NEW YORK POWER AUTHORITY
JAMES A. FITZPATRICK NUCLEAR POWER PLANT
SAFE SHUTDOWN EQUIPMENT AND RELAY EVALUATION
FOR
UNRESOLVED SAFETY ISSUE (USI) A-46

FINAL REPORT

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TABLE OF CONTENTS

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TABLE OF CONTENTS

1.0 INTRODUCTION

This report is issued to address USNRC Unresolved Safety Issue A-46, "Seismic Qualification of Equipment in Operating Nuclear Plants," for the New York Power Authority James A. Fitzpatrick Nuclear Power Plant. The paragraphs which follow provide a general explanation of, and the methods utilized to address this safety issue.

1.1 Unresolved Safety Issue (USI) A-46

USNRC Unresolved Safety Issue A-46, "Seismic Qualification of Equipment in Operating Nuclear Plants," identifies a potential safety concern regarding the seismic qualification of equipment in operating nuclear power plants. This unresolved safety issue identifies a possible scenario whereby seismically induced equipment failure could adversely impact a plants ability to achieve and maintain safe shutdown. More specifically, this concern questions the adequacy of plant equipment to withstand substantial seismic motion from a postulated Safe Shutdown Earthquake (SSE) without sustaining structural damage. In addition, this concern questions the impact of electrical contact chatter resulting from SSE motion of relays upon the operation of electrically controlled plant equipment. Contact chatter may result from motion to sensitive electrical contacting devices such as electro-mechanical relays. Relays are typically utilized in electrical control schemes for various plant applications and equipment. As relays are used in great numbers at nuclear sites, this creates a potential for common mode failure among relays of similar construction which are prone to contact chatter. USI A-46 sets the basis for the following report which addresses USI A-46 issues for the New York Power Authority's James A. Fitzpatrick Boiling Water Nuclear Power Plant.

1.2 USI A-46/SQUG Methodology

In response to USI A-46, the Seismic Qualification Utility Group (SQUG) developed a methodology to address safety issues regarding seismic qualification of equipment in operating nuclear plants. The SQUG-developed methodology is documented in "Generic Implementation Procedure (GIP) Seismic Verification of Nuclear Plant Equipment," Revision 2, Electric Power Research Institute (EPRI) report NP-5228, "Seismic Verification of Nuclear Plant Equipment Anchorage," and EPRI report NP-7148-SL, "Procedure for Evaluating Nuclear Power Plant Relay Seismic Functionality."

In brief, the SQUG methodology entails systems analysis to select a subset of plant systems and equipment (components) necessary to achieve and maintain safe shutdown from a normal plant operating condition, and assuming a loss of offsite power. This data is utilized to create a Safe Shutdown Equipment List (SSEL). Seismic review and/or relay evaluation is conducted as applicable to ensure the adequacy of the selected safe shutdown systems and equipment following an SSE. Each SSEL component is designated for seismic evaluation and/or relay evaluation based upon component type, functional, and operational characteristics as defined by the GIP.

For each safe shutdown component identified as requiring seismic evaluation, analysis for structural integrity is performed to establish that the component is adequately anchored such that it can withstand the expected SSE motion postulated for its location and elevation without sustaining structural damage.

For each safe shutdown component identified as requiring relay evaluation, initial relay screening is performed to identify relays which support the associated SSEL component. Any device with electrical contacts is considered a relay for purposes of the initial screening. These relays are classified as essential or non essential by considering the effects of contact chatter upon the required safe shutdown function of the associated SSEL component. Essential relays are those relays for which contact chatter could adversely impact the safe shutdown function of the associated SSEL component(s). Essential relays are reviewed to establish that their seismic capacity (the level of seismic motion that a specific model or family of relay can experience without exhibiting contact chatter) is not exceeded by the seismic demand (the expected seismic motion of the plant installed relay based upon location and elevation). Non essential relays are those relays for which contact chatter could not adversely impact the safe shutdown function of the associated SSEL component(s). Non essential relays include devices such as mechanically actuated switches which are considered to be seismically rugged and therefore non vulnerable to contact chatter.

The goal of performing seismic and/or relay evaluation for applicable SSEL components is to identify a subset of SSEL components and/or associated relays which are subject to malfunction (e.g., structural damage to components, or contact chatter of relays respectively) due to an SSE. This list may also include SSEL components and/or relays for which the effect of an SSE cannot be determined. These components and/or relays are classified as "outliers" per GIP terminology and are subject to further analysis by the utility. For each outlier, further analysis is required to justify the existing configuration or develop a plan for resolution.

2.0 SCOPE

The scope of this report is to present the results of the safe shutdown system selection, Safe Shutdown Equipment List (SSEL) development, and subsequent relay review performed for the New York Power Authority's James A. Fitzpatrick Boiling Water Nuclear Power Plant to address USNRC Unresolved Safety Issue A-46, "Seismic Qualification of Equipment in Operating Nuclear Plants." A total of 776 components were identified for the USI A-46 SSEL. Components classified as requiring seismic review totaled 522. Components classified as requiring relay review totaled 405. A total of 1734 relays (1352 non essential and 382 essential) were selected for all SSEL components requiring relay review.

This report will document only those USI A-46 activities performed by Engineering Planning and Management Inc. (EPM). Organization of this report is consistent with the format and content guidelines established in Section 9 of the GIP, "Documentation." The EPM scope of activity for the NYPA JAF USI A-46 analysis was limited to safe shutdown system selection, Safe Shutdown Equipment List (SSEL) development, and subsequent relay evaluation, as such, several documentation topics identified by Section 9 of the GIP are not included in this report as described in the following paragraphs.

Seismic evaluation of SSEL components for structural anchorage concerns will be addressed by the firm of Stevenson & Associates, Inc. (S&A) and is therefore not addressed by this report. Other than seismic demand values for racks and panels housing essential relays as provided to EPM by S&A, no seismic analysis results or equipment outliers will be identified in this report. S&A will issue a report documenting the data obtained from seismic evaluation of SSEL components for structural anchorage concerns.

Outlier relays will be identified in this report. Proposed resolutions for these outlier relays are provided on the respective Outlier Seismic Verification Sheet (OSVS) for each relay. However, it is not within the scope of this report to provide a final resolution of outlier relays. It is assumed that NYPA or a NYPA designee will utilize this report to perform further analysis and/or plan corrective action for resolution of outliers.

3.0 SAFE SHUTDOWN EQUIPMENT LIST (SSEL) REPORT

The USI A-46 Safe Shutdown List encompasses 776 components. Of these, 522 are identified for seismic review and 405 are identified for relay review. An SSEL component may require either seismic or relay review or both. Additionally, the SSEL includes approximately 19 components which require neither relay or seismic review.

This section identifies the plant systems and equipment credited for USI A-46 safe shutdown of the James A. Fitzpatrick Nuclear Power Plant. The following documentation is provided for this section as specified by GIP Sections 3.8 and 9.0.

1) Summary of plant systems including safe shutdown sequence diagrams selected for USI A-46 safe shutdown following a S. Shutdown Earthquake;

2) Scope of equipment included on the Safe Shutdown Equipment Lists (SSEL) for each safe shutdown system. The SSEL scope is briefly defined in the text which follows.

3) Results of NYPA JAF Plant Operations Department review for SSEL compatibility with plant operating procedures; and

4) Safe Shutdown Equipment Lists: Computer generated lists sorted by component ID in ascending order by system;

   a) Composite SSEL - all SSEL components identified;

   b) Seismic Review SSEL - subset of SSEL components identified for seismic review;

   c) Relay Review SSEL - subset of SSEL components identified for relay review.

The above listed USI A-46 safe shutdown sequence drawings and SSEL lists are located in Section 6.0, "Attachments." Documentation of SSEL component data was accomplished via the use of a computerized database. Safe Shutdown Equipment Lists are computer generated sorts extracted from this database. Cumulatively, these lists provide all necessary data to create a complete and auditable record of SSEL development.

