Seismic and Relay | CL           | CL            | N           | 2-12031 2-98285                 | 2-ABV-D-2B                                |
| 447      | 2     | 8      | 2-IMO-212 | 0      | CONTAINMENT SPRAY / EAST CONTAINMENT SPRAY PUMP PP-9E 2 in MOTOR OPERATED DISCHARGE TO CONTAINMENT SPRAY ADDITIVE EDUCTOR SHUTOFF VALVE | 2-5144               | AUXILIARY   | 573    | E CONT SPRAY PMP RM          | P         | DRI      | Seismic and Relay | OP           | OP            | N           | 2-12031 2-98285                 | VCC 2-ABV-D-3C                            |
| 448      | 2     | 8      | 2-IMO-215 | 0      | CONTAINMENT SPRAY / REFUELING WATER STORAGE TANK TO EAST CONTAINMENT SPRAY PUMP PP-9E SUCTION 12 in MOTOR OPERATED SHUTOFF VALVE        | 2-5144               | AUXILIARY   | 573    | E CONT SPRAY PMP RM          | P         | DRI      | Seismic and Relay | OP           | OP            | N           | 2-12031 2-98285                 | 2-ABV-D-3B                                |
| 449      | 1     | 8      | 2-IMO-220 | 0      | CONTAINMENT SPRAY / WEST CONTAINMENT SPRAY PUMP PP-9W 10 in MOTOR OPERATED DISCHARGE SHUTOFF VALVE                                      | 2-5144               | AUXILIARY   | 573    | W CONT SPRAY PMP RM          | P         | DRI      | Seismic and Relay | CL           | CL            | N           | 2-12011 2-98285                 | 2-ABV-A-2C                                |
| 450      | 1     | 8      | 2-IMO-221 | 0      | CONTAINMENT SPRAY / WEST CONTAINMENT SPRAY PUMP PP-9W DISCHARGE SHUTOFF 10 in MOTOR OPERATED VALVE                                      | 2-5144               | AUXILIARY   | 573    | W CONT SPRAY PMP RM          | P         | DRI      | Seismic and Relay | CL           | CL            | N           | 2-12011 2-98285                 | 2-ABV-A-2B                                |



DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID    | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.       | FIEL | Rm or Rm/CL          | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|-----------|--------|---|----------------------|-------------|------|----------------------|-----------|----------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 451      | 1     | 8      | 2-IMO-222 | 0      | CONTAINMENT SPRAY / WEST CONTAINMENT SPRAY PUMP PP-8W DISCHARGE TO CONTAINMENT SPRAY ADDITIVE EDUCTOR 2 IN MOTOR OPERATED SHUTOFF VALVE | 2-5144               | AUXILIARY   | 573  | W CONT SPRAY PMP RM  | P         | DRI      | Seismic and Relay | OP           | OP            | N           | 2-12011 2-98285                 | 2-ABV-A-3C                                |
| 452      | 1     | 8      | 2-IMO-225 | 0      | CONTAINMENT SPRAY / REFUELING WATER STORAGE TANK TO WEST CONTAINMENT SPRAY PUMP PP-8W SUCTION 12 IN MOTOR OPERATED SHUTOFF VALVE        | 2-5144               | AUXILIARY   | 573  | W CONT SPRAY PMP RM  | P         | DRI      | Seismic and Relay | OP           | OP            | N           | 2-12011 2-98285                 | 2-ABV-A-3B                                |
| 453      | 2     | 8      | 2-IMO-255 | 0      | BORON INJECTION / BORON INJECTION TANK TRAIN 'A' INLET SHUTOFF VALVE  | 2-5142               | AUXILIARY   | 612  | BORON INJ TANK RM    | P         | RI       | Seismic and Relay | CL           | CL            | Y           | 2-12031 2-98282                 | MCC 2-AM-D-2C                             |
| 454      | 1     | 8      | 2-IMO-258 | 0      | BORON INJECTION / BORON INJECTION TANK TRAIN 'B' INLET SHUTOFF VALVE  | 2-5142               | AUXILIARY   | 612  | BORON INJ TANK RM    | P         | RI       | Seismic and Relay | CL           | CL            | Y           | 2-12012 2-98282                 | 2-AZV-A-2C                                |
| 455      | 12    | 8      | 2-IMO-261 | 0      | REFUELING WATER STORAGE TANK SUPPLY / REFUELING WATER STORAGE TANK TK-33 SUPPLY TO SAFETY INJECTION PUMPS SHUTOFF VALVE                 | 2-5142               | AUXILIARY   | 587  | S SAFETY INJ PMP RM  | P         | RI       | Seismic and Relay | OP           | OP            | N           | 2-98281 2-12012                 | VCC 2-AZV-A-3C                            |
| 456      | 2     | 8      | 2-IMO-262 | 0      | REFUELING WATER STORAGE TANK SUPPLY / SAFETY INJECTION PUMPS RECIRC TO REFUELING WATER STORAGE TANK TK-33 TRAIN 'A' SHUTOFF VALVE       | 2-5142               | AUXILIARY   | 587  | N SAFETY INJ PMP RM  | P         | RI       | Seismic and Relay | OP           | OP            | N           | 2-12031 2-98281                 | 2-ABV-D-R3C                               |
| 457      | 1     | 8      | 2-IMO-263 | 0      | REFUELING WATER STORAGE TANK SUPPLY / SAFETY INJECTION PUMPS RECIRC TO REFUELING WATER STORAGE TANK TK-33 TRAIN 'B' SHUTOFF VALVE       | 2-5142               | AUXILIARY   | 587  | N SAFETY INJ PMP RM  | P         | RI       | Seismic and Relay | OP           | OP            | N           | 2-12011 2-98281                 | 2-ABV-A-4B                                |
| 458      | 2     | 8      | 2-IMO-270 | 0      | SAFETY INJECTION / SAFETY INJECTION PUMPS DISCHARGE CROSSTIE TRAIN 'A' SHUTOFF VALVE  | 2-5142               | AUXILIARY   | 587  | N SAFETY INJ PMP RM  | P         | RI       | Seismic and Relay | OP           | OP            | N           | 2-12031 2-98288                 | 2-ABV-D-R5C                               |
| 459      | 1     | 8      | 2-IMO-275 | 0      | SAFETY INJECTION / SAFETY INJECTION PUMPS DISCHARGE CROSSTIE TRAIN 'B' SHUTOFF VALVE  | 2-5142               | AUXILIARY   | 587  | S SAFETY INJ PMP RM  | P         | RI       | Seismic and Relay | OP           | OP            | N           | 2-12011 2-98288                 | 2-ABV-A-6C                                |
| 460      | 2     | 8      | 2-IMO-310 | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL PUMP PP-35E SUCTION SHUTOFF VALVE  | 2-5143               | AUXILIARY   | 573  | EAST RHR PUMP RM     | P         | DRIP     | Seismic and Relay | OP           | OP            | N           | 2-12031 2-98284                 | 2-ABV-D-1C                                |
| 461      | 2     | 8      | 2-IMO-312 | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17E OUTLET MINIFLOW LINE SHUTOFF VALVE                             | 2-5143               | AUXILIARY   | 609  | E RHR HEAT XCHGR RM  | P         | DRIP     | Seismic and Relay | OP           | OP            | Y           | 2-120361 2-98284                | 2-AM-D-1B                                 |
| 462      | 2     | 8      | 2-IMO-314 | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL PUMP PP-35E DISCHARGE CROSSTIE SHUTOFF VALVE   | 2-5143               | AUXILIARY   | 609  | E RHR HEAT XCHGR RM  | P         | DRIP     | Seismic and Relay | CL           | CL            | N           | 2-12031 2-98287                 | 2-ABV-D-R4B                               |
| 463      | 2     | 8      | 2-IMO-315 | 0      | RESIDUAL HEAT REMOVAL / EAST RHR AND NORTH SAFETY INJECTION TO REACTOR COOLANT LOOPS #1 AND #4 HOT LEGS SHUTOFF VALVE                   | 2-5143               | CONTAINMENT | 612  | E CONT LOWER VENT RM | P         | DRIP     | Seismic and Relay | CL           | CL            | Y           | 2-12033 2-98287                 | 2-EZC-D-2C                                |
| 464      | 2     | 8      | 2-IMO-316 | 0      | RESIDUAL HEAT REMOVAL / EAST RHR AND NORTH SAFETY INJECTION TO REACTOR COOLANT LOOPS #1 AND #4 COLD LEGS SHUTOFF VALVE                  | 2-5143               | CONTAINMENT | 612  | E CONT LOWER VENT RM | P         | DRIP     | Seismic and Relay | OP           | OP            | N           | 2-12032 2-98287                 | 2-EZC-C-2A                                |
| 465      | 1     | 8      | 2-IMO-320 | 0      | RESIDUAL HEAT REMOVAL / WEST RESIDUAL HEAT REMOVAL PUMP PP-35W SUCTION SHUTOFF VALVE  | 2-5143               | AUXILIARY   | 573  | W RHR PMP RM         | P         | DRIP     | Seismic and Relay | OP           | OP            | N           | 2-12011 2-98284                 | 2-ABV-A-1C                                |
| 466      | 1     | 8      | 2-IMO-322 | 0      | RESIDUAL HEAT REMOVAL / WEST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17W OUTLET MINIFLOW LINE SHUTOFF VALVE                             | 2-5143               | AUXILIARY   | 609  | W RHR HEAT XCHGR RM  | P         | DRIP     | Seismic and Relay | OP           | OP            | Y           | 2-12011 2-98284                 | 2-AM-A-R1A                                |
| 467      | 1     | 8      | 2-IMO-324 | 0      | RESIDUAL HEAT REMOVAL / WEST RESIDUAL HEAT REMOVAL PUMP PP-35W DISCHARGE CROSSTIE SHUTOFF VALVE   | 2-5143               | AUXILIARY   | 609  | W RHR HEAT XCHGR RM  | P         | DRIP     | Seismic and Relay | CL           | CL            | N           | 2-12012 2-98287                 | 2-AZV-A-R2D                               |

**DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**

| Line No. | Train | Eq. CL | Eq. ID    | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.       | FIEL | Rm or Rwl/Cl                 | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|-----------|--------|--|----------------------|-------------|------|------------------------------|-----------|----------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 468      | 1     | 8      | 2-IMO-325 | 0      | RESIDUAL HEAT REMOVAL / WEST RHR AND SOUTH SAFETY INJECTION TO REACTOR COOLANT LOOPS #2 AND #3 HOT LEGS SHUTOFF VALVE            | 2-5143               | CONTAINMENT | 612  | W CONT LOWER VENT RM         | P         | DRIP     | Seismic and Relay | CL           | CL            | Y           | 2-12013 2-98287                 | 2-EZC-A-R2D                               |
| 469      | 1     | 8      | 2-IMO-326 | 0      | RESIDUAL HEAT REMOVAL / WEST RHR AND SOUTH SAFETY INJECTION TO REACTOR COOLANT LOOPS #2 AND #3 COLD LEGS SHUTOFF VALVE           | 2-5143               | CONTAINMENT | 612  | W CONT LOWER VENT RM         | P         | DRIP     | Seismic and Relay | OP           | OP            | N           | 2-12013 2-98287                 | MCC 2-EZC-B-R4C                           |
| 470      | 2     | 8      | 2-IMO-330 | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL TO UPPER CONTAINMENT SPRAY SHUTOFF VALVE                                      | 2-5143               | AUXILIARY   | 609  | E RHR HEAT XCHGR RM          | P         | DRIP     | Seismic and Relay | CL           | CL            | N           | 2-98285 2-12031                 | 2-AM-D-8B                                 |
| 471      | 1     | 8      | 2-IMO-331 | 0      | RESIDUAL HEAT REMOVAL / WEST RHR TO UPPER CONTAINMENT SPRAY SHUTOFF VALVE  | 2-5143               | AUXILIARY   | 609  | W RHR HEAT XCHGR RM          | P         | DRIP     | Seismic and Relay | CL           | CL            | N           | 2-12011 2-98285                 | 2-AM-A-R1B                                |
| 472      | 12    | 8      | 2-IMO-340 | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER TO CHARGING PUMPS SUCTION SHUTOFF VALVE                        | 2-5143               | AUXILIARY   | 609  | E RHR HEAT XCHGR RM          | P         | DRIP     | Seismic and Relay | CL           | CL            | N           | 2-12031 2-98273                 | 2-AM-D-1C                                 |
| 473      | 12    | 8      | 2-IMO-350 | 0      | RESIDUAL HEAT REMOVAL / WEST RHR HEAT EXCHANGER OUTLET TO SAFETY INJECTION PUMP SUCTION SHUTOFF VALVE                            | 2-5143               | AUXILIARY   | 609  | W RHR HEAT XCHGR RM          | P         | DRIP     | Seismic and Relay | CL           | CL            | N           | 2-12011 2-98281                 | 2-AM-A-R2D                                |
| 474      | 12    | 8      | 2-IMO-360 | 0      | SAFETY INJECTION / SAFETY INJECTION PUMPS TO CVCS CHARGING PUMPS SUCTION HEADER CROSSIE SHUTOFF VALVE                            | 2-5129               | AUXILIARY   | 587  | W CENTRIFUGAL CHARG PMP RM   | P         | RIP      | Seismic and Relay | CL           | CL            | Y           | 2-12031 2-98281                 | 2-ABV-D-R2B                               |
| 475      | 2     | 8      | 2-IMO-361 | 0      | SAFETY INJECTION / SAFETY INJECTION PUMPS SUCTION TO AND FROM CHARGING PUMPS SUCTION TRAIN 'A' SHUTOFF VALVE                     | 2-5142               | AUXILIARY   | 587  | N SAFETY INJ PMP RM          | P         | RI       | Seismic and Relay | CL           | CL            | N           | 2-12031 2-98281                 | VCC 2-ABV-D-R2C                           |
| 476      | 1     | 8      | 2-IMO-362 | 0      | SAFETY INJECTION / SAFETY INJECTION PUMPS SUCTION TO AND FROM CHARGING PUMPS SUCTION TRAIN 'B' SHUTOFF VALVE                     | 2-5142               | AUXILIARY   | 587  | N SAFETY INJ PMP RM          | P         | RI       | Seismic and Relay | CL           | CL            | N           | 2-98281 2-12011                 | 2-ABV-A-R3B                               |
| 477      | 12    | 8      | 2-IMO-390 | 0      | RESIDUAL HEAT REMOVAL / REFUELING WATER STORAGE TANK TK-33 TO RESIDUAL HEAT REMOVAL PUMPS SUCTION SHUTOFF VALVE                  | 2-5143               | AUXILIARY   | 591  | VESTIBULE                    | P         | DRIP     | Seismic and Relay | OP           | OP            | N           | 2-12031 2-98284                 | 2-ABV-D-4C                                |
| 478      | 2     | 8      | 2-IMO-51  | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP #1 SHUTOFF VALVE   | 2-5142               | CONTAINMENT | 598  | ANNULUS, QUAD NO. 1          | P         | RI       | Seismic and Relay | OP           | OP            | N           | 2-12032 2-98282                 | 2-EZC-C-5B                                |
| 479      | 1     | 8      | 2-IMO-52  | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP #2 SHUTOFF VALVE   | 2-5142               | CONTAINMENT | 598  | ANNULUS, QUAD NO. 2          | P         | RI       | Seismic and Relay | OP           | OP            | N           | 2-12013 2-98282                 | 2-EZC-B-1B                                |
| 480      | 1     | 8      | 2-IMO-53  | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP #3 SHUTOFF VALVE   | 2-5142               | CONTAINMENT | 598  | ANNULUS, QUAD NO. 3          | P         | RI       | Seismic and Relay | OP           | OP            | N           | 2-12033 2-98282                 | 2-EZC-D-1B                                |
| 481      | 2     | 8      | 2-IMO-54  | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP #4 SHUTOFF VALVE   | 2-5142               | CONTAINMENT | 598  | ANNULUS, QUAD NO. 4          | P         | RI       | Seismic and Relay | OP           | OP            | N           | 2-12031 2-98282                 | MCC 2-EZC-A-5B                            |
| 482      | 2     | 8      | 2-IMO-910 | 0      | REFUELING WATER STORAGE TANK SUPPLY / REFUELING WATER STORAGE TANK TO CVCS CHARGING PUMPS SUCTION HEADER TRAIN 'A' SHUTOFF VALVE | 2-5129               | AUXILIARY   | 587  | RECIPROCATING CHARG PMP RM   | P         | RIP      | Seismic and Relay | CL           | OP            | Y           | 2-12031 2-98273                 | MCC 2-AM-D-3B                             |
| 483      | 1     | 8      | 2-IMO-911 | 0      | REFUELING WATER STORAGE TANK SUPPLY / REFUELING WATER STORAGE TANK TO CVCS CHARGING PUMPS SUCTION HEADER TRAIN 'B' SHUTOFF VALVE | 2-5129               | AUXILIARY   | 587  | E CENTRIFUGAL CHARG PMP ROOM | P         | RIP      | Seismic and Relay | CL           | OP            | Y           | 2-12012 2-98273                 | 2-AZV-A-1B                                |
| 484      | 1     | 8      | 2-LSO-240 | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL UPPER VALVE GEAR LUBRICATION CONTROL SOLENOID #1   | 2-5151A              | AUXILIARY   | 587  | AB EMER DSL GEN RM           | S         | EDG      | Seismic and Relay | CL           | CL            | Y           | 2-98013                         | 2-ABD-A-R1BL, 2-ABD-B-R2CL                |
| 485      | 1     | 8      | 2-LSO-241 | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL UPPER VALVE GEAR LUBRICATION CONTROL SOLENOID #2   | 2-5151A              | AUXILIARY   | 587  | AB EMER DSL GEN RM           | S         | EDG      | Seismic and Relay | CL           | CL            | Y           | 2-98013                         | 2-ABD-B-R2CL, 2-ABD-A-R1BL                |



DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID    | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.       | FIEL | Rm or Rwl/CL               | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|-----------|--------|---|----------------------|-------------|------|----------------------------|-----------|----------|-------------------|--------------|---------------|-------------|----------------------------|---|
| 486      | 2     | 8      | 2-LSO-245 | 0      | DIESEL LUBE OIL / CD EMER DIESEL GEN UPPER VALVE GEAR LUBRICATION CONTROL SOLENOID #1               | 2-5151C              | AUXILIARY   | 587  | CD EMER DSL GEN RM         | S         | EDG      | Seismic and Relay | CL           | CL            | Y           | 2-98014                    | 2-ABD-C-R2AL, 2-ABD-D-R1CL                |
| 487      | 2     | 8      | 2-LSO-246 | 0      | DIESEL LUBE OIL / CD EMER DIESEL GEN UPPER VALVE GEAR LUBRICATION CONTROL SOLENOID #2               | 2-5151C              | AUXILIARY   | 587  | CD EMER DSL GEN RM         | S         | EDG      | Seismic and Relay | CL           | CL            | Y           | 2-98014                    | 2-ABD-D-R1CL, 2-ABD-C-R2AL                |
| 488      | 1     | 8      | 2-MCM-221 | 0      | MAIN STEAM / MAIN STEAM LEAD #2 TO AUXILIARY FEED PUMP TURBINE 4 IN MOTOR OPERATED SHUTOFF VALVE    | 2-5105D              | AUXILIARY   | 633  | W MN STM STOP ENCL         | P         | D        | Seismic and Relay | OP           | OP            | N           | 2-12011 2-98216            | 2-AM-A-1B                                 |
| 489      | 1     | 8      | 2-MCM-231 | 0      | MAIN STEAM / MAIN STEAM LEAD #3 TO AUXILIARY FEED PUMP TURBINE 4 IN MOTOR OPERATED SHUTOFF VALVE    | 2-5105D              | AUXILIARY   | 633  | W MN STM STOP ENCL         | P         | D        | Seismic and Relay | OP           | OP            | N           | 2-12031 2-98216 2-98511    | 2-AM-D-R6C                                |
| 490      | 2     | 8      | 2-MMO-210 | 0      | MAIN STEAM / STEAM STOP VALVE MRV-210 STEAM CYLINDER DUMP 4 IN MOTOR OPERATED VALVES SELECTOR VALVE | 2-5105D              | AUXILIARY   | 633  | E MAIN STM STOP ENCL       | P         | D        | Seismic and Relay | OP           | OP            | N           | 2-12041 2-98538            | BOP 2-EZC-CN-6C                           |
| 491      | 1     | 8      | 2-MMO-220 | 0      | MAIN STEAM / STEAM STOP VALVE MRV-220 STEAM CYLINDER DUMP 4 IN MOTOR OPERATED VALVES SELECTOR VALVE | 2-5105D              | AUXILIARY   | 633  | W MN STM STOP ENCL         | P         | D        | Seismic and Relay | OP           | OP            | N           | 2-12020 2-98538            | BOP 2-AM-B-3C                             |
| 492      | 1     | 8      | 2-MMO-230 | 0      | MAIN STEAM / STEAM STOP VALVE MRV-230 STEAM CYLINDER DUMP VALVES 4 IN MOTOR OPERATED SELECTOR VALVE | 2-5105D              | AUXILIARY   | 633  | W MN STM STOP ENCL         | P         | D        | Seismic and Relay | OP           | OP            | N           | 2-12041 2-98538            | 2-EZC-CS-R4C                              |
| 493      | 2     | 8      | 2-MMO-240 | 0      | MAIN STEAM / STEAM STOP VALVE MRV-240 STEAM CYLINDER DUMP VALVE 4 IN MOTOR OPERATED SELECTOR VALVE  | 2-5105D              | AUXILIARY   | 633  | E MAIN STM STOP ENCL       | P         | D        | Seismic and Relay | OP           | OP            | N           | 2-12021 2-98538            | BOP 2-EZC-BN-6B                           |
| 494      | 1     | 8      | 2-NMO-151 | 0      | PRESSURIZER / PRESSURIZER RELIEF VALVE NRV-151 UPSTREAM 3 IN MOTOR OPERATED SHUTOFF VALVE           | 2-5128A              | CONTAINMENT | 650  | PRESSURIZER ENCL, INTERIOR | P         | RIP      | Seismic and Relay | OP           | CL            | N           | 2-12013 2-98204            | MCC 2-EZC-A-3D                            |
| 495      | 1     | 8      | 2-NMO-152 | 0      | PRESSURIZER / PRESSURIZER RELIEF VALVE NRV-152 UPSTREAM 3 IN MOTOR OPERATED SHUTOFF VALVE           | 2-5128A              | CONTAINMENT | 650  | PRESSURIZER ENCL, INTERIOR | P         | RIP      | Seismic and Relay | OP           | CL            | N           | 2-12013 2-98204            | MCC 2-EZC-B-3D                            |
| 496      | 2     | 8      | 2-NMO-153 | 0      | PRESSURIZER / PRESSURIZER RELIEF VALVE NRV-153 UPSTREAM 3 IN MOTOR OPERATED SHUTOFF VALVE           | 2-5128A              | CONTAINMENT | 650  | PRESSURIZER ENCL, INTERIOR | P         | RIP      | Seismic and Relay | OP           | CL            | N           | 2-12033 2-98204            | 2-EZC-D-3D                                |
| 497      | 2     | 8      | 2-NSO-21  | 0      | REACTOR COOLANT SYSTEM VENTS / REACTOR VESSEL OME-1 POST-ACCIDENT VENT TRAIN 'A' SOLENOID VALVE     | 2-5128               | CONTAINMENT | 621  | RCTR VESSEL HEAD AREA      | P         | DRIP     | Seismic Only      | CL           | CL            | N           | 2-98307                    | 2-SSV-A1-16                               |
| 498      | 2     | 8      | 2-NSO-22  | 0      | REACTOR COOLANT SYSTEM VENTS / REACTOR VESSEL OME-1 POST-ACCIDENT VENT TRAIN 'A' SOLENOID VALVE     | 2-5128               | CONTAINMENT | 621  | RCTR VESSEL HEAD AREA      | P         | DRIP     | Seismic Only      | CL           | CL            | N           | 2-98307                    | 2-SSV-A1-16                               |
| 499      | 1     | 8      | 2-NSO-23  | 0      | REACTOR COOLANT SYSTEM VENTS / REACTOR VESSEL OME-1 POST-ACCIDENT VENT TRAIN 'B' SOLENOID VALVE     | 2-5128               | CONTAINMENT | 621  | RCTR VESSEL HEAD AREA      | P         | DRIP     | Seismic Only      | CL           | CL            | N           | 2-98307                    | 2-CCV-AB-73                               |
| 500      | 1     | 8      | 2-NSO-24  | 0      | REACTOR COOLANT SYSTEM VENTS / REACTOR VESSEL OME-1 POST-ACCIDENT VENT TRAIN 'B' SOLENOID VALVE     | 2-5128               | CONTAINMENT | 621  | RCTR VESSEL HEAD AREA      | P         | DRIP     | Seismic Only      | CL           | CL            | N           | 2-98307                    | 2-CCV-AB-73                               |
| 501      | 2     | 8      | 2-NSO-61  | 0      | REACTOR COOLANT SYSTEM VENTS / PRESSURIZER OME-4 POST-ACCIDENT VENT TRAIN 'A' SOLENOID VALVE        | 2-5128A              | CONTAINMENT | 650  | PRESSURIZER ENCL, INTERIOR | P         | RIP      | Seismic and Relay | CL           | CL            | Y           | 2-98307                    | 2-SSV-A1-17                               |
| 502      | 2     | 8      | 2-NSO-62  | 0      | REACTOR COOLANT SYSTEM VENTS / PRESSURIZER OME-4 POST-ACCIDENT VENT TRAIN 'A' SOLENOID VALVE        | 2-5128A              | CONTAINMENT | 650  | PRESSURIZER ENCL, INTERIOR | P         | RIP      | Seismic and Relay | CL           | CL            | Y           | 2-98307                    | 2-SSV-A1-17                               |
| 503      | 1     | 8      | 2-NSO-63  | 0      | REACTOR COOLANT SYSTEM VENTS / PRESSURIZER OME-4 POST-ACCIDENT VENT TRAIN 'B' SOLENOID VALVE        | 2-5128A              | CONTAINMENT | 650  | PRESSURIZER ENCL, INTERIOR | P         | RIP      | Seismic and Relay | CL           | CL            | Y           | 2-98307                    | 2-CCV-AB-74                               |
| 504      | 1     | 8      | 2-NSO-64  | 0      | REACTOR COOLANT SYSTEM VENTS / PRESSURIZER OME-4 POST-ACCIDENT VENT TRAIN 'B' SOLENOID VALVE        | 2-5128A              | CONTAINMENT | 650  | PRESSURIZER ENCL, INTERIOR | P         | RIP      | Seismic and Relay | CL           | CL            | Y           | 2-98307                    | 2-CCV-AB-74                               |

DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. Cl. | Eq. ID    | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.       | FIEL | Rm or Rwf/Cl                    | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|---------|-----------|--------|---|----------------------|-------------|------|---------------------------------|-----------|----------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 505      | 2     | 8       | 2-QCM-250 | 0      | REACTOR COOLANT PUMP SEAL WATER IN/LEAKOFF / REACTOR COOLANT PUMP SEAL WATER RETURN TRAIN 'A' CONTAINMENT ISOLATION 4 IN MOTOR OPERATED VALVE | 2-5129A              | CONTAINMENT | 598  | ANNULUS QUAD NO. 2              | P         | RI       | Seismic and Relay | OP           | OP            | N           | 2-12033 2-98274 2-98394         | MCC 2-EZC-D-R5B                           |
| 506      | 1     | 8       | 2-QCM-350 | 0      | REACTOR COOLANT PUMP SEAL WATER IN/LEAKOFF / REACTOR COOLANT PUMP SEAL WATER RETURN TRAIN 'B' CONTAINMENT ISOLATION 4 IN MOTOR OPERATED VALVE | 2-5129A              | AUXILIARY   | 591  | VESTIBULE                       | P         | RI       | Seismic and Relay | OP           | OP            | N           | 2-12011 2-98274 2-98394         | MCC 2-ABV-A-5B                            |
| 507      | 2     | 8       | 2-QMO-200 | 0      | CHARGING (CVCS) / CVCS CHARGING TO REGENERATIVE HEAT EXCHANGER TRAIN 'A' SHUTOFF VALVE  | 2-5129               | AUXILIARY   | 587  | RECIPROCATIN G CHARG PMP RM     | P         | RIP      | Seismic and Relay | OP           | CL            | Y           | 2-12031 2-98273                 | 2-AM-D-4B                                 |
| 508      | 1     | 8       | 2-QMO-201 | 0      | CHARGING (CVCS) / CVCS CHARGING TO REGENERATIVE HEAT EXCHANGER TRAIN 'B' SHUTOFF VALVE  | 2-5129               | AUXILIARY   | 587  | RECIPROCATIN G CHARG PMP RM     | P         | RIP      | Seismic and Relay | OP           | CL            | Y           | 2-12012 2-98273                 | 2-AZV-A-3B                                |
| 509      | 2     | 8       | 2-QMO-225 | 0      | CHARGING (CVCS) / WEST CENTRIFUGAL CHARGING PUMP MINIFLOW TO RCP SEAL WATER HEAT EXCHANGER HE-11 2 IN MOTOR OPERATED SHUTOFF VALVE            | 2-5129               | AUXILIARY   | 587  | WEST CENTRIFUGAL CHARG PMP ROOM | P         | RIP      | Seismic and Relay | OP           | OP            | N           | 2-12031 2-98266                 | 2-ABV-D-5C                                |
| 510      | 1     | 8       | 2-QMO-226 | 0      | CHARGING (CVCS) / WEST CENTRIFUGAL CHARGING PUMP MINIFLOW TO RCP SEAL WATER HEAT EXCHANGER HE-11 2 IN MOTOR OPERATED SHUTOFF VALVE            | 2-5129               | AUXILIARY   | 587  | W CENTRIFUGAL CHARG PMP RM      | P         | RIP      | Seismic and Relay | OP           | OP            | N           | 2-12011 2-98266                 | 2-ABV-A-5C                                |
| 511      | 12    | 8       | 2-QMO-420 | 0      | BORON MAKEUP (CVCS) / EMERGENCY BORATION TO CVCS CHARGING PUMPS SUCTION HEADER SHUTOFF VALVE  | 12-5131 12-5131A     | AUXILIARY   | 587  | BORIC ACID STOR TANK AREA       | P         | RI       | Seismic and Relay | CL           | CL            | Y           | 2-12011 2-98273                 | 2-ABV-A-R2C                               |
| 512      | 2     | 8       | 2-QMO-451 | 0      | LETDOWN (CVCS) / REACTOR COOLANT LETDOWN VOLUME CONTROL TANK TK-10 TO CVCS CHARGING PUMPS TRAIN 'A' SHUTOFF 4 IN MOTOR OPERATED VALVE         | 2-5129A 12-5131A     | AUXILIARY   | 609  | VOL CTRL TANK E HALLWAY         | P         | RI       | Seismic and Relay | OP           | OP            | N           | 2-12031 2-98271                 | 2-AM-D-3C                                 |
| 513      | 1     | 8       | 2-QMO-452 | 0      | LETDOWN (CVCS) / REACTOR COOLANT LETDOWN VOLUME CONTROL TANK TK-10 TO CVCS CHARGING PUMPS TRAIN 'B' SHUTOFF 4 IN MOTOR OPERATED VALVE         | 2-5129A 12-5131A     | AUXILIARY   | 609  | VOL CTRL TANK E HALLWAY         | P         | RI       | Seismic and Relay | OP           | OP            | N           | 2-12012 2-98271                 | 2-AZV-A-1C                                |
| 514      | 12    | 8       | 2-QT-506  | 0      | MAIN STEAM / TURBINE DRIVEN AUX FEED PUMP PP-4 TRIP AND THROTTLE VALVE  | 2-5105B              | TURBINE     | 591  | TB DRIVEN AUX FDWTR PMP         | P         | D        | Seismic and Relay | CL           | OP            | Y           | 2-98215 2-98511                 | 2-AB-N-3B                                 |
| 515      | 2     | 8       | 2-WMO-703 | 0      | ESSENTIAL SERVICE WATER / EAST ESSENTIAL SERVICE WATER PUMP PP-7E DISCHARGE SHUTOFF VALVE   | 2-5113               | SCREENHOUSE | 591  | E ESSNTL SERV WTR PMP RM        | S         | ESW      | Seismic and Relay | C/O          | AS IS         | Y           | 2-12033 2-98415                 | 2-PS-D-4C                                 |
| 516      | 1     | 8       | 2-WMO-704 | 0      | ESSENTIAL SERVICE WATER / WEST ESSENTIAL SERVICE WATER PUMP PP-7W DISCHARGE SHUTOFF VALVE   | 2-5113               | SCREENHOUSE | 591  | W ESSNTL SERV WTR PMP RM        | S         | ESW      | Seismic and Relay | C/O          | AS IS         | Y           | 2-12014 2-98415                 | 2-PS-A-2D                                 |
| 517      | 1     | 8       | 2-WMO-705 | 0      | ESSENTIAL SERVICE WATER / WEST ESSENTIAL SERVICE WATER SUPPLY HEADER CROSSTIE TO UNIT 1 SHUTOFF VALVE   | 2-5113 1-5113        | TURBINE     | 569  | ESSNTL SERV WTR PIPE TUNN       | S         | ESW      | Seismic and Relay | OP           | OP            | N           | 2-12012 2-98416                 | 2-ABD-A-1B                                |
| 518      | 2     | 8       | 2-WMO-706 | 0      | ESSENTIAL SERVICE WATER / EAST ESSENTIAL SERVICE WATER SUPPLY HEADER CROSSTIE TO UNIT 1 SHUTOFF VALVE   | 2-5113 1-5113        | TURBINE     | 569  | ESSNTL SERV WTR PIPE TUNN       | S         | ESW      | Seismic and Relay | OP           | OP            | N           | 2-98416 2-12030                 | 2-ABD-D-1B                                |
| 519      | 2     | 8       | 2-WMO-712 | 0      | ESSENTIAL SERVICE WATER / EAST CONTAINMENT SPRAY HEAT EXCHANGER HE-18E ESSENTIAL SERVICE WATER INLET SHUTOFF VALVE                            | 2-5113               | AUXILIARY   | 633  | 633 HALLWAY                     | S         | ESW      | Seismic and Relay | OP           | OP            | N           | 2-12031 2-98416                 | 2-AM-D-4C                                 |
| 520      | 2     | 8       | 2-WMO-714 | 0      | ESSENTIAL SERVICE WATER / EAST CONTAINMENT SPRAY HEAT EXCHANGER HE-18E ESSENTIAL SERVICE WATER OUTLET SHUTOFF VALVE                           | 2-5113               | AUXILIARY   | 609  | 609 HALLWAY                     | S         | ESW      | Seismic and Relay | CL           | CL            | Y           | 2-12031 2-98416                 | 2-AM-D-5B                                 |

# DONALD C. COOK NUCLEAR PLANT UNIT # 2 SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID       | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.           | FIEL | Rm or Rwf/CL                     | Flow Path | Function          | Eval Type               | Normal State | Desired State | Power Req'd | Supporting Sys. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|--------------|--------|--|----------------------|-----------------|------|----------------------------------|-----------|-------------------|-------------------------|--------------|---------------|-------------|----------------------------|---|
| 521      | 1     | 8      | 2-WMO-718    | 0      | ESSENTIAL SERVICE WATER / WEST<br>CONTAINMENT SPRAY HEAT<br>EXCHANGER ESSENTIAL SERVICE<br>WATER INLET SHUTOFF VALVE                           | 2-5113               | AUXILIARY       | 633  | 633 HALLWAY                      | S         | ESW               | Seismic<br>and<br>Relay | OP           | OP            | N           | 2-12012 2-98418            | 2-AZV-A-4C                                |
| 522      | 1     | 8      | 2-WMO-718    | 0      | ESSENTIAL SERVICE WATER / WEST<br>CONTAINMENT SPRAY HEAT<br>EXCHANGER ESSENTIAL SERVICE<br>WATER OUTLET SHUTOFF VALVE                          | 2-5113               | AUXILIARY       | 609  | 609 HALLWAY                      | S         | ESW               | Seismic<br>and<br>Relay | CL           | CL            | Y           | 2-12012 2-98418            | 2-AZV-A-4B                                |
| 523      | 1     | 8      | 2-WMO-722-AB | 0      | ESSENTIAL SERVICE WATER / WEST<br>ESSENTIAL SERVICE WATER SUPPLY<br>HEADER TO AB EMERGENCY DIESEL<br>HEAT EXCHANGERS SHUTOFF VALVE             | 2-5113               | AUXILIARY       | 587  | 2CD DSL RM N<br>PIPE TUNNEL      | S         | ESW               | Seismic<br>and<br>Relay | CL           | OP            | Y           | 2-12010 2-98418            | 2-ABD-A-1C                                |
| 524      | 2     | 8      | 2-WMO-724-AB | 0      | ESSENTIAL SERVICE WATER / EAST<br>ESSENTIAL SERVICE WATER SUPPLY<br>HEADER TO AB EMERGENCY DIESEL<br>HEAT EXCHANGERS SHUTOFF VALVE             | 2-5113               | AUXILIARY       | 587  | 2CD DSL RM N<br>PIPE TUNNEL      | S         | ESW               | Seismic<br>and<br>Relay | CL           | OP            | Y           | 2-12030 2-98418            | 2-ABD-D-1C                                |
| 525      | 2     | 8      | 2-WMO-728-CD | 0      | ESSENTIAL SERVICE WATER / WEST<br>ESSENTIAL SERVICE WATER SUPPLY<br>HEADER TO CD EMERGENCY DIESEL<br>HEAT EXCHANGERS SHUTOFF VALVE             | 2-5113               | AUXILIARY       | 587  | 2CD DSL RM N<br>PIPE TUNNEL      | S         | ESW               | Seismic<br>and<br>Relay | CL           | OP            | Y           | 2-12030 2-98418            | 2-ABD-D-R2D                               |
| 526      | 1     | 8      | 2-WMO-728-CD | 0      | ESSENTIAL SERVICE WATER / WEST<br>ESSENTIAL SERVICE WATER SUPPLY<br>HEADER TO CD EMERGENCY DIESEL<br>HEAT EXCHANGERS SHUTOFF VALVE             | 2-5113               | AUXILIARY       | 587  | 2CD DSL RM N<br>PIPE TUNNEL      | S         | ESW               | Seismic<br>and<br>Relay | CL           | OP            | Y           | 2-98418                    | 2-ABD-A-R2D                               |
| 527      | 2     | 8      | 2-WMO-732    | 0      | ESSENTIAL SERVICE WATER / EAST<br>COMPONENT COOLING WATER HEAT<br>EXCHANGER HE-15E ESSENTIAL<br>SERVICE WATER INLET SHUTOFF<br>VALVE           | 2-5113               | AUXILIARY       | 609  | 609 HALLWAY                      | S         | ESW               | Seismic<br>and<br>Relay | OP           | OP            | N           | 2-12031, 2-98418           | 2-AM-D-5C                                 |
| 528      | 2     | 8      | 2-WMO-734    | 0      | ESSENTIAL SERVICE WATER / EAST<br>COMPONENT COOLING WATER HEAT<br>EXCHANGER HE-15E ESSENTIAL<br>SERVICE WATER OUTLET SHUTOFF<br>VALVE          | 2-5113               | AUXILIARY       | 609  | 609 HALLWAY                      | S         | ESW               | Seismic<br>and<br>Relay | AS IS        | AS IS         | Y           | 2-12031, 2-98418, 2-98393  | 2-AM-D-6C                                 |
| 529      | 1     | 8      | 2-WMO-738    | 0      | ESSENTIAL SERVICE WATER / WEST<br>COMPONENT COOLING WATER HEAT<br>EXCHANGER ESSENTIAL SERVICE<br>WATER INLET SHUTOFF VALVE                     | 2-5113               | AUXILIARY       | 609  | 609 HALLWAY                      | S         | ESW               | Seismic<br>and<br>Relay | OP           | OP            | N           | 2-12012, 2-98418           | 2-AZV-A-5C                                |
| 530      | 1     | 8      | 2-WMO-738    | 0      | ESSENTIAL SERVICE WATER / WEST<br>COMPONENT COOLING WATER HEAT<br>EXCHANGER ESSENTIAL SERVICE<br>WATER OUTLET SHUTOFF VALVE                    | 2-5113               | AUXILIARY       | 609  | 609 HALLWAY                      | S         | ESW               | Seismic<br>and<br>Relay | AS IS        | AS IS         | Y           | 2-12012, 2-98418           | 2-AZV-A-5B                                |
| 531      | 1     | 8      | 2-WMO-744    | 0      | AUXILIARY FEED WATER SYSTEM / ESW<br>TO WEST MOTOR DRIV AUX FEED PUMP<br>PP-3W SHUTOFF 4 IN MOTOR<br>OPERATED VALVE                            | 2-5108A, 2-5113      | TURBINE         | 591  | W MTR DRIVEN<br>AUX FDWTR<br>PMP | P         | D                 | Seismic<br>and<br>Relay | CL           | CL            | N           | 2-12010 2-98220            | 2-AB-A-R1D                                |
| 532      | 12    | 8      | 2-WMO-753    | 0      | AUXILIARY FEED WATER / ESW TO<br>TURB DRIVEN AUX FEED PUMP PP-4<br>SHUTOFF 6 IN MOTOR OPERATED<br>VALVE  | 2-5108A, 2-5113      | TURBINE         | 591  | TB DRIVEN AUX<br>FDWTR PMP       | P         | D                 | Seismic<br>and<br>Relay | CL           | CL            | N           | 2-12010 2-98218 2-98511    | 2-AB-A-2D                                 |
| 533      | 2     | 8      | 2-WMO-754    | 0      | ESSENTIAL SERVICE WATER /<br>ESSENTIAL SERVICE WATER TO EAST<br>MOTOR DRIVEN AUXILIARY FEED PUMP<br>PP-3E 4 IN MOTOR OPERATED SHUTOFF<br>VALVE | 2-5108A, 2-5113      | TURBINE         | 591  | E MTR DRIV<br>AUX FEEDWTR<br>PMP | P         | D                 | Seismic<br>and<br>Relay | CL           | CL            | N           | 2-12031 2-98214 2-98650    | 2-ABV-D-R3B                               |
| 534      | 12    | 8      | 2-XSO-505    | 0      | CONTROL AIR / PRESSURIZER TRAIN 'B'<br>PRESSURE RELIEF VALVE NRV-152<br>CONTROL SOLENOID   | 2-5120D              | CONTAINME<br>NT | 650  | PRESSURIZER<br>ENCL, INTERIOR    | S         | CONTROL<br>AIR/N2 | Seismic<br>and<br>Relay | CL           | CL            |             | 2-98204                    | 2-CCV-AB-80                               |
| 535      | 2     | 8      | 2-XSO-507    | 0      | CONTROL AIR / PRESSURIZER TRAIN 'A'<br>PRESSURE RELIEF VALVE NRV-153<br>CONTROL SOLENOID   | 2-5120D              | CONTAINME<br>NT | 650  | PRESSURIZER<br>ENCL, INTERIOR    | S         | CONTROL<br>AIR/N2 | Seismic<br>and<br>Relay | CL           | CL            |             | 2-98204                    | 2-CCV-CD-79                               |
| 536      | 2     | 9      | 12-HV-ESW-1  | 0      | SCREENHOUSE VENTILATION / UNIT 2<br>EAST ESSENTIAL SERVICE WATER<br>PUMP ROOM SUPPLY VENTILATION FAN   | 12-5148B             | SCREENHOU<br>SE | 591  | E ESSNTL SERV<br>WTR PMP RM      | S         | HVAC              | Seismic<br>and<br>Relay |              |               | Y           | 2-98415, 2-98721           | 2-PS-D-2B                                 |
| 537      | 2     | 9      | 12-HV-ESW-2  | 0      | SCREENHOUSE VENTILATION / UNIT 2<br>EAST ESSENTIAL SERVICE WATER<br>PUMP ROOM SUPPLY VENTILATION FAN   | 12-5148B             | SCREENHOU<br>SE | 591  | E ESSNTL SERV<br>WTR PMP RM      | S         | HVAC              | Seismic<br>and<br>Relay |              |               | Y           | 2-98415, 2-98721           | 2-PS-D-3B                                 |

DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. Cl. | Eq. ID         | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.       | Ft EL | Rm or Rwf/Cl               | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|---------|----------------|--------|--|----------------------|-------------|-------|----------------------------|-----------|----------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 538      | 1     | 9       | 12-HV-ESW-3    | 0      | SCREENHOUSE VENTILATION / UNIT 2 WEST ESSENTIAL SERVICE WATER PUMP ROOM SUPPLY VENTILATION FAN           | 12-5148B             | SCREENHOUSE | 591   | WESSNTL SERV WTR PMP RM    | S         | HVAC     | Seismic and Relay |              |               | Y           | 2-98415, 2-98721                | 2-PS-A-1A                                 |
| 539      | 1     | 9       | 12-HV-ESW-4    | 0      | SCREENHOUSE VENTILATION / UNIT 2 WEST ESSENTIAL SERVICE WATER PUMP ROOM SUPPLY VENTILATION FAN           | 12-5148B             | SCREENHOUSE | 591   | WESSNTL SERV WTR PMP RM    | S         | HVAC     | Seismic and Relay |              |               | Y           | 2-98415, 2-98721                | 2-PS-A-2A                                 |
| 540      | 2     | 9       | 2-HV-AES-1     | 0      | AUXILIARY BUILDING VENTILATION / AUXILIARY BUILDING VENTILATION ENGINEERED SAFETY FEATURE EXHAUST UNIT 1 | 12-5148A             | AUXILIARY   | 633   | NORM BLOWDOWN FLASHTANK RM | S         | HVAC     | Seismic and Relay | NR           | R             | Y           | 2-12031, 2-98266                | 2-AB-D-R3D                                |
| 541      | 1     | 9       | 2-HV-AES-2     | 0      | AUXILIARY BUILDING VENTILATION / AUXILIARY BUILDING VENTILATION ENGINEERED SAFETY FEATURE EXHAUST UNIT   | 12-5148A             | AUXILIARY   | 633   | NORM BLOWDOWN FLASHTANK RM | S         | HVAC     | Seismic and Relay | NR           | R             | Y           | 2-12011, 2-98266                | 2-AM-A-3D                                 |
| 542      | 2     | 9       | 2-HV-AFP-BRE-1 | 0      | AUXILIARY BUILDING VENTILATION / TRAIN 'N' BATTERY ROOM EAST EXHAUST FAN                                 | 12-5148B             | AUXILIARY   | 633   | NORM BLOWDOWN FLASHTANK RM | S         | HVAC     | Seismic and Relay |              |               | Y           | 2-12031 2-98216                 | 2-AM-D-7A                                 |
| 543      | 1     | 9       | 2-HV-AFP-BRE-2 | 0      | AUXILIARY BUILDING VENTILATION / TRAIN 'N' BATTERY ROOM WEST EXHAUST FAN                                 | 12-5148B             | AUXILIARY   | 633   | NORM BLOWDOWN FLASHTANK RM | S         | HVAC     | Seismic and Relay |              |               | Y           | 2-12011 2-98216                 | 2-AM-A-3B                                 |
| 544      | 2     | 9       | 2-HV-AFP-M1    | 0      | TURBINE BUILDING VENTILATION / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP ROOM EXHAUST FAN               | 12-5148B             | TURBINE     | 591   | E MTR DRIV AUX FEEDWTR PMP | S         | HVAC     | Seismic and Relay |              |               | Y           | 2-12030 2-98214                 | 2-AB-D-R2D                                |
| 545      | 2     | 9       | 2-HV-AFP-M2    | 0      | TURBINE BUILDING VENTILATION / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP ROOM SUPPLY FAN                | 12-5148B             | TURBINE     | 591   | E MTR DRIV AUX FEEDWTR PMP | S         | HVAC     | Seismic and Relay |              |               | Y           | 2-98214                         | 2-ABV-D-R5A                               |
| 546      | 2     | 9       | 2-HV-AFP-T1    | 0      | TURBINE BUILDING VENTILATION / TURBINE DRIVEN AUXILIARY FEED PUMP ROOM NORTH EXHAUST FAN                 | 12-5148B             | TURBINE     | 591   | TB DRIVEN AUX FDWTR PMP    | S         | HVAC     | Seismic and Relay |              |               | Y           | 2-12031 2-98216                 | 2-ABV-D-R4A                               |
| 547      | 1     | 9       | 2-HV-AFP-T2    | 0      | TURBINE BUILDING VENTILATION / TURBINE DRIVEN AUXILIARY FEED PUMP ROOM SOUTH EXHAUST FAN                 | 12-5148B             | TURBINE     | 591   | TB DRIVEN AUX FDWTR PMP    | S         | HVAC     | Seismic and Relay |              |               | Y           | 2-12010 2-98216                 | 2-AB-A-R2C                                |
| 548      | 1     | 9       | 2-HV-AFP-X1    | 0      | TURBINE BUILDING VENTILATION / WEST MOTOR DRIVEN AUXILIARY FEED PUMP ROOM EAST EXHAUST FAN               | 12-5148B             | TURBINE     | 591   | W MTR DRIVEN AUX FDWTR PMP | S         | HVAC     | Seismic and Relay |              |               | Y           | 2-12010 2-98220                 | 2-AB-A-R1B                                |
| 549      | 1     | 9       | 2-HV-AFP-X2    | 0      | TURBINE BUILDING VENTILATION / WEST MOTOR DRIVEN AUXILIARY FEED PUMP ROOM WEST EXHAUST FAN               | 12-5148B             | TURBINE     | 591   | TB 591 ELEV BASMNT         | S         | HVAC     | Seismic and Relay |              |               | Y           | 2-12011 2-98220                 | 2-ABV-A-R6A                               |
| 550      | 1     | 9       | 2-HV-CEQ-1     | 0      | HYDROGEN SKIMMER / CONTAINMENT HYDROGEN SKIMMER VENTILATION FAN #1                                       | 2-5135B              | CONTAINMENT | 625   | HV-CEQ-1 FAN RM            | S         | CCW      | Seismic and Relay |              |               | Y           | 2-12013, 2-98266, 2-98394       | 2-EZC-B-R2D                               |
| 551      | 2     | 9       | 2-HV-CEQ-2     | 0      | HYDROGEN SKIMMER / CONTAINMENT HYDROGEN SKIMMER VENTILATION FAN #2                                       | 2-5135B              | CONTAINMENT | 625   | HV-CEQ-2 FAN RM            | S         | CCW      | Seismic and Relay |              |               | Y           | 2-12032, 2-98266, 2-98394       | 2-EZC-C-R3D                               |
| 552      | 2     | 9       | 2-HV-DGS-1     | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN                      | 2-5148C              | AUXILIARY   | 587   | CD EMER DSL GEN RM         | S         | HVAC     | Seismic and Relay |              |               | Y           | 2-12030 2-98017                 | 2-ABD-C-2E                                |
| 553      | 1     | 9       | 2-HV-DGS-2     | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN                      | 2-5148C              | AUXILIARY   | 587   | AB EMER DSL GEN RM         | S         | HVAC     | Seismic and Relay |              |               | Y           | 2-12010 2-98016                 | 2-ABD-A-R2B                               |
| 554      | 1     | 9       | 2-HV-DGS-3     | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM CABINET VENTILATION SUPPLY FAN              | 2-5148C              | AUXILIARY   | 587   | AB EMER DSL GEN RM         | S         | HVAC     | Seismic and Relay |              |               | Y           | 2-12010 2-98016                 | 2-ABD-A-R1D                               |
| 555      | 2     | 9       | 2-HV-DGS-4     | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM CABINET VENTILATION SUPPLY FAN              | 2-5148C              | AUXILIARY   | 587   | CD EMER DSL GEN RM         | S         | HVAC     | Seismic and Relay |              |               | Y           | 2-12030 2-98017                 | 2-ABD-C-R1D                               |
| 556      | 2     | 9       | 2-HV-DGX-1     | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FAN                     | 2-5148C              | AUXILIARY   | 587   | CD EMER DSL GEN RM         | S         | HVAC     | Seismic and Relay |              |               | Y           | 2-12030 2-98017                 | 2-ABD-D-R2B                               |
| 557      | 1     | 9       | 2-HV-DGX-2     | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FAN                     | 2-5148C              | AUXILIARY   | 587   | AB EMER DSL GEN RM         | S         | HVAC     | Seismic and Relay |              |               |             | 2-12010 2-98016                 | 2-ABD-B-2E                                |





DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. Cl. | Eq. ID           | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.     | Ft EL | Rm or Rm/Cl                | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|---------|------------------|--------|--|----------------------|-----------|-------|----------------------------|-----------|----------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 558      | 1     | 9       | 2-HV-SGRS-1A     | 0      | AUXILIARY BUILDING VENTILATION / CONTROL ROD DRIVE EQUIPMENT ROOM AND INVERTER AREA VENTILATION NORTH SUPPLY FAN       | 2-5148C              | AUXILIARY | 609   | 4KV RM - 600V SWGR AREA    | S         | HVAC     | Seismic and Relay |              |               | Y           | 2-98741                         | 2-EZC-A-R5B                               |
| 559      | 1     | 9       | 2-HV-SGRS-2      | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM AB 4KV SWITCHGEAR AREA VENTILATION SUPPLY FAN                                | 2-5148C              | AUXILIARY | 609   | 4KV RM - AB 4KV SWGR AREA  | S         | HVAC     | Seismic and Relay |              |               | Y           | 2-12013 2-98741                 | 2-EZC-A-R4B                               |
| 560      | 2     | 9       | 2-HV-SGRS-3      | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM CD 4KV SWITCHGEAR AREA VENTILATION SUPPLY FAN                                | 2-5148C              | AUXILIARY | 609   | 4KV RM - CD 4KV SWGR AREA  | S         | HVAC     | Seismic and Relay |              |               | Y           | 2-12033 2-98741                 | 2-EZC-D-R4E                               |
| 561      | 2     | 9       | 2-HV-SGRS-4A     | 0      | AUXILIARY BUILDING VENTILATION / CONTROL ROD DRIVE EQUIPMENT ROOM AND INVERTER AREA VENTILATION SOUTH SUPPLY FAN       | 2-5148C              | AUXILIARY | 609   | 4KV RM - 600V SWGR AREA    | S         | HVAC     | Seismic and Relay |              |               | Y           | 2-12032, 2-98741                | 2-EZC-C-2C                                |
| 562      | 2     | 9       | 2-HV-SGRS-7      | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600 VOLT SWITCHGEAR TRANSFORMERS TR21B AND TR21D AREA VENTILATION SUPPLY FAN | 2-5148C              | AUXILIARY | 609   | 4KV RM - 600V SWGR AREA    | S         | HVAC     | Seismic and Relay |              |               | Y           | 2-12033 2-98741                 | 2-EZC-D-R2B                               |
| 563      | 1     | 9       | 2-HV-SGRS-8      | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600 VOLT SWITCHGEAR TRANSFORMERS TR21A AND TR21C AREA VENTILATION SUPPLY FAN | 2-5148C              | AUXILIARY | 609   | 4KV RM - 600V SWGR AREA    | S         | HVAC     | Seismic and Relay |              |               | Y           | 2-98741                         | 2-EZC-A-R4C                               |
| 564      | 1     | 9       | 2-HV-SGRS-9      | 0      | AUXILIARY BUILDING VENTILATION / 600VAC MOTOR CONTROL CENTER MEZZANINE AREA VENTILATION SUPPLY FAN                     | 2-5148C              | AUXILIARY | 613   | 4KV ROOM - MEZZANINE AREA  | S         | HVAC     | Seismic and Relay |              |               | Y           | 2-98741, 2-12013                | 2-EZC-B-3B                                |
| 565      | 1     | 9       | 2-HV-SGRX-2      | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM AB 4KV SWITCHGEAR AREA VENTILATION EXHAUST FAN                               | 2-5148C              | AUXILIARY | 609   | 4KV RM - AB 4KV SWGR AREA  | S         | HVAC     | Seismic and Relay |              |               | Y           | 2-12013 2-98741                 | 2-EZC-B-R3C                               |
| 566      | 2     | 9       | 2-HV-SGRX-3      | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM CD 4KV SWITCHGEAR AREA VENTILATION EXHAUST FAN                               | 2-5148C              | AUXILIARY | 609   | 4KV RM - CD 4KV SWGR AREA  | S         | HVAC     | Seismic and Relay |              |               | Y           | 2-12013 2-98741                 | 2-EZC-B-R3D                               |
| 567      | 1     | 9       | 2-HV-SGRX-5      | 0      | AUXILIARY BUILDING VENTILATION / AB BATTERY EQUIPMENT AREA BATTERY ROOM VENTILATION EXHAUST FAN                        | 2-5148C              | AUXILIARY | 609   | AB BATTERY EQUIP AREA      | S         | HVAC     | Seismic and Relay |              |               | Y           | 2-12013, 2-98741                | 2-EZC-B-R4B                               |
| 568      | 2     | 9       | 2-HV-SGRX-6      | 0      | AUXILIARY BUILDING VENTILATION / CD BATTERY EQUIPMENT AREA BATTERY ROOM VENTILATION EXHAUST FAN                        | 2-5148C              | AUXILIARY | 626   | CD BATTERY EQUIP AREA      | S         | HVAC     | Seismic and Relay |              |               | Y           | 2-12033 2-98741                 | 2-EZC-D-R2A                               |
| 569      | 2     | 10      | 2-HV-ACRA-1      | 0      | CONTROL ROOM VENTILATION / CONTROL ROOM VENTILATION NORTH AIR CONDITIONING UNIT  | 2-5149               | AUXILIARY | 650   | CTRL RM AIR CONDIT RM      | S         | HVAC     | Seismic and Relay |              |               | Y           | 2-12030 2-98742                 | 2-AB-D-2C                                 |
| 570      | 1     | 10      | 2-HV-ACRA-2      | 0      | CONTROL ROOM VENTILATION / CONTROL ROOM VENTILATION SOUTH AIR CONDITIONING UNIT  | 2-5149               | AUXILIARY | 650   | CTRL RM AIR CONDIT RM      | S         | HVAC     | Seismic and Relay |              |               | Y           | 2-12011 2-98742                 | 2-AM-A-5A                                 |
| 571      | 2     | 10      | 2-HV-AES-1 (FLT) | 0      | AUXILIARY BUILDING VENTILATION / AUXILIARY BUILDING VENTILATION ENGINEERED SAFETY FEATURE EXHAUST AIR FILTER           | 12-5148A             | AUXILIARY | 633   | NORM BLOWDOWN FLASHTANK RM | S         | HVAC     | Seismic Only      |              |               |             |                                 |   |
| 572      | 1     | 10      | 2-HV-AES-2 (FLT) | 0      | AUXILIARY BUILDING VENTILATION / AUXILIARY BUILDING VENTILATION ENGINEERED SAFETY FEATURE EXHAUST AIR FILTER           | 12-5148A             | AUXILIARY | 633   | NORM BLOWDOWN FLASHTANK RM | S         | HVAC     | Seismic Only      |              |               |             |                                 |   |
| 573      | 2     | 11      | 2-HE-63N         | 0      | CONTROL ROOM AIR CONDITIONING CHILL WATER / CONTROL ROOM AIR CONDITIONING NORTH LIQUID CHILLER HV-ACR-1 EVAPORATOR     | 2-5149               | AUXILIARY | 650   | CTRL RM AIR CONDIT RM      | S         | HVAC     | Seismic Only      |              |               |             |                                 | see 2-HV-ACR-1                            |
| 574      | 1     | 11      | 2-HE-63S         | 0      | CONTROL ROOM AIR CONDITIONING CHILL WATER / CONTROL ROOM AIR CONDITIONING SOUTH LIQUID CHILLER HV-ACR-2 EVAPORATOR     | 2-5149               | AUXILIARY | 650   | CTRL RM AIR CONDIT RM      | S         | HVAC     | Seismic Only      |              |               |             |                                 | see 2-HV-ACR-2                            |
| 575      | 2     | 11      | 2-HE-64N         | 0      | CONTROL ROOM AIR CONDITIONING CHILL WATER / CONTROL ROOM AIR CONDITIONING NORTH LIQUID CHILLER HV-ACR-1 CONDENSER      | 2-5149               | AUXILIARY | 650   | CTRL RM AIR CONDIT RM      | S         | HVAC     | Seismic Only      |              |               |             |                                 | see 2-HV-ACR-1                            |

DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID *     | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.     | FIEL | Rm or Rwl/CI                   | Flow Path | Function       | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|--------------|--------|--|----------------------|-----------|------|--------------------------------|-----------|----------------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 576      | 1     | 11     | 2-HE-84S     | 0      | CONTROL ROOM AIR CONDITIONING CHILL WATER / CONTROL ROOM AIR CONDITIONING SOUTH LIQUID CHILLER HV-ACR-2 CONDENSER  | 2-5149               | AUXILIARY | 650  | CTRL RM AIR CONDIT RM          | S         | HVAC           | Seismic Only      |              |               |             |                                 | see 2-HV-ACR-2                            |
| 577      | 2     | 11     | 2-HV-ACR-1   | 0      | CONTROL ROOM AIR CONDITIONING CHILL WATER / CONTROL ROOM AIR CONDITIONING NORTH LIQUID CHILLER                     | 2-5149 2-5113        | AUXILIARY | 650  | CTRL RM AIR CONDIT RM          | S         | HVAC           | Seismic and Relay |              |               | Y           | 2-98742                         | 2-AB-D-R3AR                               |
| 578      | 1     | 11     | 2-HV-ACR-2   | 0      | CONTROL ROOM AIR CONDITIONING CHILL WATER / CONTROL ROOM AIR CONDITIONING SOUTH LIQUID CHILLER                     | 2-5149 2-5113        | AUXILIARY | 650  | CTRL RM AIR CONDIT RM          | S         | HVAC           | Seismic and Relay |              |               | Y           | 2-12011 2-98742                 | 2-AM-A-1AR                                |
| 579      | 1     | 12     | 2-QT-502-AB  | 0      | DIESEL COMBUSTION AIR / AB EMERGENCY DIESEL TURBOCHARGER   | 2-5151B              | AUXILIARY | 587  | AB EMER DSL GEN RM             | S         | EDG            | Seismic Only      |              |               |             |                                 |   |
| 580      | 2     | 12     | 2-QT-502-CD  | 0      | DIESEL COMBUSTION AIR / CD EMERGENCY DIESEL TURBOCHARGER   | 2-5151D              | AUXILIARY | 587  | CD EMER DSL GEN RM             | S         | EDG            | Seismic Only      |              |               |             |                                 |   |
| 581      | 1     | 14     | 2-89-ABBC    | 0      | 250 VDC DISTRIBUTION / PLANT BATTERY BATT-AB DISCONNECT SWITCH   | 2-12003              | AUXILIARY | 609  | INVERTER AREA                  | E         |                | Seismic Only      |              |               |             |                                 |   |
| 582      | 2     | 14     | 2-89-CDBC    | 0      | 250 VDC DISTRIBUTION / PLANT BATTERY BATT-CD DISCONNECT SWITCH   | 2-12003              | AUXILIARY | 626  | CD BATTERY EQUIP AREA          | E         |                | Seismic Only      |              |               |             |                                 |   |
| 583      | 2     | 14     | 2-AFW        | 0      | 120/208V MISC SAFETY RELATED POWER DISTRIBUTION / POWER PANEL  | 2-12035, 2-12030     | AUXILIARY | 587  | CD EMER DSL GEN RM             | E         | 120 VAC SYSTEM | Seismic Only      |              |               | Y           | 2-98215, 2-12035, 2-12030       |   |
| 584      | 2     | 14     | 2-AFWX       | 0      | 120/208V MISC SAFETY RELATED POWER DISTRIBUTION / 120/208 VAC AUXILIARY FEEDWATER DISTRIBUTION PANEL               | 2-12035              | AUXILIARY | 587  | CD EMER DSL GEN RM             | E         | 120 VAC SYSTEM | Seismic Only      |              |               |             | 2-12035                         |   |
| 585      | 1     | 14     | 2-BATT-AB-SH | 0      | 250VDC DISTRIBUTION / PLANT BATTERY BATT-AB AMMETER SHUNT  | 2-12003              | AUXILIARY | 609  | GRID INVERTER AREA             | E         | 250 VDC SYSTEM | Seismic Only      |              |               |             | 2-98055, 2-12003                |   |
| 586      | 2     | 14     | 2-BATT-CD-SH | 0      | 250VDC DISTRIBUTION / PLANT BATTERY BATT-CD AMMETER SHUNT CABINET  | 2-12003              | AUXILIARY | 626  | CD BATTERY EQUIP AREA          | E         | 250 VDC SYSTEM | Seismic Only      |              |               |             | 2-98057, 2-12003                |   |
| 587      | 12    | 14     | 2-BATT-N-SH  | 0      | 250VDC CONTROL AND INSTRUMENTATION / METERING SHUNT  | 2-12003              | AUXILIARY | 633  | NORMAL BLOWDOWN FLASHTANK ROOM | E         | 250 VDC SYSTEM | Seismic Only      |              |               |             | 2-98210, 2-12003                |   |
| 588      | 1     | 14     | 2-BC-AB-SH   | 0      | 250VDC DISTRIBUTION / PLANT BATTERY CHARGER AMMETER BC-AB SHUNT CABINET  | 2-12003              | AUXILIARY | 609  | GRID INVERTER AREA             | E         | 250 VDC SYSTEM | Seismic Only      |              |               |             | 2-98055, 2-12003                |   |
| 589      | 2     | 14     | 2-BC-CD-SH   | 0      | 250VDC DISTRIBUTION / PLANT BATTERY CHARGER BC-CD SHUNT CABINET  | 2-12003              | AUXILIARY | 626  | CD BATTERY EQUIP AREA          | E         | 250 VDC SYSTEM | Seismic Only      |              |               |             | 2-98057, 2-12003                |   |
| 590      | 1     | 14     | 2-BCTC-AB    | 0      | 250VDC DISTRIBUTION / PLANT BATTERY CHARGERS BC-AB1 AND BC-AB2 TRANSFER SWITCH CABINET                             | 2-12003              | AUXILIARY | 613  | 4KV ROOM - MEZZANINE AREA      | E         | 250 VDC SYSTEM | Seismic Only      |              |               |             | 2-98055, 2-12003                |   |
| 591      | 2     | 14     | 2-BCTC-CD    | 0      | 250VDC DISTRIBUTION / PLANT BATTERY CHARGERS BC-CD1 AND BC-CD2 TRANSFER CABINET                                    | 2-12003              | AUXILIARY | 626  | CD BATTERY EQUIP AREA          | E         | 250 VDC SYSTEM | Seismic Only      |              |               |             | 2-98057, 2-12003                |   |
| 592      | 1     | 14     | 2-CCV-AB     | 0      | 250VDC DISTRIBUTION / 250VDC TRAIN 'B' CRITICAL SOLENOID VALVES DISTRIBUTION PANEL                                 | 2-12003, 2-12061     | AUXILIARY | 633  | CONTROL ROOM                   | E         | 250 VDC SYSTEM | Seismic Only      |              |               | Y           | 2-12061, 2-12003                |   |
| 593      | 2     | 14     | 2-CCV-CD     | 0      | 250VDC DISTRIBUTION / 250VDC TRAIN 'A' CRITICAL SOLENOID VALVES DISTRIBUTION PANEL                                 | 2-12003, 2-12071     | AUXILIARY | 633  | CONTROL ROOM                   | E         | 250 VDC SYSTEM | Seismic Only      |              |               | Y           | 2-12003, 2-12071                |   |
| 594      | 1     | 14     | 2-CRAB       | 0      | 250VDC DISTRIBUTION / 250VDC CONTROL ROOM DISTRIBUTION PANEL CRAB  | 2-12003, 2-12060     | AUXILIARY | 633  | CONTROL ROOM                   | E         | 250 VDC SYSTEM | Seismic Only      |              |               | Y           | 2-12060, 2-12003                |   |
| 595      | 2     | 14     | 2-CRCD       | 0      | 250VDC DISTRIBUTION / POWER PANEL  | 2-12003, 2-12070     | AUXILIARY | 633  | CONTROL ROOM                   | E         | 250 VDC SYSTEM | Seismic Only      |              |               | Y           | 2-12003, 2-12070                |   |
| 596      | 2     | 14     | 2-CRID-I     | 0      | 120V CONTROL ROOM INSTRUMENTATION DISTR / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION CHANNEL I DISTRIBUTION PANEL | 2-12050              | AUXILIARY | 633  | CONTROL ROOM                   | E         | 120 VAC SYSTEM | Seismic Only      |              |               | Y           | 2-98077, 2-12050                |   |
| 597      | 2     | 14     | 2-CRID-II    | 0      | 120V AC DISTRIBUTION / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION CHANNEL II DISTRIBUTION PANEL                   | 2-12050              | AUXILIARY | 633  | CONTROL ROOM                   | E         | 120 VAC SYSTEM | Seismic Only      |              |               | Y           | 2-98081, 2-12050                | 2-EZC-D-1AL                               |

DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID     | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.     | FIEL | Rm or Rwf/Ct                   | Flow Path | Function                  | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|------------|--------|--|----------------------|-----------|------|--------------------------------|-----------|---------------------------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 598      | 1     | 14     | 2-CRID-III | 0      | 120V CONTROL ROOM INSTRUMENTATION DISTR / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION CHANNEL III DISTRIBUTION PANEL | 2-12050              | AUXILIARY | 633  | CONTROL ROOM                   | E         | 120 VAC SYSTEM            | Seismic Only      |              |               | Y           | 2-98085, 2-12050                |   |
| 599      | 1     | 14     | 2-CRID-IV  | 0      | 120V CONTROL ROOM INSTRUMENTATION DISTR / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION CHANNEL IV DISTRIBUTION PANEL  | 2-12050              | AUXILIARY | 633  | CONTROL ROOM                   | E         | 120 VAC SYSTEM            | Seismic Only      |              |               | Y           | 2-98089, 2-12050                |   |
| 600      | 12    | 14     | 2-DCN      | 0      | 250VDC CONTROL AND INSTRUMENTATION / 250VDC POWER PANEL  | 2-12003, 2-12065     | AUXILIARY | 633  | 633 HALLWAY                    | E         | 250 VDC SYSTEM            | Seismic Only      |              |               | Y           | 2-12003, 2-12065, 2-98210       |   |
| 601      | 1     | 14     | 2-ELSC     | 0      | 120/208V MISC SAFETY RELATED POWER DISTR / POWER PANEL   | 2-12015              | AUXILIARY | 587  | AB EMER DSL GEN RM             | E         | 120 VAC SYSTEM            | Seismic Only      |              |               | Y           | 2-12015, 2-98573, 2-98351       |   |
| 602      | 1     | 14     | 2-ELSCX    | 0      | 120/208V MISC SAFETY RELATED POWER DISTRIBUTION / 120/208VAC EMERGENCY LOCAL SHUTDOWN AUXILIARY DISTRIBUTION PANEL   | 2-12015              | AUXILIARY | 587  | AB EMER DSL GEN RM             | E         | 120 VAC SYSTEM            | Seismic Only      |              |               | Y           | 2-12015, 2-98573                |   |
| 603      | 1     | 14     | 2-MCAB     | 0      | 250VDC DISTRIBUTION / 250VDC DISTRIBUTION PANEL MCAB   | 2-12003, 2-12080     | AUXILIARY | 609  | AB BATTERY EQUIP AREA          | E         | 250 VDC SYSTEM            | Seismic Only      |              |               | Y           | 2-12003, 2-12080                |   |
| 604      | 2     | 14     | 2-MCCD     | 0      | 250VDC DISTRIBUTION / 250VDC DISTRIBUTION POWER PANEL  | 2-12003, 2-12070     | AUXILIARY | 626  | CD BATTERY EQUIP AREA          | E         | 250 VDC SYSTEM            | Seismic Only      |              |               | Y           | 2-12003, 2-12070                |   |
| 605      | 1     | 14     | 2-MDAB     | 0      | 250VDC DISTRIBUTION / 250 VDC POWER PANEL  | 2-12003, 2-12060     | AUXILIARY | 609  | AB BATTERY EQUIP AREA          | E         | 250 VDC SYSTEM            | Seismic Only      |              |               | Y           | 2-12003, 2-12060                |   |
| 606      | 2     | 14     | 2-MDCD     | 0      | 250VDC DISTRIBUTION / 250VDC DISTRIBUTION PANEL MDCD   | 2-12003, 2-12070     | AUXILIARY | 626  | CD BATTERY EQUIP AREA          | E         | 250 VDC SYSTEM            | Seismic Only      |              |               | Y           |                                 |   |
| 607      | 2     | 14     | 2-SSV-A1   | 0      | 250VDC DISTRIBUTION / 250VDC TRAIN 'A' NUCLEAR SAMPLING FEEDER PANEL #1  | 2-12003, 2-12071     | AUXILIARY | 587  | NUCLEAR SAMPLING RM            | E         | 250 VDC SYSTEM            | Seismic Only      |              |               | Y           | 2-12071, 2-12003                |   |
| 608      | 2     | 14     | 2-SSV-A2   | 0      | 250VDC DISTRIBUTION / 250VDC NUCLEAR SAMPLING FEEDER PANEL #2  | 2-12003, 2-12071     | AUXILIARY | 587  | NUCLEAR SAMPLING RM            | E         | 250 VDC SYSTEM            | Seismic Only      |              |               | Y           | 2-12071, 2-12003                |   |
| 609      | 1     | 14     | 2-SSV-B    | 0      | 250VDC DISTRIBUTION / POWER PANEL  | 2-12003, 2-12061     | AUXILIARY | 587  | NUCLEAR SAMPLING RM            | E         | 250 VDC SYSTEM            | Seismic Only      |              |               | Y           | 2-12003, 2-12061                |   |
| 610      | 1     | 14     | 2-TDAB     | 0      | 250VDC DISTRIBUTION / 250 VDC POWER PANEL  | 2-12003, 2-12060     | AUXILIARY | 609  | AB BATTERY EQUIP AREA          | E         | 250 VDC SYSTEM            | Seismic Only      |              |               | Y           | 2-98055, 2-12003, 2-12080       |   |
| 611      | 2     | 14     | 2-TDCD     | 0      | 250VDC DISTRIBUTION / POWER PANEL, TRAIN A TRANSFER CABINET  | 2-12003, 2-12070     | AUXILIARY | 626  | CD BATTERY EQUIP AREA          | E         | 250 VDC SYSTEM            | Seismic Only      |              |               | Y           | 2-12003, 2-12070, 2-98057       |   |
| 612      | 3     | 14     | 2-VDAB-1   | 0      | 250VDC DISTRIBUTION / 250VDC VALVE DISTRIBUTION PANEL VDAB-1   | 2-12003, 2-12062     | AUXILIARY | 633  | CONTROL ROOM                   | E         | 250 VDC SYSTEM            | Seismic Only      |              |               | Y           | 2-12003, 2-12062                |   |
| 613      | 1     | 14     | 2-VDAB-2   | 0      | 250VDC DISTRIBUTION / 250VDC VALVE DISTRIBUTION PANEL VDAB-2   | 2-12003, 2-12062     | AUXILIARY | 633  | CONTROL ROOM                   | E         | 250 VDC SYSTEM            | Seismic Only      |              |               | Y           | 2-12062, 2-12003                | 2-CRAB-4                                  |
| 614      | 2     | 14     | 2-VDCD-1   | 0      | 250VDC DISTRIBUTION / 250VDC VALVE DISTRIBUTION PANEL VDCD-1   | 2-12003, 2-12073     | AUXILIARY | 633  | CONTROL ROOM                   | E         | 250 VDC SYSTEM            | Seismic Only      |              |               | Y           | 2-12003, 2-12073                |   |
| 615      | 2     | 14     | 2-VDCD-2   | 0      | 250VDC DISTRIBUTION / 250VDC VALVE DISTRIBUTION PANEL VDCD-2   | 2-12003, 2-12073     | AUXILIARY | 633  | CONTROL ROOM                   | E         | 250 VDC SYSTEM            | Seismic Only      |              |               | Y           | 2-12073, 2-12003                |   |
| 616      | 1     | 15     | 2-BATT-AB  | 0      | 250VDC DISTRIBUTION / PLANT BATTERY AB   | 2-12003              | AUXILIARY | 609  | AB BATTERY EQUIP AREA          | E         | 250 VDC SYSTEM            | Seismic and Relay |              |               |             | 2-98055, 2-12003                |   |
| 617      | 2     | 15     | 2-BATT-CD  | 0      | 250VDC DISTRIBUTION / PLANT BATTERY CD   | 2-12003              | AUXILIARY | 626  | CD BATTERY EQUIP AREA          | E         | 250 VDC SYSTEM            | Seismic and Relay |              |               |             | 2-98057, 2-12003                |   |
| 618      | 12    | 15     | 2-BATT-N   | 0      | 250VDC CONTROL AND INSTRUMENTATION / TRAIN 'N' PLANT BATTERY   | 2-12003              | AUXILIARY | 633  | NORMAL BLOWDOWN FLASHTANK ROOM | E         | 250 VDC SYSTEM            | Seismic and Relay |              |               |             | 2-12003, 2-98210                |   |
| 619      | 12    | 16     | 2-BC-A     | 0      | 250VDC CONTROL AND INSTRUMENTATION / BATTERY CHARGER A FOR N-TRAIN BATTERY   | 2-12003              | AUXILIARY | 633  | 633 HALLWAY                    | E         | 250 VDC CONTROL AND INSTR | Seismic and Relay |              |               |             | 2-98210, 2-12003, 2-12031       | 2-AM-D-8A                                 |
| 620      | 1     | 16     | 2-BC-AB1   | 0      | 250VDC DISTRIBUTION / PLANT BATTERY BATT-AB BATTERY CHARGER #1   | 2-12003, 2-12013     | AUXILIARY | 613  | 4KV ROOM - MEZZANINE AREA      | E         | 250 VDC SYSTEM            | Seismic and Relay |              |               |             | 2-98055, 2-12003, 2-12013       | 1-EZC-A-2B                                |
| 621      | 1     | 16     | 2-BC-AB2   | 0      | 250VDC DISTRIBUTION / PLANT BATTERY BATT-AB BATTERY CHARGER #2   | 2-12003, 2-12013     | AUXILIARY | 613  | 4KV ROOM - MEZZANINE AREA      | E         | 250 VDC SYSTEM            | Seismic and Relay |              |               |             | 2-98055, 2-12003, 2-12013       | 2-EZC-B-4B                                |

DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID         | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone      | Bldg.       | FIEL | Rm or Rm/CL              | Flow Path | Function                  | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev.    | Required Supporting Systems or Components |
|----------|-------|--------|----------------|--------|---|---------------------------|-------------|------|--------------------------|-----------|---------------------------|-------------------|--------------|---------------|-------------|------------------------------------|---|
| 622      | 12    | 18     | 2-BC-B         | 0      | 250VDC CONTROL AND INSTRUMENTATION / BATTERY CHARGER B FOR N-TRAIN BATTERY  | 2-12003                   | AUXILIARY   | 633  | 633 HALLWAY              | E         | 250 VDC CONTROL AND INSTR | Seismic and Relay |              |               |             | 2-98210, 2-12003, 2-12010          | 2-ABD-B-R1E                               |
| 623      | 2     | 16     | 2-BC-CD1       | 0      | 250VDC DISTRIBUTION / PLANT BATTERY BATT-CD CHARGER #1  | 2-12003, 2-12033          | AUXILIARY   | 626  | CD BATTERY EQUIP AREA    | E         | 250 VDC SYSTEM            | Seismic and Relay |              |               |             | 2-98057, 2-12003, 2-12033          | 2-EZC-D-4B                                |
| 624      | 2     | 16     | 2-BC-CD2       | 0      | 250VDC DISTRIBUTION / PLANT BATTERY BATT-CD CHARGER #2  | 2-12003, 2-12032          | AUXILIARY   | 626  | CD BATTERY EQUIP AREA    | E         | 250 VDC SYSTEM            | Seismic and Relay |              |               |             | 2-98057, 2-12003, 2-12032          |   |
| 625      | 2     | 16     | 2-CRID-I-INV   | 0      | 120VAC CONTROL ROOM INSTRUMENTATION DISTRIBUTION SYSTEM / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CHANNEL I INVERTER | 2-12050                   | AUXILIARY   | 609  | INVERTER AREA            | E         | 120 VAC SYSTEM            | Seismic and Relay |              |               |             | 2-98077, 2-12050                   |   |
| 626      | 2     | 16     | 2-CRID-II-INV  | 0      | 120V CONTROL ROOM INSTRUMENTATION DISTR / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CHANNEL II INVERTER                | 2-12050                   | AUXILIARY   | 609  | INVERTER AREA            | E         | 120 VAC SYSTEM            | Seismic and Relay |              |               |             | S-98081, S-12050                   | 2-MCCD-12                                 |
| 627      | 1     | 16     | 2-CRID-III-INV | 0      | 120V CONTROL ROOM INSTRUMENTATION DISTR / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CHANNEL III INVERTER               | 2-12050                   | AUXILIARY   | 609  | INVERTER AREA            | E         | 120 VAC SYSTEM            | Seismic and Relay |              |               |             | S-98085, 2-12050                   |   |
| 628      | 1     | 16     | 2-CRID-IV-INV  | 0      | 120V CONTROL ROOM INSTRUMENTATION DISTR / 120VAC CONTROL ROOM INSTRUMENT DISTRIBUTION SYSTEM CHANNEL IV INVERTER                | 2-12050                   | AUXILIARY   | 609  | CONTROL ROOM             | E         | 120 VAC SYSTEM            | Seismic and Relay |              |               |             | 2-98089, 2-12050                   |   |
| 629      | 1     | 16     | 2-DGAB-INV     | 0      | DIESEL GENERATOR, CONTROL & INSTRUMENTATION / AB EMERGENCY DIESEL GENERATOR OME-150-AB INVERTER                                 | 2-12001, 2-5148C          | AUXILIARY   | 587  | AB EMER DSL GEN RM       | E         | EDG                       | Seismic and Relay |              |               |             | 2-98032, 2-12001                   |   |
| 630      | 2     | 16     | 2-DGCD-INV     | 0      | DIESEL GENERATION, CONTROL & INSTRUMENTATION / CD EMERGENCY DIESEL GENERATOR OME-150-CD INVERTER                                | 2-12002, 2-5148C          | AUXILIARY   | 587  | CD EMER DSL GEN RM       | E         | EDG                       | Seismic and Relay |              |               |             | 2-98033, 2-12002                   |   |
| 631      | 1     | 17     | 2-OME-150-AB   | 0      | DIESEL GENERATION, CONTROL & INSTRUMENTATION / AB EMERGENCY DIESEL GENERATOR  | 2-12001, 2-5151A, 2-5151B | AUXILIARY   | 587  | AB EMER DSL GEN RM       | E         | EDG                       | Seismic and Relay |              |               |             | 2-98032, 2-98051, 2-98052, 2-12001 |   |
| 632      | 2     | 17     | 2-OME-150-CD   | 0      | DIESEL GENERATION, CONTROL & INSTRUMENTATION / CD EMERGENCY DIESEL GENERATOR  | 2-12002, 2-5151C, 2-5151D | AUXILIARY   | 587  | CD EMER DSL GEN RM       | E         | EDG                       | Seismic and Relay |              |               |             | 2-98033, 2-98051, 2-98052, 2-12002 |   |
| 633      | 2     | 18     | 2-BLI-110      | 0      | STEAM GENERATING / STEAM GENERATOR OME-3-1 WIDE RANGE LEVEL INDICATOR TRANSMITTER   | 2-5105D                   | CONTAINMENT | 612  | ACCUMULATOR TANK #1 AREA | P         | D                         | Seismic Only      |              |               | Y           | 2-98573 2-98583 2-98508            | INSTRUMENTATION BOP 2-CRID-I-4            |
| 634      | 1     | 18     | 2-BLI-120      | 0      | STEAM GENERATING / STEAM GENERATOR OME-3-2 WIDE RANGE LEVEL INDICATOR TRANSMITTER   | 2-5105D                   | CONTAINMENT | 612  | W CONT LOWER VENT RM     | P         | D                         | Seismic Only      |              |               | Y           | 2-98583 2-98508 2-98573            | INSTRUMENTATION BOP 2-CRID-IV-4           |
| 635      | 1     | 18     | 2-BLI-130      | 0      | STEAM GENERATING / STEAM GENERATOR OME-3-3 WIDE RANGE LEVEL INDICATOR TRANSMITTER   | 2-5105D                   | CONTAINMENT | 612  | ACCUMULATOR TANK #3 AREA | P         | D                         | Seismic Only      |              |               | Y           | 2-98573 2-98583 2-98508            | INSTRUMENTATION BOP 2-CRID-III-4          |
| 636      | 2     | 18     | 2-BLI-140      | 0      | STEAM GENERATING / STEAM GENERATOR OME-3-4 WIDE RANGE LEVEL INDICATOR TRANSMITTER   | 2-5105D                   | CONTAINMENT | 612  | ACCUMULATOR TANK #4 AREA | P         | D                         | Seismic Only      |              |               | Y           | 2-98573 2-98583 2-98508            | INSTRUMENTATION BOP 2-CRID-IV-4           |
| 637      | 2     | 18     | 2-CLJ-113      | 0      | CONDENSATE STORAGE TANK SUPPLY / CONDENSATE STORAGE TANK TK-32 LEVEL INDICATOR TRANSMITTER                                      | 2-5108A                   | AUXILIARY   | 586  | STORAGE TANK PIPE TUNNEL | P         | D                         | Seismic and Relay |              |               | Y           | 2-98426                            | INSTRUMENTATION 2-CRID-II-4               |
| 638      | 1     | 18     | 2-CLJ-114      | 0      | CONDENSATE STORAGE TANK SUPPLY / CONDENSATE STORAGE TANK TK-32 LEVEL INDICATOR TRANSMITTER                                      | 2-5108A                   | AUXILIARY   | 586  | STORAGE TANK PIPE TUNNEL | P         | D                         | Seismic and Relay |              |               | Y           | 2-98426                            | INSTRUMENTATION 2-CRID-III-3              |
| 639      | 2     | 18     | 2-CPS-312      | 0      | DIESEL JACKET WATER / AB EMERGENCY DIESEL JACKET WATER PUMP QT-130-AB1 DISCHARGE PRESSURE SWITCH                                | 2-5151B                   | AUXILIARY   | 587  | AB EMER DSL GEN RM       | S         | EDG                       | Seismic Only      |              |               | Y           | 2-98013                            | INSTRUMENTATION 2-ABD-B-2C                |

DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID    | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.       | FIEL | Rm or Rwf/CI         | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No./Rev. | Required Supporting Systems or Components |
|----------|-------|--------|-----------|--------|---|----------------------|-------------|------|----------------------|-----------|----------|-------------------|--------------|---------------|-------------|-------------------------------|---|
| 640      | 1     | 18     | 2-CPS-314 | 0      | DIESEL JACKET WATER / AB EMERGENCY DIESEL JACKET WATER PUMP QT-130-AB2 DISCHARGE PRESSURE SWITCH                      | 2-5151B              | AUXILIARY   | 587  | AB EMER DSL GEN RM   | S         | EDG      | Seismic Only      |              |               | Y           | 2-98013                       | INSTRUMENTATION 2-ABD-A-2C                |
| 641      | 2     | 18     | 2-CPS-317 | 0      | DIESEL JACKET WATER / CD EMERGENCY DIESEL JACKET WATER PUMP QT-130-CD1 DISCHARGE PRESSURE SWITCH                      | 2-5151D              | AUXILIARY   | 587  | CD EMER DSL GEN RM   | S         | EDG      | Seismic Only      |              |               | Y           | 2-98014                       | INSTRUMENTATION 2-ABD-C-2C                |
| 642      | 2     | 18     | 2-CPS-319 | 0      | DIESEL JACKET WATER / CD EMERGENCY DIESEL JACKET WATER PUMP QT-130-CD2 DISCHARGE PRESSURE SWITCH                      | 2-5151D              | AUXILIARY   | 587  | CD EMER DSL GEN RM   | S         | EDG      | Seismic Only      |              |               | Y           | 2-98014                       | INSTRUMENTATION 2-ABD-D-2C                |
| 643      | 2     | 18     | 2-CPS-410 | 0      | COMPONENT COOLING WATER / EAST COMPONENT COOLING WATER PUMP PP-10E DISCHARGE PRESSURE SWITCH                          | 2-5135A              | AUXILIARY   | 609  | 609 HALLWAY          | S         | CCW      | Seismic Only      |              |               | Y           | 2-98405                       | INSTRUMENTATION                           |
| 644      | 1     | 18     | 2-CPS-420 | 0      | COMPONENT COOLING WATER / WEST COMPONENT COOLING WATER PUMP PP-10W DISCHARGE PRESSURE SWITCH                          | 2-5135A              | AUXILIARY   | 609  | 609 HALLWAY          | S         | CCW      | Seismic Only      |              |               | Y           | 2-12070, 2-98405              |   |
| 645      | 1     | 18     | 2-FFI-210 | 0      | AUXILIARY FEEDWATER / AUXILIARY FEEDWATER TO STEAM GENERATOR OME-3-1 FLOW INDICATOR TRANSMITTER                       | 2-5108A              | AUXILIARY   | 621  | E MAIN STM STOP ENCL | P         | D        | Seismic and Relay |              |               | Y           | 2-98447                       | INSTRUMENTATION 2-CR1C-III-3              |
| 646      | 2     | 18     | 2-FFI-220 | 0      | AUXILIARY FEEDWATER / AUXILIARY FEEDWATER TO STEAM GENERATOR OME-3-2 FLOW INDICATOR TRANSMITTER                       | 2-5108A              | AUXILIARY   | 621  | W MN STM STOP ENCL   | P         | D        | Seismic and Relay |              |               | Y           | 2-98437                       | INSTRUMENTATION 2-CR1D-III-3              |
| 647      | 2     | 18     | 2-FFI-230 | 0      | AUXILIARY FEEDWATER / AUXILIARY FEEDWATER TO STEAM GENERATOR OME-3-3 FLOW INDICATOR TRANSMITTER                       | 2-5108A              | AUXILIARY   | 621  | W MN STM STOP ENCL   | P         | D        | Seismic and Relay |              |               | Y           | 2-98437                       |   |
| 648      | 1     | 18     | 2-FFI-240 | 0      | FEEDWATER / AUXILIARY FEEDWATER TO STEAM GENERATOR OME-3-4 FLOW INDICATOR TRANSMITTER                                 | 2-5108A              | AUXILIARY   | 621  | E MAIN STM STOP ENCL | P         | D        | Seismic and Relay |              |               | Y           | 2-98447                       | INSTRUMENTATION 2-CR1D-IV-3               |
| 649      | 2     | 18     | 2-IFI-310 | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17E OUTLET LOW RANGE FLOW INDICATOR TRANSMITTER  | 2-5143               | AUXILIARY   | 609  | 609 HALLWAY          | P         | DRIP     | Seismic Only      |              |               | Y           | 2-98567                       | 2-CR1D-IV-4                               |
| 650      | 2     | 18     | 2-IFI-311 | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17E OUTLET HIGH RANGE FLOW INDICATOR TRANSMITTER | 2-5143               | AUXILIARY   | 609  | 609 HALLWAY          | P         | DRIP     | Seismic Only      |              |               | Y           | 2-98566 2-98567               | INSTRUMENTATION 2-CR1D-IV-4               |
| 651      | 1     | 18     | 2-IFI-320 | 0      | RESIDUAL HEAT REMOVAL / WEST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17W OUTLET LOW RANGE FLOW INDICATOR TRANSMITTER  | 2-5143               | AUXILIARY   | 609  | 609 HALLWAY          | P         | DRIP     | Seismic Only      |              |               | Y           | 2-98567                       | 2-CR1D-III-4                              |
| 652      | 1     | 18     | 2-IFI-321 | 0      | RESIDUAL HEAT REMOVAL / WEST RESIDUAL HEAT REMOVAL HEAT EXCHANGER HE-17W OUTLET HIGH RANGE FLOW INDICATOR TRANSMITTER | 2-5143               | AUXILIARY   | 609  | 609 HALLWAY          | P         | DRIP     | Seismic Only      |              |               | Y           | 2-98567 2-98566               | INSTRUMENTATION 2-CR1D-III-4              |
| 653      | 12    | 18     | 2-IFI-335 | 0      | RESIDUAL HEAT REMOVAL / RESIDUAL HEAT REMOVAL TO REACTOR COOLANT LOOPS #2 AND #3 COLD LEGS FLOW INDICATOR TRANSMITTER | 2-5143               | AUXILIARY   | 591  | VESTIBULE            | P         | DRIP     | Seismic Only      |              |               | Y           | 2-98566                       | INSTRUMENTATION 2-CR1D-III-4              |
| 654      | 2     | 18     | 2-IFI-51  | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP #1 FLOW INDICATOR TRANSMITTER                               | 2-5142               | CONTAINMENT | 598  | ANNULUS, QUAD NO. 1  | P         | RI       | Seismic Only      |              |               | Y           | 2-98567                       | 2-CR1D-I-4                                |
| 655      | 1     | 18     | 2-IFI-52  | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP #2 FLOW INDICATOR TRANSMITTER                               | 2-5142               | CONTAINMENT | 598  | ANNULUS, QUAD NO. 2  | P         | RI       | Seismic Only      |              |               | Y           | 2-98567                       | 2-CR1D-II-4                               |
| 656      | 1     | 18     | 2-IFI-53  | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP #3 FLOW INDICATOR TRANSMITTER                               | 2-5142               | CONTAINMENT | 598  | ANNULUS, QUAD NO. 3  | P         | RI       | Seismic Only      |              |               | Y           | 2-98567                       | 2-CR1D-III-4                              |
| 657      | 2     | 18     | 2-IFI-54  | 0      | BORON INJECTION / BORON INJECTION TO REACTOR COOLANT LOOP #4 FLOW INDICATOR TRANSMITTER                               | 2-5142               | CONTAINMENT | 598  | ANNULUS, QUAD NO. 4  | P         | RI       | Seismic Only      |              |               | Y           | 2-98567                       | 2-CR1D-IV-4                               |

DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. Cl. | Eq. ID    | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.       | FIEL | Rm or RwrCl              | Flow Path | Function | Eval Type    | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|---------|-----------|--------|--|----------------------|-------------|------|--------------------------|-----------|----------|--------------|--------------|---------------|-------------|---------------------------------|---|
| 658      | 12    | 18      | 2-LS-950  | 0      | REFUELING WATER STORAGE TANK SUPPLY / REFUELING WATER STORAGE TANK TK-33 EXTREME LOW LEVEL TRANSMITTER | 2-5144               | AUXILIARY   | 588  | STORAGE TANK PIPE TUNNEL | P         | DRI      | Seismic Only |              |               | Y           | 2-98567                         | INSTRUMENTATION 2-CRID-III-3 2-CRID-III-4 |
| 659      | 12    | 18      | 2-LS-951  | 0      | REFUELING WATER STORAGE TANK SUPPLY / REFUELING WATER STORAGE TANK TK-33 LEVEL TRANSMITTER             | 2-5144               | AUXILIARY   | 588  | STORAGE TANK PIPE TUNNEL | P         | DRI      | Seismic Only |              |               | Y           | 2-98567                         | INSTRUMENTATION 2-CRID-IV-3               |
| 660      | 1     | 18      | 2-LS-120  | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL DAY TANK QT-107-AB HIGH LEVEL SWITCH #1                 | 2-5151A              | AUXILIARY   | 587  | AB EMER DSL GEN RM       | S         | EDG      | Seismic Only |              |               | Y           | 2-98013                         | INSTRUMENTATION 2-ABD-B-3D                |
| 661      | 1     | 18      | 2-LS-121  | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL DAY TANK QT-107-AB LOW LEVEL SWITCH #1                  | 2-5151A              | AUXILIARY   | 587  | AB EMER DSL GEN RM       | S         | EDG      | Seismic Only |              |               | Y           | 2-98013                         | INSTRUMENTATION 2-ABD-B-3D                |
| 662      | 1     | 18      | 2-LS-122  | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL DAY TANK QT-107-AB HIGH LEVEL SWITCH #2                 | 2-5151A              | AUXILIARY   | 587  | AB EMER DSL GEN RM       | S         | EDG      | Seismic Only |              |               | Y           | 2-98013                         | 2-ABD-A-2D                                |
| 663      | 1     | 18      | 2-LS-123  | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL DAY TANK QT-107-AB LOW LEVEL SWITCH #2                  | 2-5151A              | AUXILIARY   | 587  | AB EMER DSL GEN RM       | S         | EDG      | Seismic Only |              |               | Y           | 2-98013                         | INSTRUMENTATION 2-ABD-A-2D                |
| 664      | 2     | 18      | 2-LS-125  | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL FUEL OIL DAY TANK QT-107-CD HIGH LEVEL SWITCH #1                 | 2-5151C              | AUXILIARY   | 587  | CD EMER DSL GEN RM       | S         | EDG      | Seismic Only |              |               | Y           | 2-98014                         | INSTRUMENTATION 2-ABD-C-3D                |
| 665      | 2     | 18      | 2-LS-126  | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL FUEL OIL DAY TANK QT-107-CD LOW LEVEL SWITCH #1                  | 2-5151C              | AUXILIARY   | 587  | CD EMER DSL GEN RM       | S         | EDG      | Seismic Only |              |               | Y           | 2-98014                         | INSTRUMENTATION 2-ABD-C-3D                |
| 666      | 2     | 18      | 2-LS-127  | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL FUEL OIL DAY TANK QT-107-CD HIGH LEVEL SWITCH #2                 | 2-5151C              | AUXILIARY   | 587  | CD EMER DSL GEN RM       | S         | EDG      | Seismic Only |              |               | Y           | 2-98014                         | INSTRUMENTATION 2-ABD-D-2D                |
| 667      | 2     | 18      | 2-LS-128  | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL FUEL OIL DAY TANK QT-107-CD LOW LEVEL SWITCH #2                  | 2-5151C              | AUXILIARY   | 587  | CD EMER DSL GEN RM       | S         | EDG      | Seismic Only |              |               | Y           | 2-98014                         | 2-ABD-D-2D                                |
| 668      | 2     | 18      | 2-MPP-210 | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 CHANNEL I STEAM PRESSURE TRANSMITTER                              | 2-5105D              | AUXILIARY   | 633  | E MAIN STM STOP ENCL     | P         | D        | Seismic Only |              |               | Y           | 2-98575 2-98506                 | INSTRUMENTATION 2-CRID-I-3                |
| 669      | 2     | 18      | 2-MPP-212 | 0      | MAIN STEAM / STEAM GENERATOR OME-3-1 CHANNEL IV REACTOR PROTECTION INPUT STEAM PRESSURE TRANSMITTER    | 2-5105D              | AUXILIARY   | 633  | E MAIN STM STOP ENCL     | P         | D        | Seismic Only |              |               | Y           | 2-98584 2-98506                 | INSTRUMENTATION 2-CRID-IV-3               |
| 670      | 1     | 18      | 2-MPP-220 | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2 CHANNEL I STEAM PRESSURE TRANSMITTER                              | 2-5105D              | AUXILIARY   | 633  | W MN STM STOP ENCL       | P         | D        | Seismic Only |              |               | Y           | 2-98575 2-98506                 | INSTRUMENTATION 2-CRID-I-3                |
| 671      | 1     | 18      | 2-MPP-222 | 0      | MAIN STEAM / STEAM GENERATOR OME-3-2 CHANNEL III REACTOR PROTECTION INPUT STEAM PRESSURE TRANSMITTER   | 2-5105D              | AUXILIARY   | 633  | W MN STM STOP ENCL       | P         | D        | Seismic Only |              |               | Y           | 2-98584 2-98506                 | INSTRUMENTATION 2-CRID-III-3              |
| 672      | 1     | 18      | 2-MPP-230 | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3 CHANNEL I STEAM PRESSURE TRANSMITTER                              | 2-5105D              | AUXILIARY   | 633  | W MN STM STOP ENCL       | P         | D        | Seismic Only |              |               | Y           | 2-98576 2-98506                 | INSTRUMENTATION 2-CRID-I-3                |
| 673      | 1     | 18      | 2-MPP-232 | 0      | MAIN STEAM / STEAM GENERATOR OME-3-3 CHANNEL III REACTOR PROTECTION INPUT STEAM PRESSURE TRANSMITTER   | 2-5105D              | AUXILIARY   | 633  | W MN STM STOP ENCL       | P         | D        | Seismic Only |              |               | Y           | 2-98584 2-98506                 | INSTRUMENTATION 2-CRID-III-3              |
| 674      | 2     | 18      | 2-MPP-240 | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 CHANNEL I STEAM PRESSURE TRANSMITTER                              | 2-5105D              | AUXILIARY   | 633  | E MAIN STM STOP ENCL     | P         | D        | Seismic Only |              |               | Y           | 2-98576 2-98506                 | INSTRUMENTATION 2-CRID-I-3                |
| 675      | 1     | 18      | 2-MPP-242 | 0      | MAIN STEAM / STEAM GENERATOR OME-3-4 CHANNEL IV REACTOR PROTECTION INPUT STEAM PRESSURE TRANSMITTER    | 2-5105D              | AUXILIARY   | 633  | E MAIN STM STOP ENCL     | P         | D        | Seismic Only |              |               | Y           | 2-98584 2-98506                 | INSTRUMENTATION 2-CRID-IV-3               |
| 676      | 1     | 18      | 2-NLI-151 | 0      | PRESSURIZER / PRESSURIZER OME-4 LEVEL INDICATOR TRANSMITTER  | 2-5128A              | CONTAINMENT | 612  | INSTRUMENTATION ON RM    | P         | RIP      | Seismic Only |              |               | Y           | 2-98573 2-98554                 | 2-CRID-IV-4                               |
| 677      | 2     | 18      | 2-NLP-151 | 0      | PRESSURIZER / PRESSURIZER OME-4 PROTECTION CHANNEL I LEVEL TRANSMITTER                                 | 2-5128A              | CONTAINMENT | 612  | INSTRUMENTATION ON RM    | P         | RIP      | Seismic Only |              |               | Y           | 2-98550 2-98503                 | INSTRUMENTATION 2-CRID-I-3                |

DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID    | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.       | FIEL | Rm or Rm/CL          | Flow Path | Function | Eval Type    | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|-----------|--------|--|----------------------|-------------|------|----------------------|-----------|----------|--------------|--------------|---------------|-------------|---------------------------------|---|
| 678      | 2     | 18     | 2-NLP-152 | 0      | PRESSURIZER / PRESSURIZER OME-4 PROTECTION CHANNEL II LEVEL TRANSMITTER  | 2-5128A              | CONTAINMENT | 612  | INSTRUMENTATION RM   | P         | RIP      | Seismic Only |              |               | Y           | 2-98550 2-98503                 | INSTRUMENTATION 2-CRID-II-2               |
| 679      | 1     | 18     | 2-NLP-153 | 0      | PRESSURIZER / PRESSURIZER OME-4 PROTECTION CHANNEL III LEVEL TRANSMITTER   | 2-5128A              | CONTAINMENT | 612  | INSTRUMENTATION RM   | P         | RIP      | Seismic Only |              |               | Y           | 2-98550 2-98503                 | INSTRUMENTATION 2-CRID-III-3              |
| 680      | 2     | 18     | 2-NPP-151 | 0      | PRESSURIZER / PRESSURIZER OME-4 PROTECTION CHANNEL I PRESSURE TRANSMITTER  | 2-5128A              | CONTAINMENT | 612  | INSTRUMENTATION RM   | P         | RIP      | Seismic Only |              |               | Y           | 2-98551 2-98503 2-98550         | INSTRUMENTATION 2-CRID-I-3                |
| 681      | 2     | 18     | 2-NPP-152 | 0      | PRESSURIZER / PRESSURIZER OME-4 PROTECTION CHANNEL II PRESSURE TRANSMITTER   | 2-5128A              | CONTAINMENT | 612  | INSTRUMENTATION RM   | P         | RIP      | Seismic Only |              |               | Y           | 2-98550 2-98551 2-98503         | INSTRUMENTATION 2-CRID-II-3               |
| 682      | 1     | 18     | 2-NPP-153 | 0      | PRESSURIZER / PRESSURIZER OME-4 PROTECTION CHANNEL III PRESSURE TRANSMITTER  | 2-5128A              | CONTAINMENT | 612  | INSTRUMENTATION RM   | P         | RIP      | Seismic Only |              |               | Y           | 2-98552 2-98550 2-98503         | INSTRUMENTATION 2-CRID-III-3              |
| 683      | 2     | 18     | 2-NPS-121 | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP #2 HOT LEG WIDE RANGE PRESSURE TRANSMITTER  | 2-5128               | CONTAINMENT | 612  | W CONT LOWER VENT RM | P         | DRIP     | Seismic Only |              |               | Y           | 2-98571 2-98502 2-98550         | INSTRUMENTATION 2-CRID-II-3               |
| 684      | 1     | 18     | 2-NPS-122 | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP #1 HOT LEG WIDE RANGE PRESSURE TRANSMITTER  | 2-5128               | CONTAINMENT | 612  | E CONT LOWER VENT RM | P         | DRIP     | Seismic Only |              |               | Y           | 2-98573 2-98502 2-98550         | INSTRUMENTATION 2-CRID-III-3              |
| 685      | 2     | 18     | 2-NRI-21  | 0      | NUCLEAR INSTRUMENTATION / NUCLEAR INSTRUMENTATION SOURCE RADIATION DETECTOR  |                      | CONTAINMENT | 626  | REACTOR CAVITY       | P         | R        | Seismic Only |              |               | Y           | 2-98524                         |   |
| 686      | 1     | 18     | 2-NRI-23  | 0      | NUCLEAR INSTRUMENTATION / NUCLEAR INSTRUMENTATION SOURCE RADIATION DETECTOR  |                      | CONTAINMENT | 626  | REACTOR CAVITY       | P         | R        | Seismic Only | NA           | NA            | Y           | 2-985224                        | 2-CRID-II-6, 1-CRID-III-6                 |
| 687      | 1     | 18     | 2-PPP-301 | 0      | CONTAINMENT VENTILATION / LOWER CONTAINMENT CHANNEL II PRESSURE TRANSMITTER  |                      | AUXILIARY   | 612  | 612 AIRLOCK AREA     | P         | DP       | Seismic Only |              |               | Y           |                                 | 2-CRID-III-3                              |
| 688      | 2     | 18     | 2-PPP-302 | 0      | CONTAINMENT VENTILATION / LOWER CONTAINMENT CHANNEL II PRESSURE PROTECTION TRANSMITTER   |                      | AUXILIARY   | 612  | 612 AIRLOCK AREA     | P         | DP       | Seismic Only |              |               | Y           | 2-98512                         | 2-CRID-II-3                               |
| 689      | 2     | 18     | 2-PPP-303 | 0      | CONTAINMENT VENTILATION / LOWER CONT. CHANNEL I PRESSURE PROTECTION TRANSMITTER  |                      | AUXILIARY   | 612  | 612 AIRLOCK AREA     | P         | DP       | Seismic Only |              |               | Y           | 2-98512 2-98593                 | 2-CRID-I-3                                |
| 690      | 2     | 18     | 2-QFA-210 | 0      | REACTOR COOLANT PUMP SEAL WATER IN/LEAKOFF / RCP SEAL WATER INJECTION TO REACTOR COOLANT PUMP PP-45-1 LOW FLOW ALARM TRANSMITTER | 2-5128A              | AUXILIARY   | 587  | 587 HALLWAY          | P         | RIP      | Seismic Only |              |               | Y           | 2-98562                         | INSTRUMENTATION BOP 2-CRID-I-4            |
| 691      | 2     | 18     | 2-QFA-220 | 0      | REACTOR COOLANT PUMP SEAL WATER IN/LEAKOFF / RCP SEAL WATER INJECTION TO REACTOR COOLANT PUMP PP-45-2 LOW FLOW ALARM TRANSMITTER | 2-5128A              | AUXILIARY   | 587  | 587 HALLWAY          | P         | RIP      | Seismic Only |              |               | Y           | 2-98562                         | INSTRUMENTATION BOP 2-CRID-II-4           |
| 692      | 1     | 18     | 2-QFA-230 | 0      | REACTOR COOLANT PUMP SEAL WATER IN/LEAKOFF / RCP SEAL WATER INJECTION TO REACTOR COOLANT PUMP PP-45-3 LOW FLOW ALARM TRANSMITTER | 2-5128A              | AUXILIARY   | 587  | 587 HALLWAY          | P         | RIP      | Seismic Only |              |               | Y           | 2-98563                         | INSTRUMENTATION BOP 2-CRID-III-4          |
| 693      | 1     | 18     | 2-QFA-240 | 0      | REACTOR COOLANT PUMP SEAL WATER IN/LEAKOFF / RCP SEAL WATER INJECTION TO REACTOR COOLANT PUMP PP-45-4 LOW FLOW ALARM TRANSMITTER | 2-5128A              | AUXILIARY   | 587  | 587 HALLWAY          | P         | RIP      | Seismic Only |              |               | Y           | 2-98563                         | INSTRUMENTATION BOP 2-CRID-IV-4           |
| 694      | 12    | 18     | 2-QFI-200 | 0      | CHARGING (CVCS) / CVCS CHARGING PUMPS DISCHARGE FLOW INDICATOR TRANSMITTER   | 2-5129               | AUXILIARY   | 587  | 587 HALLWAY          | P         | RIP      | Seismic Only |              |               | Y           | 2-98573 2-98554 2-98503         | 2-CRID-III-3 2-CRID-II-4                  |
| 695      | 12    | 18     | 2-QLC-451 | 0      | LETDOWN (CVCS) / REACTOR COOLANT LETDOWN VOLUME CONTROL TANK TK-10 EXTREME HIGH LEVEL CONTROL TRANSMITTER                        | 2-5129A              | AUXILIARY   | 609  | 609 HALLWAY          | P         | RI       | Seismic Only |              |               | Y           | 2-98558 2-98514                 | INSTRUMENTATION BOP 2-CRID-I-4            |
| 696      | 12    | 18     | 2-QLC-452 | 0      | LETDOWN (CVCS) / REACTOR COOLANT LETDOWN VOLUME CONTROL TANK TK-10 HIGH LEVEL CONTROL TRANSMITTER                                | 2-5129A              | AUXILIARY   | 609  | 609 HALLWAY          | P         | RI       | Seismic Only |              |               | Y           | 2-98558 2-98514                 | INSTRUMENTATION BOP 2-CRID-IV-4           |

DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. Cl. | Eq. ID         | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.       | FIEL | Rm or Rwf/Cl                 | Flow Path | Function       | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. No. / Rev. | Dwg. No. | Required Supporting Systems or Components |
|----------|-------|---------|----------------|--------|--|----------------------|-------------|------|------------------------------|-----------|----------------|-------------------|--------------|---------------|-------------|----------------------------|----------|---|
| 697      | 2     | 18      | 2-WDS-703      | 0      | ESSENTIAL SERVICE WATER / EAST ESSENTIAL SERVICE WATER PUMP PP-7E DISCHARGE STRAINER OME-34E HIGH DIFFERENTIAL PRESSURE SWITCH | 2-5113               | SCREENHOUSE | 591  | E ESSENTIAL SERV WTR PMP RM  | S         | ESW            | Seismic and Relay |              |               | Y           | 2-98415                    |          | INSTRUMENTATION 2-PS-D-3C                 |
| 698      | 1     | 18      | 2-WDS-704      | 0      | ESSENTIAL SERVICE WATER / WEST ESSENTIAL SERVICE WATER PUMP PP-7W DISCHARGE STRAINER OME-34W HIGH DIFFERENTIAL PRESSURE SWITCH | 2-5113               | SCREENHOUSE | 591  | W ESSENTIAL SERV WTR PMP RM  | S         | ESW            | Seismic and Relay |              |               | Y           | 2-98415                    |          | INSTRUMENTATION 2-PS-A-1C                 |
| 699      | 2     | 18      | 2-WPS-702      | 0      | ESSENTIAL SERVICE WATER / EAST ESSENTIAL SERVICE WATER SUPPLY HEADER PRESSURE SWITCH   | 2-5113               | TURBINE     | 569  | ESSENTIAL SERV WTR PIPE TUNN | S         | ESW            | Seismic and Relay |              |               | Y           | 2-12070, 2-98415           |          | INSTRUMENTATION                           |
| 700      | 1     | 18      | 2-WPS-706      | 0      | ESSENTIAL SERVICE WATER / WEST ESSENTIAL SERVICE WATER SUPPLY HEADER PRESSURE SWITCH   | 2-5113               | TURBINE     | 569  | ESSENTIAL SERV WTR PIPE TUNN | S         | ESW            | Seismic and Relay |              |               | Y           | 2-12080, 2-98415           |          |   |
| 701      | 1     | 18      | 2-XPS-300      | 0      | DIESEL COMBUSTION AIR / AB - EMERGENCY DIESEL FRONT BANK AIR CHEST EXTREME HIGH PRESSURE SWITCH                                | 2-5151B              | AUXILIARY   | 587  | AB EMER DSL GEN RM           | S         | EDG            | Seismic Only      |              |               | Y           |                            |          |   |
| 702      | 2     | 18      | 2-XPS-305      | 0      | DIESEL COMBUSTION AIR / CD EMERGENCY DIESEL FRONT BANK AIR CHEST EXTREME HIGH PRESSURE SWITCH                                  | 2-5151D              | AUXILIARY   | 587  | CD EMER DSL GEN RM           | S         | EDG            | Seismic Only      |              |               | Y           |                            |          |   |
| 703      | 12    | 18      | 2-XRV-RACK-152 | 0      | CONTROL AIR / PRESSURIZER TRAIN 'B' PRESSURE RELIEF VALVE NRV-152 VALVE RACK (EMERGENCY AIR PRESSURE REGULATOR)                | 2-5120D              | CONTAINMENT | 650  | UPPER CONT, QUAD 4           | S         | CONTROL AIR/N2 | Seismic Only      |              |               |             |                            |          |   |
| 704      | 12    | 18      | 2-XRV-RACK-153 | 0      | CONTROL AIR / PRESSURIZER TRAIN 'A' PRESSURE RELIEF VALVE NRV-153 VALVE RACK EMERGENCY AIR PRESSURE REGULATOR                  | 2-5120D              | CONTAINMENT | 650  | UPPER CONT, QUAD 4           | S         | CONTROL AIR/N2 | Seismic Only      |              |               |             |                            |          |   |
| 705      | 2     | 19      | 2-CTR-415      | 0      | COMPONENT COOLING WATER / EAST COMPONENT COOLING WATER HEAT EXCHANGER HE-15E CCW OUTLET TEMPERATURE RECORDER THERMAL SENSOR    | 2-5135A              | AUXILIARY   | 609  | 609 HALLWAY                  | S         | CCW            | Seismic Only      |              |               | Y           |                            |          | INSTRUMENTATION                           |
| 706      | 2     | 19      | 2-CTR-425      | 0      | COMPONENT COOLING WATER / WEST COMPONENT COOLING WATER HEAT EXCHANGER CCW OUTLET TEMPERATURE RECORDER THERMAL SENSOR           | 2-5135A              | AUXILIARY   | 609  | 609 HALLWAY                  | S         | CCW            | Seismic Only      |              |               | Y           |                            |          |   |
| 707      | 12    | 19      | 2-NTR-335      | 0      | RESIDUAL HEAT REMOVAL / RESIDUAL HEAT REMOVAL TO REACTOR COOLANT LOOPS #2 & #3 COLD LEGS TEMPERATURE RECORDER THERMAL SENSOR   | 2-5143               | AUXILIARY   | 609  | ERHR HEAT XCHGR RM           | P         | DRIP           | Seismic Only      |              |               | Y           | 2-98508                    |          | INSTRUMENTATION 2-CRID-#4                 |
| 708      | 2     | 19      | 2-NTR-110      | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP #1 HOT LEG WIDE RANGE TEMPERATURE RECORDER THERMAL SENSOR                               | 2-5128               | CONTAINMENT | 598  | LOWER CONT, QUAD NO. 1       | P         | DRIP           | Seismic Only      |              |               | Y           | 2-98502 2-98592            |          | INSTRUMENTATION 2-CRID-#3                 |
| 709      | 1     | 19      | 2-NTR-120      | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP #2 HOT LEG WIDE RANGE TEMPERATURE RECORDER THERMAL SENSOR                               | 2-5128               | CONTAINMENT | 617  | LOWER CONT, QUAD NO. 2       | P         | DRIP           | Seismic Only      |              |               | Y           | 2-98592 2-98502            |          | INSTRUMENTATION 2-CRID-#3                 |
| 710      | 1     | 19      | 2-NTR-130      | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP #3 HOT LEG WIDE RANGE TEMPERATURE RECORDER THERMAL SENSOR                               | 2-5128               | CONTAINMENT | 625  | LOWER CONT, QUAD NO. 3       | P         | DRIP           | Seismic Only      |              |               | Y           | 2-98502 2-98592            |          | INSTRUMENTATION 2-CRID-#3                 |
| 711      | 2     | 19      | 2-NTR-140      | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP #4 HOT LEG WIDE RANGE TEMPERATURE RECORDER THERMAL SENSOR                               | 2-5128               | CONTAINMENT | 617  | LOWER CONT, QUAD NO. 4       | P         | DRIP           | Seismic Only      |              |               | Y           | 2-98592 2-98502            |          |   |
| 712      | 2     | 19      | 2-NTR-210      | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP #1 COLD LEG WIDE RANGE TEMPERATURE RECORDER THERMAL SENSOR                              | 2-5128               | CONTAINMENT | 617  | LOWER CONT, QUAD NO. 1       | P         | DRIP           | Seismic Only      |              |               | Y           | 2-98502 2-98592            |          | INSTRUMENTATION 2-CRID-#3                 |





DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID    | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.        | FIEL | Rm or Rwf/CI               | Flow Path | Function | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. No. / Rev. | Dwg. No. | Required Supporting Systems or Components |
|----------|-------|--------|-----------|--------|---|----------------------|--------------|------|----------------------------|-----------|----------|-------------------|--------------|---------------|-------------|----------------------------|----------|---|
| 713      | 1     | 19     | 2-NTR-220 | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP #2 COLD LEG WIDE RANGE TEMPERATURE RECORDER THERMAL SENSOR                                     | 2-5128               | CONTAINME NT | 617  | LOWER CONT, QUAD NO. 2     | P         | DRIP     | Seismic Only      |              |               | Y           | 2-98592 2-98502            |          | INSTRUMENTATION 2-CRID-#3                 |
| 714      | 1     | 19     | 2-NTR-230 | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP #3 COLD LEG WIDE RANGE TEMPERATURE RECORDER THERMAL SENSOR                                     | 2-5128               | CONTAINME NT | 617  | LOWER CONT, QUAD NO. 3     | P         | DRIP     | Seismic Only      |              |               | Y           | 2-98502 2-98592            |          | INSTRUMENTATION 2-CRID-#3                 |
| 715      | 2     | 19     | 2-NTR-240 | 0      | REACTOR COOLANT / REACTOR COOLANT LOOP #4 COLD LEG WIDE RANGE TEMPERATURE RECORDER THERMAL SENSOR                                     | 2-5128               | CONTAINME NT | 617  | LOWER CONT, QUAD NO. 4     | P         | DRIP     | Seismic Only      |              |               | Y           | 2-98592 2-98502            |          |   |
| 716      | 2     | 19     | 2-VTS-201 | 0      | TURBINE BUILDING VENTILATION / EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP ROOM EXHAUST FAN HV-AFP-M1                                  | 12-5148B             | TURBINE      | 591  | E MTR DRIV AUX FEEDWTR PMP | S         | HVAC     | Seismic and Relay |              |               |             | 2-98214                    |          | 2-AB-D-R2D                                |
| 717      | 2     | 19     | 2-VTS-203 | 0      | TURBINE BUILDING VENTILATION / TURBINE DRIVEN AUXILIARY FEED PUMP ROOM NORTH EXHAUST FAN HV-AFP-T1                                    | 12-5148B             | TURBINE      | 591  | TB DRIVEN AUX FDWTR PMP    | S         | HVAC     | Seismic and Relay |              |               |             | 2-98216                    |          | 2-ABV-D-R4A                               |
| 718      | 1     | 19     | 2-VTS-204 | 0      | TURBINE BUILDING VENTILATION / TURBINE DRIVEN AUXILIARY FEED PUMP ROOM SOUTH EXHAUST FAN HV-AFP-T2                                    | 12-5148B             | TURBINE      | 591  | TB DRIVEN AUX FDWTR PMP    | S         | HVAC     | Seismic and Relay |              |               | Y           | 2-98216                    |          | 2-AB-A-R2C                                |
| 719      | 1     | 19     | 2-VTS-206 | 0      | TURBINE BUILDING VENTILATION / WEST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP ROOM WEST EXHAUST FAN HV-AFP-X2                             | 12-5148B             | TURBINE      | 591  | W MTR DRIVEN AUX FDWTR PMP | S         | HVAC     | Seismic and Relay |              |               |             | 2-98218                    |          | 2-ABV-A-R6A                               |
| 720      | 1     | 19     | 2-VTS-340 | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN HV-DGS-2 OUTSIDE AIR THERMOSTAT                   | 2-5148C              | GROUND       | 609  | REFUEL WTR STOR TANK AREA  | S         | HVAC     | Seismic and Relay |              |               | Y           | 2-98016                    |          | 2-ABD-A-R1C                               |
| 721      | 1     | 19     | 2-VTS-341 | 0      | DIESEL ROOM VENTILATION / AB EMERGENCY DIESEL GENERATOR ROOM VENTILATION FANS HV-DGX-2 THERMOSTAT                                     | 2-5148C              | AUXILIARY    | 587  | AB EMER DSL GEN RM         | S         | HVAC     | Seismic and Relay |              |               |             | 2-98016                    |          | 2-ABD-B-R2D                               |
| 722      | 2     | 19     | 2-VTS-345 | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION SUPPLY FAN HV-DGS-1 OUTSIDE AIR THERMOSTAT                   | 2-5148C              | AUXILIARY    | 596  | RCTR CABLE TUNN, QUAD 3    | S         | HVAC     | Seismic and Relay |              |               |             | 2-98017                    |          | 2-ABD-C-R2D                               |
| 723      | 2     | 19     | 2-VTS-348 | 0      | DIESEL ROOM VENTILATION / CD EMERGENCY DIESEL GENERATOR ROOM VENTILATION EXHAUST FAN HV-DGX-1 THERMOSTAT                              | 2-5148C              | AUXILIARY    | 587  | CD EMER DSL GEN RM         | S         | HVAC     | Seismic and Relay |              |               |             | 2-98017                    |          | 2-ABD-D-R1B                               |
| 724      | 12    | 19     | 2-VTS-350 | 0      | AUXILIARY BUILDING VENTILATION / CONTROL ROD DRIVE EQUIP ROOM AND INV AREA VENT NORTH SUPPLY FAN HV-SGRS-1A TEMPERATURE SWITCH        | 2-5148C              | AUXILIARY    | 609  | INVERTER AREA              | S         | HVAC     | Seismic and Relay |              |               | Y           | 2-98741                    |          | 2-EZC-A-R5B                               |
| 725      | 12    | 19     | 2-VTS-351 | 0      | AUXILIARY BUILDING VENTILATION / CONTROL ROD DRIVE EQUIP ROOM AND INV AREA VENT NORTH SUPPLY FAN HV-SGRS-1A TEMPERATURE SWITCH        | 2-5148C              | AUXILIARY    | 609  | CRD EQUIP RM               | S         | HVAC     | Seismic and Relay |              |               |             | 2-98741                    |          | 2-EZC-A-R5B                               |
| 726      | 12    | 19     | 2-VTS-352 | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600 VOLT SWITCHGEAR XFRMS TR21B AND TR21D AREA VENT SUPPLY FAN HV-SGRS-7 TEMPERATURE SWITCH | 2-5148C              | AUXILIARY    | 609  | 4KV RM - 600V SWGR AREA    | S         | HVAC     | Seismic and Relay |              |               |             | 2-98741                    |          | 2-EZC-D-R2B                               |
| 727      | 1     | 19     | 2-VTS-353 | 0      | AUXILIARY BUILDING VENTILATION / 600VAC MOTOR CONTROL CENTER MEZZANINE AREA VENT SUPPLY FAN HV-SGRS-9 TEMPERATURE SWITCH              | 2-5148C              | AUXILIARY    | 613  | 4KV ROOM - MEZZANINE AREA  | S         | HVAC     | Seismic and Relay |              |               |             | 2-98741                    |          | 2-EZC-B-3B                                |
| 728      | 12    | 19     | 2-VTS-354 | 0      | AUXILIARY BUILDING VENTILATION / CTRL ROD DRV EQUIP ROOM AND INV AREA VENT OUTSIDE AIR INLET DAMPER HV-SGR-MD-2 TEMPERATURE SWITCH    | 2-5148C              | AUXILIARY    | 609  | INVERTER AREA              | S         | HVAC     | Seismic and Relay |              |               |             | 2-98741                    |          | 2-EZC-C-2C                                |

**DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**

| Line No. | Train | Eq. CL | Eq. ID     | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.           | F I EL | Rm or Rwt/Cl                   | Flow Path | Function       | Eval Type         | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|------------|--------|---|----------------------|-----------------|--------|--------------------------------|-----------|----------------|-------------------|--------------|---------------|-------------|---------------------------------|---|
| 729      | 12    | 19     | 2-VTS-355  | 0      | AUXILIARY BUILDING VENTILATION / CTRL ROD DRIVE EQUIP ROOM AND INV AREA VENT RECIRC AIR INLET DAMPER HV-SGR-MD-1 TEMPERATURE SWITCH | 2-5148C              | AUXILIARY       | 609    | INVERTER AREA                  | S         | HVAC           | Seismic and Relay |              |               |             | 2-98741                         | 2-EZC-A-R5B                               |
| 730      | 12    | 19     | 2-VTS-356  | 0      | AUXILIARY BUILDING VENTILATION / CRD EQUIPMENT ROOM AND INVERTER AREA VENTILATION NORTH SUPPLY FAN HV-SGRS-4A TEMP SWITCH           | 2-5148C              | AUXILIARY       | 609    | INVERTER AREA                  | S         | HVAC           | Seismic and Relay |              |               |             | 2-98741                         | 2-EZC-C-2C                                |
| 731      | 12    | 19     | 2-VTS-357  | 0      | AUXILIARY BUILDING VENTILATION / CTRL ROD DRIVE EQUIP ROOM AND INV AREA VENTILATION SOUTH SUPPLY FAN HV-SGRS-4A TEMPERATURE SWITCH  | 2-5148C              | AUXILIARY       | 609    | CRD EQUIP RM                   | S         | HVAC           | Seismic and Relay |              |               |             | 2-98741                         | 2-EZC-C-2C                                |
| 732      | 2     | 19     | 2-VTS-702  | 0      | SCREENHOUSE VENTILATION / UNIT 2 EAST ESW PUMP ROOM TEMPERATURE SWITCH  | 12-5148B             | SCREENHOUSE     | 591    | E ESSNTL SERV WTR PMP RM       | S         | HVAC           | Seismic and Relay |              |               |             | 2-98415                         | 2-PS-D-3B                                 |
| 733      | 1     | 19     | 2-VTS-704  | 0      | SCREENHOUSE VENTILATION / UNIT 2 WEST ESW PUMP ROOM TEMPERATURE SWITCH  | 12-5148B             | UW2 SCREENHOUSE | 591    | W ESSNTL SERV WTR PMP RM       | S         | HVAC           | Seismic and Relay |              |               |             |                                 | 2-PS-A-2A                                 |
| 734      | 1     | 19     | 2-VTS-802  | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM AB 4KV SWITCHGEAR AREA VENTILATION SUPPLY FAN HV-SGRS-2 THERMAL SENSOR                    | 2-5148C              | AUXILIARY       | 609    | 4KV RM - AB 4KV SWGR AREA      | S         | HVAC           | Seismic and Relay |              |               |             | 2-98741                         | 2-EZC-A-R4B                               |
| 735      | 2     | 19     | 2-VTS-803  | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM CD 4KV SWITCHGEAR AREA VENTILATION SUPPLY FAN HV-SGRS-3 THERMAL SENSOR                    | 2-5148C              | AUXILIARY       | 609    | 4KV RM - CD 4KV SWGR AREA      | S         | HVAC           | Seismic and Relay |              |               |             | 2-98741                         | 2-EZC-D-R2B                               |
| 736      | 2     | 19     | 2-VTS-805  | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600V SWGR XFMRs TR21B AND TR21D AREA VENT SUPPLY FAN HV-SGRS-7 TEMP SWITCH THERMAL SENSOR | 2-5148C              | AUXILIARY       | 613    | 4KV ROOM - MEZZANINE AREA      | S         | HVAC           | Seismic and Relay |              |               |             | 2-98741                         | 2-EZC-D-R2B                               |
| 737      | 1     | 19     | 2-VTS-808  | 0      | AUXILIARY BUILDING VENTILATION / 4KV ROOM 600V SWGR XFMRs TR21A AND TR21C AREA VENT SUPPLY FAN HV-SGRS-8 TEMP SWITCH TEMP SWITCH    | 2-5148C              | AUXILIARY       | 609    | 4KV RM - 600V SWGR AREA        | S         | HVAC           | Seismic and Relay |              |               |             | 2-98741                         | 2-EZC-A-R4C                               |
| 738      | NA    | 20     | 2-A11      | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / AUXILIARY RELAY PANEL A11   | NONE                 | AUXILIARY       | 633    | CONTROL ROOM                   | E         | SUPPORT        | Seismic Only      |              |               |             |                                 |   |
| 739      | NA    | 20     | 2-A13      | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / AUXILIARY RELAY PANEL A13   | NONE                 | AUXILIARY       | 633    | CONTROL ROOM                   | E         | SUPPORT        | Seismic Only      |              |               |             |                                 |   |
| 740      | 2     | 20     | 2-ACRA-1   | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / CONTROL ROOM AIR HANDLING SUBPANEL #1   | NONE                 | AUXILIARY       | 650    | CTRL RM AIR CONDIT RM          | E         | SUPPORT        | Seismic Only      |              |               |             |                                 |   |
| 741      | 1     | 20     | 2-ACRA-2   | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / CONTROL ROOM AIR HANDLING SUBPANEL #2   | NONE                 | AUXILIARY       | 650    | CTRL RM AIR CONDIT RM          | E         | SUPPORT        | Seismic Only      |              |               |             |                                 |   |
| 742      | 2     | 20     | 2-ARA-2    | 0      | 120V/220V CONTROL AND INSTRUMENTATION / REACTOR PROTECTION TRAIN 'A' AUXILIARY RELAY CABINET #2                                     | NONE                 | AUXILIARY       | 633    | CONTROL ROOM                   | E         | 120 VAC SYSTEM | Seismic Only      |              |               |             |                                 |   |
| 743      | 1     | 20     | 2-ARB-2    | 0      | 120V/220V CONTROL AND INSTRUMENTATION / REACTOR PROTECTION TRAIN 'B' AUXILIARY RELAY CABINET #2                                     | NONE                 | AUXILIARY       | 633    | CONTROL ROOM                   | E         | 120 VAC SYSTEM | Seismic Only      |              |               |             |                                 |   |
| 744      | 12    | 20     | 2-BA       | 0      | BORON MAKEUP (CVCS) / BORIC ACID CHARGING AND LETDOWN CONTROL PANEL   | NONE                 | AUXILIARY       | 633    | CONTROL ROOM                   | E         | SUPPORT        | Seismic Only      |              |               |             |                                 |   |
| 745      | 2     | 20     | 2-BC-A-PNL | 0      | 120/220V CONTROL AND INSTRUMENTATION / TRAIN 'A' BATTERY DISTRIBUTION TRAIN 'A' BATTERY CHARGER BC-A CONTROL BOX                    |                      | AUXILIARY       | 633    | NORMAL BLOWDOWN FLASHTANK ROOM | E         | PANEL          | Seismic Only      |              |               | N           |                                 |   |
| 746      | 1     | 20     | 2-BC-B-PNL | 0      | 120/220V CONTROL AND INSTRUMENTATION / TRAIN 'B' BATTERY DISTRIBUTION TRAIN 'B' BATTERY CHARGER BC-B CONTROL BOX                    |                      | AUXILIARY       | 633    | NORMAL BLOWDOWN FLASHTANK ROOM | E         | PANEL          |                   |              |               | N           |                                 |   |

DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID   | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.     | FIEL | Rm or Rm/CL        | Flow Path | Function | Eval Type    | Normal State | Desired State | Power Req'd | Supporting Sys. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|----------|--------|---|----------------------|-----------|------|--------------------|-----------|----------|--------------|--------------|---------------|-------------|----------------------------|---|
| 747      | 12    | 20     | 2-CAS    | 0      | CONTAINMENT VENTILATION / CONTAINMENT AUXILIARIES SUBPANEL (VENTILATION)  | NONE                 | AUXILIARY | 633  | 633 HALLWAY        | E         | SUPPORT  | Seismic Only |              |               |             |                            |   |
| 748      | NA    | 20     | 2-CCW    | 0      | COMPONENT COOLING WATER / COMPONENT COOLING WATER CONTROL PANEL   |                      | AUXILIARY | 633  | CONTROL ROOM       | E         | SUPPORT  | Seismic Only |              |               |             |                            |   |
| 749      | NA    | 20     | 2-CG1    | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / REACTOR PROTECTION CONTROL GROUP #1 CABINET #14, 15, 16 (RACK #14, 15, & 16)              | NONE                 | AUXILIARY | 633  | CONTROL ROOM       | E         | SUPPORT  | Seismic Only |              |               |             |                            |   |
| 750      | 2     | 20     | 2-CG2    | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / REACTOR PROTECTION CONTROL GROUP #2 CABINET #17, #18 & #19 (RACK #17, 18, & 19)           | NONE                 | AUXILIARY | 633  | CONTROL ROOM       | E         | SUPPORT  | Seismic Only |              |               |             |                            |   |
| 751      | NA    | 20     | 2-CG3    | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / REACTOR PROTECTION CONTROL GROUP #3 CABINET #20, #21 (RACK #21 & 22)                      | NONE                 | AUXILIARY | 633  | CONTROL ROOM       | E         | SUPPORT  | Seismic Only |              |               |             |                            |   |
| 752      | NA    | 20     | 2-CG4    | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / REACTOR PROTECTION CONTROL GROUP #4 CABINET #22, #23, #24, & #25 (RACK #22, 23, 24, & 25) | NONE                 | AUXILIARY | 633  | CONTROL ROOM       | E         | SUPPORT  | Seismic Only |              |               |             |                            |   |
| 753      | NA    | 20     | 2-CL-26  | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / REACTOR PROTECTION CONTROL INPUT CABINET #26  | NONE                 | AUXILIARY | 633  | CONTROL ROOM       | E         | SUPPORT  | Seismic Only |              |               |             |                            |   |
| 754      | NA    | 20     | 2-CL-27  | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / REACTOR PROTECTION CONTROL INPUT CABINET #27  | NONE                 | AUXILIARY | 633  | CONTROL ROOM       | E         | SUPPORT  | Seismic Only |              |               |             |                            |   |
| 755      | NA    | 20     | 2-CP     | 0      | CONDENSATE / CONDENSATE PUMP CONTROL PANEL  | NONE                 | AUXILIARY | 633  | CONTROL ROOM       | E         | SUPPORT  | Seismic Only |              |               |             |                            |   |
| 756      | NA    | 20     | 2-CR     | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / CONDENSATE PANEL REAR INSTRUMENT/RELAY RACK  | NONE                 | AUXILIARY | 633  | CONTROL ROOM       | E         | SUPPORT  | Seismic Only |              |               |             |                            |   |
| 757      | 1     | 20     | 2-DGAB   | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / AB EMERGENCY DIESEL GENERATOR OME-150-AB CONTROL SUBPANEL                                 | NONE                 | AUXILIARY | 587  | AB EMER DSL GEN RM | E         | SUPPORT  | Seismic Only |              |               |             |                            |   |
| 758      | 1     | 20     | 2-DGAB-X | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / AB EMERGENCY DIESEL GENERATOR OME-150-AB AUXILIARY SUBPANEL                               | NONE                 | AUXILIARY | 587  | AB EMER DSL GEN RM | E         | SUPPORT  | Seismic Only |              |               |             |                            |   |
| 759      | 2     | 20     | 2-DGCD   | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / CD EMERGENCY DIESEL GENERATOR OME-150-CD CONTROL SUBPANEL                                 | NONE                 | AUXILIARY | 587  | CD EMER DSL GEN RM | E         | SUPPORT  | Seismic Only |              |               |             |                            |   |
| 760      | 2     | 20     | 2-DGCD-X | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / CD EMERGENCY DIESEL GENERATOR OME-150-CD AUXILIARY SUBPANEL                               | NONE                 | AUXILIARY | 587  | CD EMER DSL GEN RM | E         | SUPPORT  | Seismic Only |              |               |             |                            |   |
| 761      | NA    | 20     | 2-DTU    | 0      | TURBINE INSTRUMENTATION & CONTROL / DELTA T AND UNIT CONTROL PANEL  | NONE                 | AUXILIARY | 633  | CONTROL ROOM       | E         | SUPPORT  | Seismic Only |              |               |             |                            |   |
| 762      | NA    | 20     | 2-EFR    | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / EMERGENCY FIRE PANEL INSTRUMENT/RELAY RACK   | NONE                 | AUXILIARY | 633  | CONTROL ROOM       | E         | SUPPORT  | Seismic Only |              |               |             |                            |   |
| 763      | NA    | 20     | 2-ESW    | 0      | ESSENTIAL SERVICE WATER / ESSENTIAL SERVICE WATER CONTROL PANEL   |                      | AUXILIARY | 633  | CONTROL ROOM       | E         | SUPPORT  | Seismic Only |              |               |             |                            |   |
| 764      | NA    | 20     | 2-FLX    | 0      | NUCLEAR INSTRUMENTATION / FLUX CONTROL PANEL  |                      | AUXILIARY | 633  | CONTROL ROOM       | E         | SUPPORT  | Seismic Only |              |               |             |                            |   |
| 765      | 12    | 20     | 2-GR-1   | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / GENERATOR PANEL REAR INSTRUMENT/RELAY RACK #1  | NONE                 | AUXILIARY | 633  | CONTROL ROOM       | E         | SUPPORT  | Seismic Only |              |               |             |                            |   |
| 766      | NA    | 20     | 2-GR-2   | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / GENERATOR PANEL REAR INSTRUMENT/RELAY RACK #2  | NONE                 | AUXILIARY | 633  | CONTROL ROOM       | E         | SUPPORT  | Seismic Only |              |               |             |                            |   |



**DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**

| Line No. | Train | Eq. CL | Eq. ID         | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.     | FIEL | Rm or Rwf/CI                  | Flow Path | Function | Eval Type    | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|----------------|--------|---|----------------------|-----------|------|-------------------------------|-----------|----------|--------------|--------------|---------------|-------------|---------------------------------|---|
| 767      | NA    | 20     | 2-GRB          | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / GENERATOR PANEL REAR INSTRUMENT/RELAY RACK 'B'   | NONE                 | AUXILIARY | 633  | CONTROL ROOM                  | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 768      | NA    | 20     | 2-GRC          | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / GENERATOR PANEL REAR INSTRUMENT/RELAY RACK 'C'   | NONE                 | AUXILIARY | 633  | CONTROL ROOM                  | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 769      | NA    | 20     | 2-HSD2         | 0      | SAFETY INJECTION / UNIT 2 HOT SHUTDOWN PANEL  | NONE                 | AUXILIARY | 633  | CONTROL ROOM                  | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 770      | NA    | 20     | 2-IV           | 0      | CONTAINMENT SPRAY / CONTAINMENT ISOLATION VALVE CONTROL PANEL   |                      | AUXILIARY | 633  | CONTROL ROOM                  | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 771      | 2     | 20     | 2-LSI-1        | 0      | STEAM GENERATING / STEAM GENERATORS #1 AND #4 LOCAL SHUTDOWN STATION  | NONE                 | AUXILIARY | 612  | E MAIN STM STOP ENCL          | E         | PANEL    | Seismic Only |              |               |             |                                 |   |
| 772      | 1     | 20     | 2-LSI-2        | 0      | STEAM GENERATING / STEAM GENERATORS #2 AND #3 LOCAL SHUTDOWN STATION  | NONE                 | AUXILIARY | 591  | STARTUP BLOWDOWN FLASHTANK RM | E         | PANEL    | Seismic Only |              |               |             |                                 |   |
| 773      | 12    | 20     | 2-LSI-3        | 0      | PRESSURIZER / REACTOR COOLANT SYSTEM CHARGING AND LETDOWN LOCAL SHUTDOWN STATION  | NONE                 | AUXILIARY | 587  | 587 HALLWAY                   | E         | PANEL    | Seismic Only |              |               |             |                                 |   |
| 774      | 12    | 20     | 2-LSI-4        | 0      | EQUIPMENT CONTROL AND INDICATION STATION / REACTOR COOLANT SYSTEM TEMPERATURES AND STEAM GENERATORS LOCAL SHUTDOWN STATION                |                      | AUXILIARY | 587  | 587 HALLWAY                   | E         | PANEL    | Seismic Only |              |               |             |                                 |   |
| 775      | NA    | 20     | 2-LSI-5        | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / REACTOR COOLANT LOOPS #1 AND #4 TEMPERATURES, SG'S #1 AND #4 PRESSURES LOCAL SHUTDOWN STATION | NONE                 | AUXILIARY | 612  | E MAIN STM STOP ENCL          | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 776      | NA    | 20     | 2-LSI-5XX      | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / LOCAL SHUTDOWN STATION 5XX  | NONE                 | AUXILIARY | 598  | RCTR CABLE TUNN, QUAD 1       | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 777      | NA    | 20     | 2-LSI-6        | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / REACTOR COOLANT LOOPS #2 AND #3 TEMPERATURES, SG'S #2 AND #3 PRESSURES LOCAL SHUTDOWN STATION | NONE                 | AUXILIARY | 591  | STARTUP BLOWDOWN FLASHTANK RM | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 778      | 2     | 20     | 2-LSI-6XX      | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / LOCAL SHUTDOWN STATION 6XX  | NONE                 | AUXILIARY | 598  | RCTR CABLE TUNN, QUAD 3       | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 779      | NA    | 20     | 2-NIS-I        | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / NUCLEAR INSTRUMENTATION SYSTEM PROTECTION CHANNEL I CONTROL PANEL                             | NONE                 | AUXILIARY | 633  | CONTROL ROOM                  | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 780      | NA    | 20     | 2-NIS-III      | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / NUCLEAR INSTRUMENTATION SYSTEM PROTECTION CHANNEL III CONTROL PANEL                           | NONE                 | AUXILIARY | 633  | CONTROL ROOM                  | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 781      | NA    | 20     | 2-NRI-21-AMP   | 0      | NUCLEAR INSTRUMENTATION / NUCLEAR INSTRUMENTATION WIDE RANGE RADIATION AMPLIFIER CABINET  | NONE                 | AUXILIARY | 598  | RCTR CABLE TUNN, QUAD 1       | E         | SUPPORT  | Seismic Only |              |               |             | 2-98524                         |   |
| 782      | NA    | 20     | 2-NRI-21-PRCSR | 0      | NUCLEAR INSTRUMENTATION / NUCLEAR INSTRUMENTATION WIDE RANGE SIGNAL PROCESSOR CABINET   | NONE                 | AUXILIARY | 633  | CONTROL ROOM                  | E         | SUPPORT  | Seismic Only |              |               |             | 2-98524                         |   |
| 783      | NA    | 20     | 2-NRI-23-AMP   | 0      | NUCLEAR INSTRUMENTATION / NUCLEAR INSTRUMENTATION SOURCE RANGE RADIATION DETECTOR NRI-23 AMPLIFIER CABINET                                | NONE                 | AUXILIARY | 598  | RCTR CABLE TUNN, QUAD 1       | E         | SUPPORT  | Seismic Only |              |               |             | 2-98524                         | 2-CRID-III-6                              |
| 784      | NA    | 20     | 2-NRI-23-ISOL  | 0      | NUCLEAR INSTRUMENTATION / NUCLEAR INSTRUMENTATION SOURCE RANGE SIGNAL ISOLATOR CABINET  | NONE                 | AUXILIARY | 598  | RCTR CABLE TUNN, QUAD 1       | E         | SUPPORT  | Seismic Only |              |               |             | 2-98524                         | 2-CRID-III-6                              |
| 785      | NA    | 20     | 2-NRI-23-PRCSR | 0      | NUCLEAR INSTRUMENTATION / NUCLEAR INSTRUMENTATION SOURCE RANGE SIGNAL PROCESSOR CABINET   | NONE                 | AUXILIARY | 598  | RCTR CABLE TUNN, QUAD 1       | E         | SUPPORT  | Seismic Only |              |               |             | 2-98524                         | 2-CRID-III-6                              |

**DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**

| Line No. | Train | Eq. CL | Eq. ID    | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.     | FIEL | Rm or RwrCl         | Flow Path | Function | Eval Type    | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|-----------|--------|--|----------------------|-----------|------|---------------------|-----------|----------|--------------|--------------|---------------|-------------|---------------------------------|---|
| 786      | NA    | 20     | 2-NSR     | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / NUCLEAR INSTRUMENTATION SYSTEM REAR INSTRUMENT/RELAY RACK | NONE                 | AUXILIARY | 633  | CONTROL ROOM        | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 787      | NA    | 20     | 2-PRZ     | 0      | PRESSURIZER / PRESSURIZER CONTROL PANEL  | NONE                 | AUXILIARY | 633  | CONTROL ROOM        | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 788      | NA    | 20     | 2-RC      | 0      | ROD CONTROL AND INSTRUMENTATION / REACTOR CONTROL RODS CONTROL PANEL                         | NONE                 | AUXILIARY | 633  | CONTROL ROOM        | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 789      | NA    | 20     | 2-RCP     | 0      | REACTOR COOLANT / REACTOR COOLANT PUMP CONTROL PANEL   | NONE                 | AUXILIARY | 633  | CONTROL ROOM        | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 790      | 12    | 20     | 2-RHR     | 0      | RESIDUAL HEAT REMOVAL / RESIDUAL HEAT REMOVAL CONTROL PANEL                                  | NONE                 | AUXILIARY | 633  | CONTROL ROOM        | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 791      | NA    | 20     | 2-RPC-I   | 0      | REACTOR PROTECTION / REACTOR PROTECTION CHANNEL I CAB #1, 2, 3 & 4 (RACK #1, 2, 3, & 4)      | NONE                 | AUXILIARY | 633  | CONTROL ROOM        | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 792      | NA    | 20     | 2-RPC-II  | 0      | REACTOR PROTECTION / REACTOR PROTECTION CHANNEL II CABINET #5, 6 & 7 (RACK #5, 6, 7, & 8)    | NONE                 | AUXILIARY | 633  | CONTROL ROOM        | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 793      | NA    | 20     | 2-RPC-III | 0      | REACTOR PROTECTION / REACTOR PROTECTION CHANNEL III CABINET #9, 10 & 11 (RACK #9, 10, 11)    | NONE                 | AUXILIARY | 633  | CONTROL ROOM        | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 794      | NA    | 20     | 2-RPC-IV  | 0      | REACTOR PROTECTION / REACTOR PROTECTION CHANNEL IV CABINET #12 & #13 (RACK #12 & 13)         | NONE                 | AUXILIARY | 633  | CONTROL ROOM        | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 795      | 2     | 20     | 2-RPS-A   | 0      | REACTOR PROTECTION / REACTOR PROTECTION AND SAFEGUARD ACTUATION TRAIN 'A' CABINET            | NONE                 | AUXILIARY | 633  | CONTROL ROOM        | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 796      | 1     | 20     | 2-RPS-B   | 0      | REACTOR PROTECTION / REACTOR PROTECTION AND SAFEGUARD ACTUATION TRAIN 'B' CABINET            | NONE                 | AUXILIARY | 633  | CONTROL ROOM        | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 797      | 2     | 20     | 2-RPSX-A  | 0      | REACTOR PROTECTION / REACTOR PROTECTION AND SAFEGUARD ACTUATION TRAIN 'A' AUXILIARY CABINET  | NONE                 | AUXILIARY | 633  | CONTROL ROOM        | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 798      | 1     | 20     | 2-RPSX-B  | 0      | REACTOR PROTECTION / REACTOR PROTECTION AND SAFEGUARD ACTUATION TRAIN 'B' AUXILIARY CABINET  | NONE                 | AUXILIARY | 633  | CONTROL ROOM        | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 799      | NA    | 20     | 2-SA      | 0      | ELECTRICAL DISTRIBUTION, 4160VAC / STATION AUXILIARIES CONTROL PANEL                         | NONE                 | AUXILIARY | 633  | CONTROL ROOM        | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 800      | NA    | 20     | 2-SCP     | 0      | NUCLEAR SAMPLING / NUCLEAR SAMPLING SYSTEM CONTROL PANEL                                     |                      | AUXILIARY | 587  | NUCLEAR SAMPLING RM | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 801      | NA    | 20     | 2-SG      | 0      | STEAM GENERATION / STEAM GENERATOR AND AUXILIARY FEED PUMP CONTROL PANEL                     | NONE                 | AUXILIARY | 633  | CONTROL ROOM        | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 802      | 12    | 20     | 2-SIS     | 0      | SAFETY INJECTION / SAFETY INJECTION CONTROL PANEL  | NONE                 | AUXILIARY | 633  | CONTROL ROOM        | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 803      | 12    | 20     | 2-SPY     | 0      | CONTAINMENT SPRAY / CONTAINMENT SPRAY CONTROL PANEL  | NONE                 | AUXILIARY | 633  | CONTROL ROOM        | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 804      | 12    | 20     | 2-SR1     | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / STATION AUXILIARIES REAR INSTRUMENT/RELAY RACK #1         | NONE                 | AUXILIARY | 633  | CONTROL ROOM        | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 805      | NA    | 20     | 2-SR2     | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / STATION AUXILIARIES REAR INSTRUMENT/RELAY RACK #2         | NONE                 | AUXILIARY | 633  | CONTROL ROOM        | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 806      | NA    | 20     | 2-SR3     | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / STATION AUXILIARIES REAR INSTRUMENT/RELAY RACK #3         | NONE                 | AUXILIARY | 633  | CONTROL ROOM        | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 807      | NA    | 20     | 2-SR4     | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / STATION AUXILIARIES REAR INSTRUMENT/RELAY RACK #4         | NONE                 | AUXILIARY | 633  | CONTROL ROOM        | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |
| 808      | 12    | 20     | 2-SSR     | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / ENGINEER SAFETY SYSTEM REAR INSTRUMENT/RELAY RACK         | NONE                 | AUXILIARY | 633  | CONTROL ROOM        | E         | SUPPORT  | Seismic Only |              |               |             |                                 |   |

DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID      | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.         | FIEL | Rm or Rm/Cl                  | Flow Path | Function                     | Eval Type    | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|-------------|--------|--|----------------------|---------------|------|------------------------------|-----------|------------------------------|--------------|--------------|---------------|-------------|---------------------------------|---|
| 809      | NA    | 20     | 2-SWR       | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / NUCLEAR INSTRUMENTAL SOURCE RANGE N21 INSTRUMENT/RELAY RACK | NONE                 | AUXILIARY     | 633  | CONTROL ROOM                 | E         | SUPPORT                      | Seismic Only |              |               |             |                                 |   |
| 810      | NA    | 20     | 2-SWRR      | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / CONTROL ROOM SOUTHWEST INSTRUMENT/RELAY RACK                |                      | AUXILIARY     | 633  | CONTROL ROOM                 | E         | SUPPORT                      | Seismic Only |              |               |             |                                 |   |
| 811      | NA    | 20     | 2-TFP       | 0      | EQUIPMENT CONTROL AND INDICATION STATIONS / TURBINE DRIVEN AUX FEED PUMP SUBPANEL              | NONE                 | TURBINE       | 591  | TB DRIVEN AUX FDMTR PMP      | E         | SUPPORT                      | Seismic Only |              |               |             |                                 |   |
| 812      | NA    | 20     | 2-TRB       | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / TURBINE PANEL REAR INSTRUMENT/RELAY RACK 'B'                | NONE                 | AUXILIARY     | 633  | CONTROL ROOM                 | E         | SUPPORT                      | Seismic Only |              |               |             |                                 |   |
| 813      | NA    | 20     | 2-TRD       | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / TURBINE PANEL REAR INSTRUMENT/RELAY RACK 'D'                | NONE                 | AUX           | 633  | CONTROL ROOM                 | E         | SUPPORT                      | Seismic Only |              |               |             |                                 |   |
| 814      | NA    | 20     | 2-TRE       | 0      | MISCELLANEOUS EQUIPMENT SUPPORTS / TURBINE PANEL REAR INSTRUMENT/RELAY RACK                    | NONE                 | AUXILIARY     | 633  | CONTROL ROOM                 | E         | SUPPORT                      | Seismic Only |              |               |             |                                 |   |
| 815      | NA    | 20     | 2-TSC-VO-07 | 0      | COMPUTER SUPPORT SYSTEMS / TSC COMPUTER INPUT/OUTPUT CABINET #07                               | NONE                 | AUXILIARY     | 633  | 633 HALLWAY                  | E         | SUPPORT                      | Seismic Only |              |               |             | 2-98048, 2-98049                |   |
| 816      | NA    | 20     | 2-TSC-VO-09 | 0      | COMPUTER SUPPORT SYSTEMS / TSC COMPUTER INPUT/OUTPUT CABINET #9                                | NONE                 | AUXILIARY     | 633  | 633 HALLWAY                  | E         | SUPPORT                      | Seismic Only |              |               |             | 2-98050, 2-98051                |   |
| 817      | NA    | 20     | 2-TSC-VO-13 | 0      | NONE / TSC COMPUTER INPUT/OUTPUT CABINET #13   | NONE                 | AUXILIARY     | 633  | 633 HALLWAY                  | E         | SUPPORT                      | Seismic Only |              |               |             | 2-98052, 2-98053                |   |
| 818      | NA    | 20     | 2-TSC-VO-15 | 0      | COMPUTER SUPPORT SYSTEMS / TSC COMPUTER INPUT/OUTPUT CABINET #15                               | NONE                 | AUXILIARY     | 633  | 633 HALLWAY                  | E         | SUPPORT                      | Seismic Only |              |               |             | 2-98054, 2-98055                |   |
| 819      | NA    | 20     | 2-VS        | 0      | CONTAINMENT VENTILATION / VENTILATION CONTROL PANEL  |                      | AUXILIARY     | 633  | CONTROL ROOM                 | E         | SUPPORT                      | Seismic Only |              |               |             |                                 |   |
| 820      | 12    | 21     | 12-HE-16S   | 0      | SPENT FUEL PIT COOLING/CLEANUP & CCW / SOUTH SPENT FUEL PIT HEAT EXCHANGER                     | 12-5136, 1-5135      | U-2 AUXILIARY | 609  | SPENT FUEL PIT HEAT XCHGR RM | S         | SPENT FUEL PIT COOLING & CCW | Seismic Only |              |               | N           |                                 |   |
| 821      | 12    | 21     | 2-HE-11     | 0      | REACTOR COOLANT PUMP SEAL WATER IN/LEAKOFF / REACTOR COOLANT PUMP SEAL WATER HEAT EXCHANGER    | 2-5129A 2-5135       | AUXILIARY     | 609  | SEAL WTR HEAT XCHGR RM       | P         | RI                           | Seismic Only |              |               | N           |                                 |   |
| 822      | 12    | 21     | 2-HE-13     | 0      | LETDOWN (CVCS) / EXCESS LETDOWN HEAT EXCHANGER   | 2-5129A 2-5135       | CONTAINMENT   | 612  | REGEN HEAT XCHGR RM          | P         | RI                           | Seismic Only |              |               | N           |                                 |   |
| 823      | 12    | 21     | 2-HE-14     | 0      | LETDOWN (CVCS) / LETDOWN HEAT EXCHANGER  | 2-5135, 2-5129       | AUXILIARY     | 633  | LETDOWN HEAT XCHGR RM        | S         | CCW                          | Seismic Only |              |               | N           |                                 |   |
| 824      | 2     | 21     | 2-HE-15E    | 0      | COMPONENT COOLING WATER / EAST COMPONENT COOLING WATER HEAT EXCHANGER                          | 2-5135A 2-5113       | AUXILIARY     | 609  | 609 HALLWAY                  | S         | CCW                          | Seismic Only |              |               | N           |                                 |   |
| 825      | 1     | 21     | 2-HE-15W    | 0      | COMPONENT COOLING WATER / WEST COMPONENT COOLING WATER HEAT EXCHANGER                          | 2-5135A 2-5113       | AUXILIARY     | 609  | 609 HALLWAY                  | S         | CCW                          | Seismic Only |              |               | N           |                                 |   |
| 826      | 2     | 21     | 2-HE-17E    | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER                              | 2-5143 2-5135A       | AUXILIARY     | 609  | E RHR HEAT XCHGR RM          | P         | DRIP                         | Seismic Only |              |               |             |                                 |   |
| 827      | 1     | 21     | 2-HE-17W    | 0      | RESIDUAL HEAT REMOVAL / WEST RESIDUAL HEAT REMOVAL HEAT EXCHANGER                              | 2-5143 2-5135A       | AUXILIARY     | 609  | W RHR HEAT XCHGR RM          | P         | DRIP                         | Seismic Only |              |               |             |                                 |   |
| 828      | 2     | 21     | 2-HE-18E    | 0      | CONTAINMENT SPRAY / EAST CONTAINMENT SPRAY HEAT EXCHANGER                                      | 2-5113 2-5144        | AUXILIARY     | 609  | E CONT SPRAY HEAT XCHGR RM   | S         | ESW                          | Seismic Only |              |               | N           |                                 |   |
| 829      | 1     | 21     | 2-HE-18W    | 0      | CONTAINMENT SPRAY / WEST CONTAINMENT SPRAY HEAT EXCHANGER                                      | 2-5113 2-5144        | AUXILIARY     | 609  | W CONT SPRAY HEAT XCHGR RM   | S         | ESW                          | Seismic Only |              |               | N           |                                 |   |
| 830      | 2     | 21     | 2-HE-32E    | 0      | RESIDUAL HEAT REMOVAL / EAST RESIDUAL HEAT REMOVAL PUMP PP-35E MECHANICAL SEAL HEAT EXCHANGER  | 2-5135A              | AUXILIARY     | 573  | EAST RHR PUMP RM             | S         | CCW                          | Seismic Only |              |               | N           |                                 |   |



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SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID     | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.     | Fl. EL | Rm or Rm/CL                  | Flow Path | Function | Eval Type    | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|------------|--------|---|----------------------|-----------|--------|------------------------------|-----------|----------|--------------|--------------|---------------|-------------|---------------------------------|---|
| 831      | 1     | 21     | 2-HE-32W   | 0      | RESIDUAL HEAT REMOVAL / WEST RESIDUAL HEAT REMOVAL PUMP PP-35W MECHANICAL SEAL HEAT EXCHANGER           | 2-5135A              | AUXILIARY | 573    | W RHR PMP RM                 | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 832      | 2     | 21     | 2-HE-33E   | 0      | CCW / EAST CONTAINMENT SPRAY PUMP PP-9E MECHANICAL SEAL HEAT EXCHANGER                                  | 2-5135A              | AUXILIARY | 573    | E CONT SPRAY PMP RM          | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 833      | 1     | 21     | 2-HE-33W   | 0      | CCW / WEST CONTAINMENT SPRAY PUMP PP-9W MECHANICAL SEAL HEAT EXCHANGER                                  | 2-5135A              | AUXILIARY | 573    | W CONT SPRAY PMP RM          | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 834      | 2     | 21     | 2-HE-34-NE | 0      | COMPONENT COOLING WATER / NORTH SAFETY INJECTION PUMP PP-26N OUTBOARD MECHANICAL SEAL HEAT EXCHANGER    | 2-5135A              | AUXILIARY | 587    | N SAFETY INJ PMP RM          | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 835      | 2     | 21     | 2-HE-34-NW | 0      | COMPONENT COOLING WATER / NORTH SAFETY INJECTION PUMP PP-26N INBOARD MECHANICAL SEAL HEAT EXCHANGER     | 2-5135A              | AUXILIARY | 587    | N SAFETY INJ PMP RM          | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 836      | 1     | 21     | 2-HE-34-SE | 0      | COMPONENT COOLING WATER / SOUTH SAFETY INJECTION PUMP PP-26S OUTBOARD MECHANICAL SEAL HEAT EXCHANGER    | 2-5135A              | AUXILIARY | 587    | S SAFETY INJ PMP RM          | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 837      | 1     | 21     | 2-HE-34-SW | 0      | COMPONENT COOLING WATER / SOUTH SAFETY INJECTION PUMP PP-26S INBOARD MECHANICAL SEAL HEAT EXCHANGER     | 2-5135A              | AUXILIARY | 587    | S SAFETY INJ PMP RM          | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 838      | 2     | 21     | 2-HE-35N   | 0      | COMPONENT COOLING WATER / NORTH SAFETY INJECTION PUMP PP-26N LUBE OIL COOLER                            | 2-5135A              | AUXILIARY | 587    | N SAFETY INJ PMP RM          | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 839      | 1     | 21     | 2-HE-35S   | 0      | COMPONENT COOLING WATER / SOUTH SAFETY INJECTION PUMP PP-26S LUBE OIL COOLER                            | 2-5135A              | AUXILIARY | 587    | S SAFETY INJ PMP RM          | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 840      | 2     | 21     | 2-HE-36-EN | 0      | COMPONENT COOLING WATER / EAST CENTRIFUGAL CHARGING PUMP PP-50E INBOARD MECHANICAL SEAL HEAT EXCHANGER  | 2-5135A              | AUXILIARY | 587    | E CENTRIFUGAL CHARG PMP ROOM | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 841      | 2     | 21     | 2-HE-36-ES | 0      | COMPONENT COOLING WATER / EAST CENTRIFUGAL CHARGING PUMP PP-50E OUTBOARD MECHANICAL SEAL HEAT EXCHANGER | 2-5135A              | AUXILIARY | 587    | E CENTRIFUGAL CHARG PMP ROOM | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 842      | 1     | 21     | 2-HE-36-WN | 0      | COMPONENT COOLING WATER / WEST CENTRIFUGAL CHARGING PUMP PP-50W INBOARD MECHANICAL SEAL HEAT EXCHANGER  | 2-5135A              | AUXILIARY | 587    | W CENTRIFUGAL CHARG PMP RM   | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 843      | 1     | 21     | 2-HE-36-WS | 0      | COMPONENT COOLING WATER / WEST CENTRIFUGAL CHARGING PUMP PP-50W OUTBOARD MECHANICAL SEAL HEAT EXCHANGER | 2-5135A              | AUXILIARY | 587    | W CENTRIFUGAL CHARG PMP RM   | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 844      | 2     | 21     | 2-HE-37E   | 0      | MISCELLANEOUS SEALING AND COOLING / EAST CENTRIFUGAL CHARGING PUMP PP-50E GEAR OIL COOLER               | 2-5135A              | AUXILIARY | 587    | E CENTRIFUGAL CHARG PMP ROOM | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 845      | 1     | 21     | 2-HE-37W   | 0      | MISCELLANEOUS SEALING AND COOLING / WEST CENTRIFUGAL CHARGING PUMP PP-50W GEAR OIL COOLER               | 2-5135A              | AUXILIARY | 587    | W CENTRIFUGAL CHARG PMP RM   | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 846      | 2     | 21     | 2-HE-38E   | 0      | MISCELLANEOUS SEALING AND COOLING / EAST CENTRIFUGAL CHARGING PUMP PP-50E LUBE OIL COOLER               | 2-5135A              | AUXILIARY | 587    | E CENTRIFUGAL CHARG PMP ROOM | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 847      | 1     | 21     | 2-HE-38W   | 0      | MISCELLANEOUS SEALING AND COOLING / WEST CENTRIFUGAL CHARGING PUMP PP-50W LUBE OIL COOLER               | 2-5135A              | AUXILIARY | 587    | W CENTRIFUGAL CHARG PMP RM   | S         | CCW      | Seismic Only |              |               | N           |                                 |   |

DONALD C. COOK NUCLEAR PLANT UNIT #2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)

| Line No. | Train | Eq. CL | Eq. ID       | Rev No | Sys/Eq. Desc   | Drawing No. Rev/Zone | Bldg.     | F I EL | Rm or Rwf/CI                 | Flow Path | Function | Eval Type    | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|--------------|--------|--|----------------------|-----------|--------|------------------------------|-----------|----------|--------------|--------------|---------------|-------------|---------------------------------|---|
| 848      | 1     | 21     | 2-HE-47-ABN  | 0      | DIESEL COMBUSTION AIR / AB EMERGENCY DIESEL NORTH COMBUSTION AIR AFTERCOOLER   | 2-5113 2-5151B       | AUXILIARY | 587    | AB EMER DSL GEN RM           | S         | EDG      | Seismic Only |              |               | N           |                                 |   |
| 849      | 1     | 21     | 2-HE-47-ABS  | 0      | DIESEL COMBUSTION AIR / AB EMERGENCY DIESEL SOUTH COMBUSTION AIR AFTERCOOLER   | 2-5113, 2-5151B      | AUXILIARY | 587    | AB EMER DSL GEN RM           | S         | EDG      | Seismic Only |              |               | Y           |                                 |   |
| 850      | 2     | 21     | 2-HE-47-CDN  | 0      | DIESEL COMBUSTION AIR / CD EMERGENCY DIESEL NORTH COMBUSTION AIR AFTERCOOLER   | 2-5113, 2-5151D      | AUXILIARY | 587    | CD EMER DSL GEN RM           | S         | EDG      | Seismic Only |              |               | N           |                                 |   |
| 851      | 2     | 21     | 2-HE-47-CDS  | 0      | DIESEL COMBUSTION AIR / CD EMERGENCY DIESEL SOUTH COMBUSTION AIR AFTERCOOLER   | 2-5113, 2-5151D      | AUXILIARY | 587    | CD EMER DSL GEN RM           | S         | EDG      | Seismic Only |              |               | N           |                                 |   |
| 852      | 12    | 21     | 2-QP-21      | 0      | BORON MAKEUP (CVCS) / SOUTH BORIC ACID BLENDER                                 | 12-5131              | AUXILIARY | 587    | BORIC ACID STOR TANK AREA    | P         | RI       | Seismic Only |              |               | N           |                                 |   |
| 853      | 1     | 21     | 2-QT-107-AB  | 0      | DIESEL FUEL OIL / AB EMERGENCY DIESEL FUEL OIL DAY TANK                        | 2-5151A              | AUXILIARY | 587    | AB EMER DSL GEN RM           | S         | EDG      | Seismic Only |              |               | N           |                                 |   |
| 854      | 2     | 21     | 2-QT-107-CD  | 0      | DIESEL FUEL OIL / CD EMERGENCY DIESEL FUEL OIL DAY TANK                        | 2-5151C              | AUXILIARY | 587    | CD EMER DSL GEN RM           | S         | EDG      | Seismic Only |              |               | N           |                                 |   |
| 855      | 1     | 21     | 2-QT-110-AB  | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL LUBE OIL COOLER                          | 2-5151A 2-5113       | AUXILIARY | 587    | AB EMER DSL GEN RM           | S         | EDG      | Seismic Only |              |               | N           |                                 |   |
| 856      | 2     | 21     | 2-QT-110-CD  | 0      | DIESEL LUBE OIL / CD EMERGENCY DIESEL LUBE OIL COOLER                          | 2-5151C 2-5113       | AUXILIARY | 587    | CD EMER DSL GEN RM           | S         | EDG      | Seismic Only |              |               | N           |                                 |   |
| 857      | 1     | 21     | 2-QT-115-AB  | 0      | DIESEL LUBE OIL / AB EMERGENCY DIESEL LUBE OIL SUMP TANK                       | 2-5151A              | AUXILIARY | 579    | AB EMER DSL LUBE OIL PIT     | S         | EDG      | Seismic Only |              |               | N           |                                 |   |
| 858      | 2     | 21     | 2-QT-115-CD  | 0      | DIESEL LUBE OIL / CD EMERGENCY DIESEL LUBE OIL SUMP TANK                       | 2-5151C              | AUXILIARY | 579    | CD EMER DSL LUBE OIL PIT     | S         | EDG      | Seismic Only |              |               | N           |                                 |   |
| 859      | 1     | 21     | 2-QT-131-AB  | 0      | DIESEL JACKET WATER / AB EMERGENCY DIESEL JACKET WATER COOLER                  | 2-5151B, 2-5113      | AUXILIARY | 587    | AB EMER DSL GEN RM           | S         | EDG      | Seismic Only |              |               | N           |                                 |   |
| 860      | 2     | 21     | 2-QT-131-CD  | 0      | DIESEL JACKET WATER / CD EMERGENCY DIESEL JACKET WATER COOLER                  | 2-5151D 2-5113       | AUXILIARY | 587    | CD EMER DSL GEN RM           | S         | EDG      | Seismic Only |              |               | N           |                                 |   |
| 861      | 1     | 21     | 2-QT-133-AB  | 0      | DIESEL JACKET WATER / AB EMERGENCY DIESEL JACKET WATER SURGE TANK              | 2-5151B              | AUXILIARY | 587    | AB EMER DSL GEN RM           | S         | EDG      | Seismic Only |              |               | N           |                                 |   |
| 862      | 2     | 21     | 2-QT-133-CD  | 0      | DIESEL JACKET WATER / CD EMERGENCY DIESEL JACKET WATER SURGE TANK              | 2-5151D              | AUXILIARY | 587    | CD EMER DSL GEN RM           | S         | EDG      | Seismic Only |              |               | N           |                                 |   |
| 863      | 1     | 21     | 2-QT-134-AB  | 0      | DIESEL JACKET WATER / AB EMERGENCY DIESEL AUXILIARY JACKET WATER HEATER        | 2-5151B              | AUXILIARY | 587    | AB EMER DSL GEN RM           | S         | EDG      | Seismic Only |              |               | Y           | 2-12010, 2-98013                | 2-ABD-B-1D                                |
| 864      | 2     | 21     | 2-QT-134-CD  | 0      | DIESEL JACKET WATER / CD EMERGENCY DIESEL AUXILIARY JACKET WATER HEATER (TANK) | 2-5151D              | AUXILIARY | 587    | CD EMER DSL GEN RM           | S         | EDG      | Seismic Only |              |               | Y           | 2-12030 2-98014                 | 2-ABD-C-1D                                |
| 865      | 1     | 21     | 2-QT-141-AB1 | 0      | DIESEL STARTING AIR / AB EMERGENCY DIESEL STARTING AIR RECEIVER #1             | 2-5151B              | AUXILIARY | 587    | AB EMER DSL GEN RM           | S         | EDG      | Seismic Only |              |               | N           |                                 |   |
| 866      | 1     | 21     | 2-QT-141-AB2 | 0      | DIESEL STARTING AIR / AB EMERGENCY DIESEL STARTING AIR RECEIVER #2             | 2-5151B              | AUXILIARY | 587    | AB EMER DSL GEN RM           | S         | EDG      | Seismic Only |              |               | N           |                                 |   |
| 867      | 2     | 21     | 2-QT-141-CD1 | 0      | DIESEL STARTING AIR / CD EMERGENCY DIESEL STARTING AIR RECEIVER #1             | 2-5151D              | AUXILIARY | 587    | CD EMER DSL GEN RM           | S         | EDG      | Seismic Only |              |               | N           |                                 |   |
| 868      | 2     | 21     | 2-QT-141-CD2 | 0      | DIESEL STARTING AIR / CD EMERGENCY DIESEL STARTING AIR RECEIVER #2             | 2-5151D              | AUXILIARY | 587    | CD EMER DSL GEN RM           | S         | EDG      | Seismic Only |              |               | N           |                                 |   |
| 869      | 12    | 21     | 2-TK-10      | 0      | LETDOWN (CVCS) / REACTOR COOLANT LETDOWN VOLUME CONTROL TANK                   | 2-5129A 12-5131A     | AUXILIARY | 609    | VOL CTRL TANK RM             | P         | RI       | Seismic Only |              |               | N           |                                 |   |
| 870      | 12    | 21     | 2-TK-11      | 0      | BORON INJECTION / BORON INJECTION TANK   | 2-5142               | AUXILIARY | 612    | BORON INJ TANK RM            | P         | RI       | Seismic Only |              |               | Y           | 2-98282 2-12031 2-12011         | 2-AM-D-5A                                 |
| 871      | 12    | 21     | 2-TK-12S     | 0      | BORON MAKEUP (CVCS) / SOUTH BORIC ACID STORAGE TANK                            | 12-5131              | AUXILIARY | 587    | BORIC ACID STOR TANK AREA    | P         | RI       | Seismic Only |              |               |             | 12-98272 2-12010 2-12030        |   |
| 872      | 12    | 21     | 2-TK-150     | 0      | DRAINS, MISCELLANEOUS / MAIN STEAM LEADS CONDENSATION DRAIN TANK               | 2-5105 2-5110B       | AUXILIARY | 600    | MN STM LINES VERT PIPE CHASE | P         | D        | Seismic Only |              |               | N           |                                 |   |
| 873      | 12    | 21     | 2-TK-32      | 0      | CONDENSATE STORAGE TANK SUPPLY / CONDENSATE STORAGE TANK                       | 2-5108A              | GROUNDS   | 609    | INNER PLANT GROUNDS          | P         | D        | Seismic Only |              |               | N           |                                 |   |

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**DONALD C. COOK NUCLEAR PLANT UNIT # 2  
SAFE SHUTDOWN EQUIPMENT LIST (SSEL)**

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| Line No. | Train | Eq. CL | Eq. ID   | Rev No | Sys/Eq. Desc  | Drawing No. Rev/Zone | Bldg.     | FIEL | Rm or Rwf/CI                 | Flow Path | Function | Eval Type    | Normal State | Desired State | Power Req'd | Supporting Sys. Dwg. No. / Rev. | Required Supporting Systems or Components |
|----------|-------|--------|----------|--------|---|----------------------|-----------|------|------------------------------|-----------|----------|--------------|--------------|---------------|-------------|---------------------------------|---|
| 874      | 12    | 21     | 2-TK-33  | 0      | REFUELING WATER STORAGE TANK<br>SUPPLY / REFUELING WATER STORAGE TANK   | 2-5144               | GROUNDS   | 609  | REFUEL WTR<br>STOR TANK AREA | P         | DRI      | Seismic Only |              |               |             |                                 |   |
| 875      | 12    | 21     | 2-TK-37  | 0      | COMPONENT COOLING WATER /<br>COMPONENT COOLING WATER SURGE TANK   | 2-5135A              | AUXILIARY | 650  | 650 HALLWAY                  | S         | CCW      | Seismic Only |              |               | N           |                                 |   |
| 876      | 2     | 21     | 2-TK-76N | 0      | CONTROL ROOM AIR CONDITIONING<br>CHILL WATER / CONTROL ROOM AIR<br>CONDITIONING NORTH CHILL WATER<br>EXPANSION TANK | 2-5149               | AUXILIARY | 650  | CTRL RM AIR<br>CONDIT RM     | S         | HVAC     | Seismic Only |              |               | N           |                                 |   |
| 877      | 1     | 21     | 2-TK-76S | 0      | CONTROL ROOM AIR CONDITIONING<br>CHILL WATER / CONTROL ROOM AIR<br>CONDITIONING SOUTH CHILL WATER<br>EXPANSION TANK | 2-5149               | AUXILIARY | 650  | CTRL RM AIR<br>CONDIT RM     | S         | HVAC     | Seismic Only |              |               | N           |                                 |   |