3.1 Methodology Utilized for Selection of USI A-46 Safe Shutdown Systems

The methodology utilized by EPM to perform safe shutdown systems selection and SSEL development was similar to that described by Section 3, "Identification of Safe Shutdown Equipment," of the Generic Implementation Procedure, "Seismic Verification of Nuclear Plant Equipment." In addition, EPM Project Procedure P909-000-001 Revision 1, "Safe Shutdown Equipment and Relay List Development for Unresolved Safety Issue (USI) A-46," was utilized to provide guidance regarding engineering workflow and the specific documentation requirements for SSEL component data. No significant or programmatic deviations were made from GIP methodology. The text which follows provides a summary of the safe shutdown systems selected for USI A-46:

3.2 Summary/Scope of Safe Shutdown Systems and Equipment Selected for USI A-46

Boiling water reactors (BWRs) have several paths or methods which can be used to bring the plant to a safe shutdown condition. The Generic Implementation Procedure identifies four safe shutdown functions necessary to achieve safe shutdown:

1) Reactor Reactivity Control (RRC)
2) Reactor Coolant Pressure Control (RPC)
3) Reactor Coolant Inventory Control (RIC)
4) Decay Heat Removal (DHR)

The systems selected to achieve these functions are described under their respective titles as identified in the following text. In addition, Sections 3.2.5, "Safe Shutdown Auxiliaries for Front Line Systems," and 3.2.6, "Safe Shutdown Plant Monitoring Instruments," have been provided to identify the balance of plant systems and components which are required to indirectly support USI A-46 Safe Shutdown. These system descriptions establish the required function(s) for each safe shutdown system selected and define the overall scope of safe shutdown equipment selection. The minimum subset of equipment identified in the SSEL has been chosen because of its' inherent ruggedness and simplicity of control in order to minimize the amount of equipment under scrutiny and to maximize the potential for a successful USI A-46, SQUG evaluation.

Per the GIP, Section 3, "If a Safe Shutdown Earthquake occurs, it is not necessary to use only the safe shutdown equipment identified for the Unresolved Safety Issue A-46 program. The operator may attempt shutdown using other available systems and equipment provided these other means of shutting down do not prevent the latter use of the safe shutdown method identified for the USI A-46 program."

Moreover, "it is not the intent (of the GIP) that the operator be directed to use the USI A-46 shutdown path as his first priority or to change the symptom-based emergency operating procedures."

3.2.1 Reactor Reactivity Control

The safe shutdown method for accomplishing the reactor reactivity control (SCRAM) function is illustrated in the sequence diagram shown in Attachment B. Although two independent methods are available for reactivity control during reactor shutdown conditions, control rod drive hydraulic system and standby liquid control system, the control rod drive hydraulic system is the normal reactor protection system method.

Control Rod Drive Hydraulic System

The control rod drive (CRD) hydraulic system is the primary method of reactivity control and is the only method capable of rapid shutdown (SCRAM) of the reactor or operational control of fast reactivity transients. For this reason, the CRD hydraulic system is considered an essential safe shutdown system. The hydraulic CRD is used to manually position neutron absorbing control rods in the reactor core and acts automatically to rapidly insert the control rods when required.

The CRD mechanism consists of a double-acting, mechanically-latched, hydraulic cylinder which uses demineralized water from the condensate storage tank or condenser hotwell as the operating fluid. A separate hydraulic control unit is provided for each individual control rod. The CRD hydraulic system supplies and controls the pressure and flow requirements to the drive mechanisms.

Each CRD drive mechanism is connected to a SCRAM accumulator tank pressurized with nitrogen. At lower reactor vessel pressures (less than 600 psig), the SCRAM accumulator tank stores sufficient energy to fully insert the control rod independent of any other source of energy; i.e., pneumatic, AC, or DC power. At reactor vessel pressures greater than 600 psig, reactor pressure is utilized to supplement accumulator pressure to achieve full rod insertion. During SCRAM, accumulator pressure is emitted below the drive piston and the volume over the drive piston is vented to the SCRAM discharge volume tank. The large differential pressure across the drive piston produces a large upward force on the control rod to insert the control rod into the core. Credit is not taken for the CRD pumps during a seismic event as the SCRAM accumulators (with reactor pressure assist) are credited exclusively to achieve full rod insertion.

Standby Liquid Control System

The standby liquid control system (SLC) system provides a backup method of reactivity control. The SLC system will shut down the reactor from full power to cold shutdown in the event the control rods are inoperable. The SLC system is manually initiated from the control room and pumps a neutron absorbing solution (sodium pentaborate) into the reactor vessel. General Electric BWR system design descriptions and operator training manuals define SLC injection time as typically 50 to 100 minutes, depending on pump capacity and the number operating. The SLC system is only required to shut down the reactor at a steady state within the capacity of the normal shutdown cooling systems. The SLC system is not capable of rapid shutdown (SCRAM) of the reactor or operational control of fast reactivity transients.

3.2.2 Reactor Coolant Pressure Control

The safe shutdown method for accomplishing the reactor coolant pressure control (Pressure Relief) is illustrated in the sequence diagram shown in Attachment B.

This method provides protection from overpressurization of the isolated reactor vessel, prior to controlled cooldown and depressurization, by 11 safety/relief valves (SRVs). These valves are located on the main steam lines upstream of the MSIVs and are capable of mechanical actuation, requiring no external source of power other than reactor vessel steam pressure. Each of the safety/relief valves can also be remote-manually operated for controlled depressurization of the reactor vessel (maximum 100°F/hr cooldown rate). Remote-manual operation requires a nitrogen supply and DC power for pilot solenoid actuation.

3.2.3 Reactor Coolant Inventory

The safe shutdown methods for accomplishing the reactor coolant inventory control (Reactor Vessel Isolation) function are illustrated in the sequence diagram shown in Attachment B; these methods are described below.

Reactor coolant make-up control will be achieved by isolating the Reactor Coolant System (RCS) and controlling vessel coolant level. Maintaining the RCS pressure boundary integrity is also necessary to achieve inventory and pressure control.

High Pressure Coolant Injection (HPCI) System

The HPCI system uses a steam turbine-driven pump to pump water from the condensate storage tank into the feedwater system. Water is injected into the reactor vessel through the feedwater sparger. On low condensate storage tank level or high suppression pool level, the pump suction is automatically transferred to the suppression pool. Manual transfer may also be made from the Control Room.

Low Pressure Coolant Injection System

The Low Pressure Coolant Injection (LPCI) mode of the Residual Heat Removal (RHR) System will be utilized to inject water into the isolated reactor vessel. This system would be used after initiating depressurization of the reactor vessel using the safety/relief valves (SRVs). The SRVs may be remotely manually-actuated from the Control Room. The SRVs depressurize the reactor vessel by releasing steam to the suppression pool through the safety relief valves.

The Low Pressure Coolant Injection (LPCI) mode of the Residual Heat Removal (RHR) system uses the RHR pumps to pump water from the suppression pool to the reactor vessel through the RCS recirculation lines.

Discharge from Reactor Coolant System

Maintaining the RCS pressure boundary integrity is necessary to ensure reactor coolant inventory control. There are several paths through which reactor coolant can leave the reactor coolant system. Listed as follows are the discharge paths which will be isolated and/or controlled to minimize loss of inventory:

- Safety/Relief Valves (SRVs);
- Main Steam Isolation Valves (MSIVs);
- RHR, RWCU, HPCI, CS, RCIC and several other lines connected to the Reactor Coolant Pressure Boundary

3.2.4 Decay Heat Removal

The safe shutdown method for accomplishing the decay heat removal (Core Cooling) function is illustrated in the sequence diagram shown in Attachment B; this method is described below.

Following a postulated reactor trip for which loss of off-site power is assumed, decay heat is removed initially by mechanical operation of SRVs. The SRVs discharge steam from the reactor vessel to the suppression pool. The emerging steam is condensed in this pool; heat is removed from the suppression pool via operation of the RHR System in the suppression pool cooling mode. The RHR Service Water System provides the capability to transfer decay heat from the RHR System to the lake.

Analyses performed by General Electric have demonstrated that suppression pool water temperatures will be within acceptable operating limits as long as at least one RHR heat exchanger loop is placed in service and the RHR system is placed in the suppression pool cooling mode. In addition, these analyses also verify that suppression pool temperature limits will not be exceeded when the safety/relief valves and low pressure systems are used to accomplish safe shutdown.

The Suppression Pool Cooling (SPC) mode of the Residual Heat Removal (RHR) System will be used to control suppression pool water temperatures within the limits assumed in the Station Safety Analysis.

With the RHR system in the SPC mode of operation, the RHR system pumps are aligned to pump water from the suppression pool through the RHR system heat exchangers where cooling takes place by transferring heat to the RHR Service Water (RHRSW) System. RHR System flow returns to the suppression pool via return lines which discharge below the pool surface.

If desired, the capability exists to operate the RHR system in the Shutdown Cooling (SDC) mode, where the suction of the RHR pump(s) are aligned to the Reactor Recirculation piping, and the flow is returned to the recirc loops after passing through the RHR heat exchanger(s). Depending on power availability, it may be possible to simultaneously run one loop of RHR in the SDC mode and the opposite side in SPC alignment.

3.2.5 Safe Shutdown Auxiliaries for Front-Line Systems

The following systems are considered support/auxiliary systems for the previously referenced systems which will be relied upon to accomplish the four safe shutdown functions.

- Emergency Diesel Generators (including start air, fuel oil supply, etc.)
- Standby AC Power System (including Buses, SWGRs, MCCs and Circuit Breakers)
- 125 VDC System (including Batteries, Chargers and Control Boards)
- LPCI Independent Power System
- Emergency Service Water System
- RHR Service Water System
- ADS Accumulators (for SRVs)
- CAD System (i.e., N_2 Backup to ADS Accumulators)
- HVAC Systems for:
  - Control & Relay Room
  - Diesel Generators
  - Electric Bays
  - Screenwell (for RHRSW/ESW Pump Areas)
  - Battery and Charger Rooms
  - Reactor Building Crescent Area

3.2.6 Safe Shutdown Plant Monitoring Instruments

The following instrumentation is credited to monitor process variables for the previously referenced safe shutdown functions. The instruments selected will be consistent with those selected for 10CFR50 Appendix R.

- Reactor Vessel Water Level
- Reactor Pressure
- Suppression Pool Temperature
- Suppression Pool Level
- Drywell Pressure
- RHR Loop Flow
- RHRSW Loop Flow
- HPCI Flow
- HPCI Turbine Speed
- EDG Day Tank Level
- CST Level

3.3 JAF Operations Department/Peer Review of USI A-46 Safe Shutdown for Compatibility with Plant Operating Procedures

EPM submitted a description of USI A-46 safe shutdown systems and safe shutdown sequence diagrams to NYPA under EPM letter EL02093-299, dated 12/13/93. The JAF Operations Department conducted a review of these descriptions and diagrams to ensure the legitimacy of the USI A-46 safe shutdown paths selected and confirm their compatibility with plant normal, abnormal, and emergency operating procedures and operator training. Two methods were utilized by JAF Operations to perform this review.

The first method of USI A-46 safe shutdown system verification involved a "table top" procedure review. This review was conducted by a licensed Senior Reactor Operator (SRO) familiar with the general criteria and governing assumptions defined in Section 3.2 of the GIP. Equipment called out in plant procedures for the identified safe shutdown paths was verified to be included in the EPM description(s) and or diagram(s) for USI A-46 safe shutdown. It was also verified that no set of USI A-46 assumed plant conditions could be identified from which an operating crew could not recover using the USI A-46 credited safe shutdown systems.

The second method of USI A-46 safe shutdown system verification involved a simulator validation of crew response to a loss of offsite power with nearly simultaneous failure of non-safe shutdown systems. Three simulations were run with each scenario assuming a different initiating event.

The JAF Operations Department review concluded that the USI A-46 safe shutdown systems as selected by EPM were acceptable. This review is documented by NYPA letter JOPS-94-006, Rev. 1, dated 1/31/94. The letter is included in this report immediately following the listing of references in Section 5.

In addition to NYPA review, an independent peer review was conducted of the same USI A-46 safe shutdown system descriptions and sequence diagrams. Similar conclusions to the NYPA review were reached. Peer review is documented by Future Resources Associates, Inc. letter to Mr. Tom Tracy of Stevenson & Associates, dated 3/15/94.

3.4 Explanation of Safe Shutdown Equipment Lists (SSEL)

This section will briefly explain the format of each computer generated SSEL list. Three SSEL lists are provided as defined by the "SSEL Report" guidelines from Section 9 of the GIP. To provide for consistency and ease of review, all report computer generated lists are sorted by component ID in ascending order by system.

The first list is the "**Composite SSEL**", Attachment C. This is a composite listing of all 776 SSEL components identified for USI A-46 safe shutdown. This list encompasses all components identified for seismic and/or relay review. In addition, this list includes "rule of box" and inherently rugged SSEL components which do not require seismic and/or relay review. For clarification, the "rule of the box" applies to sub-components which are generally mounted to (or within) a larger component, skid, or panel (i.e., the "box" could be a diesel generator, switchgear enclosure, motor control center, or valve assembly). Seismic review performed for the "box" encompasses all sub-components within, therefore individual seismic review is not required for "rule of the box" sub-components. The specific fields provided in Composite SSEL are as follow:

1) Sequence - Consecutive number assigned to each SSEL Component appearing on list.

2) Safety Train - System train A, B, or X (undefined or shared).

3) Equipment Class - The SQUG equipment class assigned from Table 3-1 of the GIP.

4) Main Equipment Designation - Component identifier obtained from the NYPA JAF Plant Equipment Database.

5) Description - Component description obtained from the NYPA JAF Plant Equipment Database.

6) Building/Elevation/Location - Component location obtained from the NYPA JAF Plant Equipment Database.

7) Rack/Panel/Assembly - If applicable, the rack, panel, or assembly in which the SSEL component is located. Obtained from the NYPA JAF Plant Equipment Database.

8) SQUG Evaluation Type - Answered "Relay" and/or "Seismic" or "Rule of Box", or "Not Applicable." Defines evaluation requirements per GIP methodology.

9) Remarks - Component specific notes regarding SSEL development.

10) Normal Component Position/Status - Pre SSE position/status during normal plant operation.

11) Required Component Position/Status - USI A-46 safe shutdown required position/status.

12) Power Required - Answered "Y" if electrical power is required to support safe shutdown function, "N" if not.

The second list is the "**Seismic Review SSEL**", Attachment D. This is a list of 522 SSEL components identified for seismic review. Specific fields provided in this list are as follow:

1) Main Equipment Designation - Component identifier obtained from the NYPA JAF Plant Equipment Database.

2) Description - Component description obtained from the NYPA JAF Plant Equipment Database.

3) Safety Class - Component safety classification identifier obtained from the NYPA JAF Plant Equipment Database.

4) Safety Train - System train A, B, or X (undefined or shared).

5) Equipment Class - The SQUG equipment class assigned from Table 3-1 of the GIP.

6) Building/Elevation/Location - Component location obtained from the NYPA JAF Plant Equipment Database.

The third list the "**Relay Review SSEL**", Attachment E. This is a list of 405 SSEL components identified for relay review. The fields in this list are the same as provided in the "**Seismic Review SSEL.**"

It should be noted that while the aforementioned lists contain most of the fields of information required by the GIP in developing the SSEL, certain component specific information such as normal position, required safe shutdown position, associated components, and power requirements is identified for each component on the SSEL component data sheets provided in Attachment J. SSEL component data sheets are combined with relay evaluation data sheets as applicable to form one report. These data sheets are discussed in further detail in the relay evaluation report section which follows.

4.0 RELAY EVALUATION REPORT

A total of 1734 relays (1352 non essential and 382 essential) were selected for the components on the relay review SSEL. These 1734 relays may each have been associated to one or more SSEL component. Relays associated to multiple components were classified as essential or non essential for each component. Relay classification depended upon the impact of contact chatter to the specific safe shutdown function of each associated component.

This section identifies the results from the functional screening of relays which affect components on the relay review SSEL. The following documentation is provided for this section as specified by GIP Sections 6.7 and 9.0.

1) Relay review SSEL (defined in the Section III of this report);

2) List of cabinets/panels which house essential relays;

3) List of all 1734 relays (essential and non essential) identified as supporting relay review SSEL components;

4) Condensed list of all essential relays associated with components on the relay review SSEL, including screening and capacity results for each relay as applicable;

5) List of all outlier relays;

6) Data sheets for each of 776 SSEL components, with corresponding relay data sheets as applicable.

The above listed data sheets and relay lists are located in Section 6.0, "Attachments." Documentation of relay evaluation was accomplished via the use of a computerized database. Lists and data sheets are computer generated reports extracted from this database. Although not identical to the suggested format of EPRI NP-7148-SL Form G.4, the overall content of these lists and data sheets follows suggested guidelines. Cumulatively, these lists and data sheets provide all necessary data to create a complete and auditable record of relay evaluation for USI A-46.

4.1 Methodology Utilized for Relay Evaluation

The methodology utilized by EPM to perform relay evaluation for relay review SSEL components was similar to that described by Section 3, "Identification of Safe Shutdown Equipment," of the Generic Implementation Procedure, "Seismic Verification of Nuclear Plant Equipment," and EPRI report NP-7148-SL, "Procedure for Evaluating Nuclear Power Plant Relay Seismic Functionality." In addition, EPM Project Procedure P909-000-001 Revision 1, "Safe Shutdown Equipment and Relay List Development for Unresolved Safety Issue (USI) A-46," was utilized to provide guidance regarding engineering workflow and the specific documentation requirements for relay screening and capacity evaluation. No significant or programmatic deviations were made from GIP methodology.

4.2 Utilization of Switchgear Screening Data

Relay screening for safe shutdown switchgear was performed by utilizing the same methodology applied to non switchgear related SSEL components. Screening techniques provided by EPRI GERS-MVS/LVS.7, "Generic Equipment Ruggedness Spectra for Switchgear (Medium Voltage, Metal Clad) (Low Voltage, Metal Enclosed)," dated 2/1/91, were not utilized. However, the following guidelines were utilized regarding circuit breaker classification. Molded case circuit breakers were generically considered to be non vulnerable to contact chatter because of the significant seismic forces required to spuriously operate these devices. Devices with electrical contacts such as mechanically actuated breaker position switches were assumed to be non vulnerable and were therefore not identified in the database. It was assumed that seismic review of switchgear performed by Stevenson & Associates would identify any potential for a change of state in the electrical contacts of these mechanically actuated devices resulting from movement between a breaker and its enclosure.

4.3 Relay Walkdown and Mounting Spot Checks

As documented by EPM letter EL02094-207, a relay walkdown was conducted at JAF to perform spot checks for essential relay mounting and model numbers. Approximately 115 relays were checked in 19 plant panels. The overall results of these spot checks determined that relays were mounted acceptably and that the installed relay model numbers were consistent with those used in the evaluation of essential relays.

4.4 Explanation of Relay Evaluation Reports

A total of 1734 relays (non essential and essential) were selected for all components on the relay review SSEL. These 1734 relays may each have been associated to one or more components. A relay associated to multiple components was classified as essential or non essential for each associated component. Relay classification depended upon the impact of contact chatter to the specific safe shutdown function of each associated component.

This section will briefly explain the format of the computer generated relay lists and data sheets which follow. The relay lists provided are defined by the "SSEL Report" guidelines from Section 9 of the GIP. To provide for consistency and ease of review, all report computer generated lists are sorted by component ID in ascending order by system unless otherwise defined.

The first list is the "**Relay Review SSEL**", Attachment E. This list was previously defined in Section 3.4 of this report.

The second list is **"List of Panels Containing Essential Relays and Essential Relays (Instruments) that are Field Mounted"**, Attachment F. This is a listing of 41 SSEL panels and 6 field mounted essential relays (process instruments). Plant locations for all essential relays are summarized by this list. The following specific fields are provided in this list:

1) Main Equipment Designation - Component identifier obtained from the NYPA JAF Plant Equipment Database.

2) Description - Component description obtained from the NYPA JAF Plant Equipment Database.

3) Safety Train - System train A, B, or X (undefined or shared).

4) Equipment Class - The SQUG equipment class assigned from Table 3-1 of the GIP.

5) Building/Elevation/Location - Component location obtained from the NYPA JAF Plant Equipment Database.

The third list is **"USI A-46 Relays"**, Attachment G. This is an overall list of all 1734 relays (essential and non essential) identified as supporting relay review SSEL components. The following specific fields are provided in this list:

1) Main Equipment Designation - Relay ID obtained from the NYPA JAF Plant Equipment Database. Relay IDs with an asterisk appended were created by EPM. These relays do not exist in the NYPA JAF Plant Equipment Database.

2) Manufacturer Designation - Relay manufacturer obtained from the NYPA JAF Plant Equipment Database.

3) Manufacturer Part/Model Number - Relay model/part number obtained from the NYPA JAF Plant Equipment Database.

4) Relay Type - SQUG methodology considers any device with electrical contacts to be a relay. This field provides a generic type identifier to further define each relay by functional characteristics as follows: Relay (RLY), Control Switch (CS), Contactor (CONT), Operator (OP), or Instrument (INST). Relay type "OP" was used to indicate valve limit and torque switches.

5) Low Ruggedness Relay - This field identifies if the evaluated relay is a low ruggedness relay. Answered "Y" if the relay model number (and contact configuration where applicable) are identified in Table 6.2 of EPRI Report NP-7147-SL and relay is essential.

6) Rack/Panel - The rack, panel, or assembly in which the evaluated relay is located. If "NA", the relay is typically a field mounted process instrument. Data obtained from the NYPA JAF Plant Equipment Database.

7) Component for Equipment - The relay review SSEL component ID(s) to which the relay has been associated. A single relay may be associated to multiple SSEL components.

8) Essential - This field identifies the classification of the relay for each associated relay review SSEL component ID. "Y" is essential, "N" is non essential.

9) Satisfactory - For essential relays, a "Y" indicates that the relay seismic capacity meets or exceeds the location specific plant seismic demand. An "N" indicates that the demand exceeds capacity or that the relay is a low ruggedness relay as identified in Table 6.2 of EPRI NP-7148-SL. An "*" indicates that this status is unknown as relay seismic capacity is unavailable for comparison to demand. Relays with "N" or "*" entries are classified as outliers. For non essential relays, this field is always answered "Y."

10) Reason Code - Essential relays that are determined to be satisfactory are assigned the reason code "GERS". This reason code signifies that the relay seismic capacity was obtained from the EPRI GERS. Essential relays not found to be satisfactory (outliers) are assigned the reason code "CR." This reason code signifies that further action is required to address contact chatter or to determine the seismic capacity for a specific manufacturer model number relay not encompassed by the EPRI GERS. For non essential relays, this field is answered with a "CA" or "NV." Respectively, these codes signify that contact chatter was evaluated not to have an adverse impact upon the safe shutdown function of the associated SSEL component or that the relay was identified as an inherently rugged device non vulnerable to contact chatter such as a mechanically actuated switch.

11) Outlier - Answered "Y" if relay demand exceeds capacity, if the relay is a low ruggedness relay, or if the relay seismic capacity is unavailable. Answered "N" if relay seismic capacity meets or exceeds the location specific plant seismic demand.

12) References - NYPA drawings used to screen and classify relays.

The fourth list is the "**Condensed List of Essential Relays**", Attachment H. This is a list (sorted by rack/panel) of 382 essential relays including 144 outliers. No low ruggedness relays were identified in the population of essential relays. Overall results of capacity evaluation are summarized by this list. As this list provides overall results only, numerical values for capacity and demand are not included in this list. This information is provided by the relay data sheets of Attachment J. The following specific fields are provided in this list:

1) Main Equipment Designation - Relay ID obtained from the NYPA JAF Plant Equipment Database.

2) Manufacturer Designation - Relay manufacturer obtained from the NYPA JAF Plant Equipment Database.

3) Manufacturer Part/Model Number - Relay model/part number obtained from the NYPA JAF Plant Equipment Database.

4) Relay Type - SQUG methodology considers any device with electrical contacts to be a relay. This field provides a generic type identifier to further define each relay by functional characteristics as follows: Relay (RLY), Control Switch (CS), Contactor (CONT), Operator (OP), or Instrument (INST). Relay type "OP" was used to indicate valve limit and torque switches.

5) Low Ruggedness Relay - This field identifies if the evaluated relay is a low ruggedness relay. Answered "Y" if the relay model number (and contact configuration where applicable) are identified in Table 6.2 of EPRI Report NP-7147-SL and relay is essential.

6) Rack/Panel - The rack, panel, or assembly in which the evaluated relay is located. If "NA", the relay is typically a field mounted process instrument. Data obtained from the NYPA JAF Plant Equipment Database.

7) Component for Equipment - The relay review SSEL component ID(s) to which the relay has been associated. A single relay may be associated to multiple SSEL components.

8) Essential - This field identifies the classification of the relay for each associated relay review SSEL component ID. "Y" is essential, "N" is non essential.

9) Satisfactory - For essential relays, a "Y" indicates that the relay seismic capacity meets or exceeds the location specific plant seismic demand. An "N" indicates that the demand exceeds capacity or that the relay is a low ruggedness relay. An "*" indicates that this status is unknown as relay seismic capacity is unavailable for comparison to demand. Relays with "N" or "*" entries are classified as outliers. For non essential relays, this field is always answered "Y."

10) Reason Code - Essential relays that are determined to be satisfactory are assigned the reason code "GERS". This reason code signifies that the relay seismic capacity was obtained from the EPRI GERS. Essential relays not found to be satisfactory (outliers) are assigned the reason code "CR." This reason code signifies that further action is required to address contact chatter or to determine the seismic capacity for a specific manufacturer model number relay not encompassed by the EPRI GERS.

For non essential relays, this field is answered with a "CA" or "NV." Respectively, these codes signify that contact chatter was evaluated not to have an adverse impact upon the safe shutdown function of the associated SSEL component or that the relay was identified as an inherently rugged device non vulnerable to contact chatter such as a mechanically actuated switch.

11) Outlier - Answered "Y" if relay demand exceeds capacity, if the relay is a low ruggedness relay, or if the relay seismic capacity is unavailable. Answered "N" if relay seismic capacity meets or exceeds the location specific plant seismic demand.

12) Remarks - Comments germane to the establishment of seismic capacity. "No applicable GERS" denotes that a specific relay manufacturer model number is not encompassed by existing GERS therefore capacity cannot be established. "ANSI shape" denotes that a multiplier of 0.40 was utilized for relay capacity ZPA calculation per GERS instruction. "GERS modified shape" denotes that a multiplier of 0.60 was utilized for relay capacity ZPA calculation per GERS instruction. "GERS shape" is used for some instruments and contactors to denote that relay capacity values of PSA and ZPA are approximated directly from GERS seismic graphs rather than from numerical tables.

The fifth list is "**List of Outlier Relays**", Attachment I. This is a list (sorted by model/part number) of outlier relays. Attachment I also includes **OSVS** forms for each relay (following the outlier list). A total of 144 relays encompassing approximately 13 different manufacturer model numbers were classified as outliers because their seismic capacity could not be established from existing EPRI GERS. As such, subsequent comparison of relay seismic capacity to location specific seismic demand was not possible. A total of 16 relays were classified as outliers because location specific plant demand exceeded relay capacity. The fields in this list are the same as those provided in the "**Condensed List of Essential Relays**."

The final report encompasses all SSEL component data sheets and relay data sheets and is Attachment J. SSEL data sheets provide component specific information such as normal position, required safe shutdown position, associated components, associated relays, and power requirements, and general remarks. Relay data sheets are provided for each relay associated with a specific SSEL component. These relay sheets fully document the results of functional screening for both non essential and essential relays associated with components on the relay review SSEL, and document the capacity evaluations for the subset of essential relays. The report is sorted by SSEL component ID and segregated by system. Each SSEL component data sheet is immediately followed by all applicable relay data sheets and numbered consecutively. The SSEL data sheet contains the following specific information:

1) Main Equipment Designation - Component identifier obtained from the NYPA JAF Plant Equipment Database.

2) Description - Component description obtained from the NYPA JAF Plant Equipment Database.

3) System/Train - Plant system and train identifier obtained from the NYPA JAF Plant Equipment Database.

4) Safe Shutdown Function - USI A-46 safe shutdown function. One or any combination of: Reactor Inventory Control (RIC), Reactor Pressure Control (RPC), Reactor Reactivity Control (RRC), and Decay Heat Removal (DHR).

5) Equipment Class - The SQUG equipment class assigned from Table 3-1 of the GIP.

6) Building/Elevation/Location - Component location obtained from the NYPA JAF Plant Equipment Database.

7) Rack/Panel/Assembly - If applicable, the rack, panel, or assembly in which the SSEL component is located. Obtained from the NYPA JAF Plant Equipment Database.

8) Normal Component Position/Status - Pre SSE position/status during normal plant operation.

9) Required Component Position/Status - USI A-46 safe shutdown required position/status.

10) Power Required - Answered "Y" if electrical power is required to support safe shutdown function, "N" if not.

11) SQUG Evaluation Type - Answered "Relay" and/or "Seismic" or "Rule of Box", or "Not Applicable." Defines evaluation requirements per GIP methodology.

12) Associated Components - Identifies supporting components to the SSEL component.

13) Associated Relays - All relays identified during the initial relay screening process associated to the SSEL component.

14) Reference Drawings - Applicable NYPA JAF reference drawings utilized for SSEL component selection.

15) Remarks - Component specific notes regarding SSEL development or relay screening for the SSEL component.

The relay data sheet contains the following specific information:

1) Relay Associated to SSEL Component ID - The relay review SSEL component ID to which the relay has been associated.

2) Main Equipment Designation - Relay ID obtained from the NYPA JAF Plant Equipment Database.

3) Description - Relay description obtained from the NYPA JAF Plant Equipment Database.

4) Building/Elevation/Location - Relay location obtained from the NYPA JAF Plant Equipment Database.

5) Rack/Panel - The rack, panel, or assembly in which the evaluated relay is located. If "NA", the relay is typically a field mounted process instrument. Data obtained from the NYPA JAF Plant Equipment Database.

6) Manufacturer Designation - Relay manufacturer obtained from the NYPA JAF Plant Equipment Database.

7) Manufacturer Part/Model Number - Relay model/part number obtained from the NYPA JAF Plant Equipment Database.

8) Relay Type - SQUG methodology considers any device with electrical contacts to be a relay. This field provides a generic type identifier to further define each relay by functional characteristics as follows: Relay (RLY), Control Switch (CS), Contactor (CONT), Operator (OP), or Instrument (INST). Relay type "OP" was used to indicate valve limit and torque switches.

9) Low Ruggedness Relay - This field identifies if the evaluated relay is a low ruggedness relay. Answered "Y" if the relay model number (and contact configuration where applicable) are identified in Table 6.2 of EPRI Report NP-7147-SL and relay is essential.

10) Essential - This field identifies the classification of the relay for the associated relay review SSEL component ID. "Y" is essential, "N" is non essential.

11) Satisfactory - For essential relays, a "Y" indicates that the relay seismic capacity meets or exceeds the location specific plant seismic demand. An "N" indicates that the demand exceeds capacity or that the relay is a low ruggedness relay. An "*" indicates that this status is unknown as relay seismic capacity is unavailable for comparison to demand. Relays with "N" or "*" entries are classified as outliers. For non essential relays, this field is always be answered "Y."

12) Reason Code - Essential relays that are determined to be satisfactory are assigned the reason code "GERS". This reason code signifies that the relay seismic capacity was obtained from the EPRI GERS. Essential relays not found to be satisfactory (outliers) are assigned the reason code "CR." This reason code signifies that further action is required to address contact chatter or to determine the seismic capacity for a specific manufacturer model number relay not encompassed by the EPRI GERS.

For non essential relays, this field is answered with a "CA" or "NV." Respectively, these codes signify that contact chatter was evaluated not to have an adverse impact upon the safe shutdown function of the associated SSEL component or that the relay was identified as an inherently rugged device non vulnerable to contact chatter such as a mechanically actuated switch.

13) Outlier - Answered "Y" if relay demand exceeds capacity, if the relay is a low ruggedness relay, or if the relay seismic capacity is unavailable. Answered "N" if relay seismic capacity meets or exceeds the location specific plant seismic demand.

14) Remarks - Comments germane to the classification of a relay as non essential or essential. Typically this field provides the engineering basis for determining the acceptability of contact chatter for a given relay.

15) References - NYPA drawings used to screen and classify the relay.

The following fields appear upon the relay data sheet only if the relay is essential.

16) Seismic Demand - Peak Spectral Acceleration (PSA) and Zero Period Acceleration (ZPA) in units of gravity (g) for the specific panel of location where the relay is mounted. These values were provided by Stevenson & Associates (reference #13).

17) Seismic Capacity - PSA and ZPA values for the specific manufacturer and model number relay evaluated. These values were provided by the EPRI GERS.

18) Seismic Capacity Source Document - Identifies the specific document from which relay seismic capacity was determined.

19) Remarks - Comments germane to the establishment of seismic capacity. "No applicable GERS" denotes that a specific relay manufacturer model number is not encompassed by existing GERS therefore capacity cannot be established. "ANSI shape" denotes that a multiplier of 0.40 was utilized for relay capacity ZPA calculation per GERS instruction. "GERS modified shape" denotes that a multiplier of 0.60 was utilized for relay capacity ZPA calculation per GERS instruction. "GERS shape" is used for some instruments and contactors to denote that relay capacity values of PSA and ZPA are approximated directly from GERS seismic graphs rather than from numerical tables.

5.0 REFERENCES

1) USNRC Unresolved Safety Issue A-46, "Seismic Qualification of Equipment in Operating Nuclear Plants."

2) Seismic Qualification Utility Group, "Generic Implementation Procedure (GIP) Seismic Verification of Nuclear Plant Equipment," Revision 2.

3) Electric Power Research Institute Report NP-5228, "Seismic Verification of Nuclear Plant Equipment Anchorage."

4) Electric Power Research Institute Report NP-7148-SL, "Procedure for Evaluating Nuclear Power Plant Relay Seismic Functionality," dated 12/90.

5) Electric Power Research Institute Report NP-7148-SL, "Procedure for Evaluating Nuclear Power Plant Relay Seismic Functionality, Volume 2: Addendum," dated 9/93.

6) Electric Power Research Institute Report NP-7147-SL, "Seismic Ruggedness of Relays," dated 8/91.

7) Electric Power Research Institute Report NP-7147-SL, "Seismic Ruggedness of Relays, Volume 2: Addendum 1," dated 9/93.

8) Electric Power Research Institute Report NP-5223-SL, "Generic Seismic Ruggedness of Power Plant Equipment (Revision 1)," dated 8/91.

9) EPM Project Procedure P909-000-001, Rev. 1, "Safe Shutdown Equipment and Relay List Development for Unresolved Safety Issue (USI) A-46," dated 4/94.

10) EPM letter EL02093-299 to Mr. Pritt Oaks, NYPA, "Selection of JAFNPP Safe Shutdown Systems for Unresolved Safety Issue (USI) A-46," dated 12/13/93.

11) EPM letter EL02094-207 to Mr. Thomas Tracy of S&A, "Relay Walkdown at JAF," dated 9/19/94.

12) NYPA letter JOPS-94-006, Rev. 1, "Report of James A. Fitzpatrick Nuclear Power Plant Operations Department Review of Safe Shutdown Equipment List (SSEL) Systems for Resolution of USI A-46," dated 1/31/94. Attached following Page 5-1.

13) Future Resources Associates, Inc. to Mr. Tom Tracy of Stevenson & Associates letter dated 3/15/94, (peer review of SSEL).

14) Stevenson & Associates letter 93C2803-LSS1-008, "Seismic Demand for Essential Relays," dated 8/18/94.

James A. FitzPatrick
Nuclear Power Plant
P.O. Box 41
Lycoming, New York 13093
315 342.3840

Memorandum

New York Power Authority

January 31, 1994
JOPS-94-006, Rev. 1

MEMORANDUM TO: P. OKAS

FROM: J. KLEVORN

SUBJECT: REPORT OF JAMES A. FITZPATRICK NUCLEAR POWER PLANT OPERATIONS DEPARTMENT REVIEW OF SAFE SHUTDOWN EQUIPMENT LIST (SSEL) SYSTEMS FOR RESOLUTION OF USI A-46

Attachment 1) EPM letter EL02093-299, dated December 13, 1993.

The James A. FitzPatrick Nuclear Power Plant (JAF) Operations Department has conducted a review of the SSEL systems listed in Attachment 1). The intent of this review was to confirm compatibility with plant normal, abnormal, and emergency operating procedures. The review verified that a trained operating crew will eventually be directed to use safe shutdown equipment after perhaps trying to use equipment not included in the USI A-46 SSEL systems. This review ensured that the safe shutdown paths selected for USI A-46 are legitimate paths consistent with plant procedures and operator training.

Two methods were used to review the SSEL systems against plant operating procedures. The first method was a "table top" review performed by a licensed Senior Reactor Operator familiar with the General Criteria and governing assumptions of reference 1) to verify that equipment called out in plant procedures for the identified safe shutdown path are included in the SSEL systems list of Attachment 1. It also verified that no set of USI A-46 assumed plant conditions could be identified from which an operating crew could not recover using the SSEL equipment. The second method was a simulator validation of crew response to a loss of offsite power transient with nearly simultaneous failure of non-SSEL systems. The main points of these reviews follow.

Table Top Procedure Review

A loss of offsite power is postulated with nearly simultaneous failure of non-SSEL systems. EOP-2, RPV Control, is entered on low RPV level due to the total loss of feed which occurs as the main generator trips. If all control rods can be verified to be fully inserted using the full core display on the 09-5 panel, then EOP-2 remains the applicable emergency operating procedure and AOP-1, Reactor Scram*, is entered. MSIV isolation occurs due to the RPS bus deenergization, leaving SRV's for RPV pressure control and HPCI for RPV level control. RPV level is restored to the normal band using HPCI and once RPV pressure is stabilized, SRV's are used to depressurize the RPV at less than 100 F/hr. EOP-4, Primary Containment Control, is entered due to high torus temperature and torus cooling is initiated using OP-13, Residual Heat Removal System*, to maintain torus temperature within limits while cycling SRV's and operating the HPCI system. Before HPCI isolates on low supply steam pressure, RPV level control is swapped to one of the LPCI systems. When the SDC pressure interlock clears, shutdown cooling is initiated per OP-13. If either 10MOV-17 or 10MOV-18 fail to open as required, then SRV's continue to provide decay heat removal to the primary containment. RHR torus cooling removes decay heat from the torus to Lake Ontario.

If all control rods cannot be verified to be fully inserted, then EOP-3, Failure to Scram, is entered and measures are taken to reduce reactor power and fully insert all control rods. AOP-34, Backup Rod Insertion, is used to attempt several methods to insert control rods. RPV pressure and level control and containment control are similar to the EOP-2 case described above.

Simulator Validation

A normal operating shift complement of two Senior Reactor Operators and three Reactor Operators were exposed to three simulator scenarios to observe their response to the simulated transients and to validate the SSEL systems. JAF USI A-46 project team representatives from Project Engineering-BWR, Technical Services, Site Engineering, Operations, Stevenson & Associates, Engineering Planning and Management, and Nuclear Systems Analysis were present to evaluate the scenarios.

Simulator Validation (Continued)

Scenario #1: Loss of offsite power with HPCI as the sole high pressure injection source.

Summary - After the initiating event, the crew entered EOP-2, RPV Control, on low RPV level and used HPCI for RPV level control, and SRV's for RPV pressure control. They completed the immediate actions of AOP-1 and entered EOP-4, Primary Containment Control, placing 'A' RHR in the torus cooling mode to control torus temperature. The crew began a controlled plant cooldown using SRV's per ST-26J, Heatup and Cooldown Checks*, and the scenario was terminated.

Scenario #2: Loss of offsite power with no high pressure injection source.

Summary - After the initiating event, the crew used SRV's for RPV pressure control and completed AOP-1 immediate actions per EOP-2, RPV Control. After unsuccessfully attempting to restore any high pressure injection source, the crew performed an emergency RPV depressurization per EOP-8, Emergency RPV Depressurization. After the depressurization, the crew used one LPCI train for RPV level control and the other RHR train for torus cooling per EOP-2 and EOP-4. SRV's were used for decay heat removal to the torus and the scenario was terminated.

Scenario #3: Loss of offsite power with failure to scram, EPIC unavailable.

Summary - After the initiating event, the crew entered EOP-3, Failure to Scram, and immediately initiated SLC injection. After the main turbine tripped, SRV's were used for RPV pressure control. The crew placed 'A' RHR in the torus cooling mode per EOP-4 and used HPCI for RPV level control. An SRO implemented AOP-34, Backup Control Rod Insertion*, as directed by EOP-3. Using the power/level control leg of EOP-3, the crew lowered RPV level to control reactor power, using HPCI as the injection source at the lower level band. The crew rapidly depressurized the RPV to avoid exceeding the Torus Heat Capacity Temperature Limit curve. With reactor power below the heating range, the SLC hot shutdown weight injected to the RPV, HPCI controlling RPV level, and SRV's controlling RPV pressure, the scenario was terminated.

Simulator Validation (Continued)

Simulator evaluation - The first scenario confirmed the safe shutdown paths selected by the SSEL to be legitimate and confirmed that operators are directed to them by their procedures. The second scenario demonstrated the importance of including at least one high pressure injection source to the SSEL-it avoids the drastic action of an emergency depressurization. The third scenario demonstrated the importance of the SLC system in an ATWS event. Overall, the scenarios supported the SSEL systems as being compatible with plant procedures and operator training.

Conclusions and Summary

The SSEL systems list was reviewed for compatibility with plant operating procedures using "table top" reviews and simulator scenarios. The SSEL was found to be acceptable.

JOSEPH D. KLEVORN
ASSISTANT SHIFT SUPERVISOR

JDK:dmh

ATTACHMENT

CC: H. Salmon (w/o attachment)
R. Barrett (w/o attachment)
D. Lindsey (w/o attachment)
M. Colomb (w/o attachment)
R. Locy (w/o attachment)
P. Brozenich (w/o attachment)
F. Edler (w/o attachment)
D. Ruddy (w/o attachment)
JOPS Correspondence Log (w/o attachment)
RMS (w/o attachment)

6.0. ATTACHMENTS

		Volume(s)
A:	Resume' of Lead Relay Reviewer(s)	I
B:	USI A-46 Safe Shutdown Sequence Diagrams	I
C:	Composite SSEL	I
D:	Seismic Review SSEL	I
E:	Relay Review SSEL	I
F:	List of Panels Containing Essential Relays and Essential Relays (Instruments) that are Field Mounted	I
G:	USI A-46 Relays	I
H:	Condensed List of Essential Relays	I
I:	Outlier Relays and OSVS Forms	I
J:	SSEL Component and Relay Data Sheets	II to XII

EDUCATION

B.S., Electrical Engineering
Northeastern University
1972

A.S., Electrical Engineering
Wentworth Institute
1968

EXPERIENCE SUMMARY

Mr. Deinha has over 21 years of engineering experience in the utility industry which includes a strong technical background in engineering design and construction. Prior to joining EPM, Mr. Deinha's responsibilities included the engineering design of Electrical Power Distribution Systems at two major A/E's. This includes significant expertise in sizing and specifying major equipment for power plant ac and dc generation and distribution systems. Equipment specifically includes transformers, cables, switchgear, batteries, inverters and chargers. His experience also includes load studies, fault current studies and voltage drop studies. At EPM, he has developed significant, specific technical expertise in Reg. Guide 1.97 Instrumentation for Post-Accident Monitoring, Equipment Qualification, Safety System Functional Inspections, Electrical Distribution System Functional Inspections (EDSFI), Appendix R analyses and SQUG relay evaluation.

PROFESSIONAL EXPERIENCE

Mr. Deinha has the following experience in each of the noted areas:

SQUG RELAY EVALUATION

Mr. Deinha was a lead relay reviewer for the J.A. Fitzpatrick SQUG project. His responsibilities included the review of plant schematics and elementary diagrams to determine whether the relays associated with a safe shutdown component were "essential" and to assess the seismic capability associated with essential relays using the methodology identified in EPRI NP-7148-SL, NP-7147-SL and the SQUG Generic Implementation Procedure. Prior to the start of this project, Mr. Deinha completed the SQUG Equipment Selection and Relay Evaluation Training course held November 16-18, 1993.

NRC EDSFI PLANT INSPECTIONS

Mr. Deinha was an NRC inspection team member for several Electrical Distribution System Functional Inspections (EDSFI) including the Arkansas, Waterford, Calvert Cliffs, Perry, Prairie Island, Millstone 2, Byron and Braidwood Nuclear Stations. His responsibilities during these inspections have included the review of load studies, short circuit calculations (AC/DC), AC and

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DC voltage drop studies, degraded grid relaying, diesel generator loading and sequencing, switchgear design, cable sizing, fast bus transfer scheme, electrical isolation, breaker and fuse coordination; sizing of transformers, breakers, batteries, battery chargers and inverters.

EQUIPMENT QUALIFICATION

These assessments included the review of the utility's EQ program controls, maintenance requirements, plant modifications, EQ documentation packages, etc. Mr. Deinha is familiar with the requirements of the 10CFR50.49, Regulatory Guide 1.89, DOR guidelines, NUREG-0588, IEEE 323 and its associated daughter documents. His specific EQ responsibilities have included:

- Performed an EQ program procedures review and maintenance review to determine the adequacy of engineering and plant controls.

- Performed various reviews of equipment qualification packages to determine the completeness and technical adequacy of documentation as required by 10CFR 50.49 and associated DOR and IEEE guidelines.

- Developed or revised equipment qualification packages.

Mr. Deinha has participated in equipment qualification assessments associated with the Arkansas Nuclear One, Indian Point 2, St. Lucie 1 and 2, Turkey Point 3 and 4, Pilgrim and LaSalle Nuclear Power Station.

Mr. Deinha provided consulting services to Turkey Point 3 and 4 which included the development or revision of EQ Documentation Packages and the development of the associated engineering packages. These projects required the understanding of the Environmental Qualification of a large range of generic component types. In addition, he performed component operability evaluations to address EQ deficiencies resulting from component walkdown at both the St. Lucie and Turkey Point Nuclear Stations.

Mr. Deinha provided consulting services to Indian Point 3 performing the preparation and revision of EQ Documentation Packages. He also provided technical support during the NRC EQ inspection.

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INSTRUMENT SETPOINTS

Mr. Deinha was involved with the Browns Ferry Nuclear 3 setpoint calculations effort. His responsibilities included the development of project procedures and guidelines, generic calculations, undervoltage relay calculations, etc. The guidelines developed by Mr. Deinha detailed the process used in performing the setpoint and inaccuracies calculations, as well as, identification of acceptable sources of design input data. He also provided technical input for those calculations associated with Regulatory Guide 1.97 for post-accident monitoring in order to ensure compliance with the requirements of the regulatory guide.

SAFETY SYSTEM FUNCTIONAL INSPECTION

Mr. Deinha was Project Engineer for the Safety System Functional Inspection (SSFI) performed for Commonwealth Edison's Zion Station. His responsibilities included the following activities:

- Developed and performed an SSFI for the review of design basis requirements, design changes and modifications, maintenance, testing and training associated with the Auxiliary Feedwater System. Prepared a detailed final report.

- Developed the SSFI review checklists for both programmatic and technical reviews.

He assisted FP&L's St. Lucie and Turkey Point Stations in performing an SSFI of their Intake Cooling Water Systems using the vertical slice methodology. His responsibilities included the following activities:

- Development of an inspection plan to identify the specific areas to be reviewed

- Review of system design basis documentation (e.g., calculations) and plant modification packages

- The development of a draft document identifying the resulting findings and concerns

ELECTRICAL DESIGN

Mr. Deinha has provided technical supervision of support engineers. He has performed station service voltage drop studies, fault current studies and load

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studies for plant power distribution systems. He has also performed calculations for short circuit, voltage drop and cable sizing. He sized and specified major equipment for power plant ac and dc generation and distribution systems. This equipment specifically included transformers, cables, switchgear, station batteries, battery chargers and inverters. He reviewed both physical and electrical design drawings to ensure compliance with the physical separation and electrical isolation requirements of Regulatory Guide 1.75. His electrical design activities were associated with nuclear steam supply, including the review of motor, switchgear and control panel specifications and drawings. He has performed environmental qualification of electrical equipment, including review of vendor qualification packages and interface with vendors and client to resolve equipment qualification deficiencies. He has also provided specification of the technical requirements for the purchase of commercial grade materials for safety-related installations.

REG. GUIDE 1.97 INSTRUMENTATION

Mr. Deinha was responsible for supervising the technical review of the Reg. Guide 1.97 submittals to NRC by Florida Power & Light (FP&L) for Turkey Point Plant and St. Lucie Nuclear Power Station. The objective of the review was to determine FP&L's level of compliance to the requirements of Reg. Guide 1.97 which identifies the instrumentation and qualification/design criteria required for post-accident monitoring.

The RG 1.97 Compliance Assessment included the following areas of review:

- Environmental Qualification
- Display and Recording
- Redundancy
- Power Sources
- Range
- Electrical Isolation
- Testing and Calibration of Loops
- Common Designation for Type A, B and C Instruments Designated as Category 1 and 2
- QA and Seismic Qualification
- Physical Separation of Category 1 Instrument Loops
- TSC and EOF Compliance
- Review of Plant Emergency Operating Procedures to Identify Type A Variables
- Review of RG 1.97 Associated Plant Modifications
- Review of NRC SER and Associated Correspondence

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Mr. Deinha was also responsible for the resolution of areas of noncompliance including the development of technical justifications/evaluations.

In addition, he was responsible for revision of the Turkey Point submittal and the FSAR section identifying plant commitments. This effort included the development of an Engineering Package to revise the FSAR and verification of the safety classification of RG 1.97 components.

APPENDIX R ANALYSIS

Mr. Deinha has participated in various projects involving Appendix R analyses. His responsibilities in this area encompassed the following activities:

- Performance of overall Appendix R plant evaluation.
- Performance of safe shutdown analysis of systems, components and cables.
- Review of proposed modifications for long-term conformance to Appendix R.
- Preparation of safe shutdown operating and repair procedures to be used by plant operators in the event of a fire.

TRAINING

Mr. Deinha was responsible for developing a training course at Commonwealth Edison's LaSalle Station for the use of Appendix R Safe Shutdown Operating Procedures. His activities included the development of course lesson plans and the performance of six operator training sessions.

Prior to joining EPM, Mr. Deinha was an electrical engineer for major firms serving the utility industry including Bechtel and Stone and Webster. Highlights of this experience follow:

BECHTEL POWER CORPORATION

As Electrical Group Leader, he provided technical supervision of support engineers for the review of electrical and I&C design change modification packages, and electrical drawings, associated with Pilgrim Station, including:

- Interfacing with the client to resolve comments and obtain approval of drawings.

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- Interfacing with plant personnel to perform plant walkdowns.

STONE & WEBSTER ENGINEERING CORPORATION

As Electrical Principal Engineer, he participated in the design and construction of Millstone 3, a 1200 Mw nuclear power plant, including:

- Technical supervision of support engineers.

- Station service voltage drop studies, fault current studies and load studies for plant power distribution systems.

- Calculations for short circuit, voltage drop and cable sizing.

- Sizing and specifying of major equipment for power plant ac and dc generation and distribution systems. Equipment specifically includes transformers, cables, switchgear, station batteries, battery chargers, and inverters.

- Review of both physical and electrical design drawings to ensure compliance with the physical separation and electrical isolation requirements of Regulatory Guide 1.75 and IEEE 323.

- Electrical design activities associated with the nuclear steam supply including the review of motor, switchgear and control panel specifications and drawings.

- Environmental qualification of electrical equipment, including review of vendor qualification packages and interface with vendors and client to resolve equipment qualification deficiencies.

- Specification of the technical requirements for the purchase of commercial grade materials for safety related installations.

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EDUCATION

B.S., Electrical Engineering
Northeastern University
Boston, Massachusetts

EPM EXPERIENCE

Mr. Kalantari has over fifteen years of engineering experience in the nuclear power industry. As a Technical Manager at EPM, he has had major responsibility for detailed review of plant electrical and mechanical systems, components and licensing commitments for both BWR and PWR plants to support projects such as Component Classification (Q-List), Environmental Qualification (EQ), Station Blackout, Reg. Guide 1.97 Assessment, USI A-46, "Seismic Qualification of Equipment in Operating Nuclear Power Plants," IPEEE, "Independent Plant Examination of External Events," and Fire Protection/Appendix R projects. Highlights of his experience include the following:

Involved in identification of Safe Shutdown Components and relay evaluation required per USI A-46 "Seismic Qualification of Equipment in Operating Nuclear Power Plants" for Cooper Nuclear Station And James A. FitzPatrick.

Lead relay reviewer for the James A. FitzPatrick and Cooper Nuclear Station SQUG project. He reviewed plant schematics and elementary diagrams to determine whether the relays associated with a safe shutdown component were "essential" and assessed the seismic capability associated with essential relays using the methodology identified in EPRI NP-7148-SL, NP-7147-SL and the SQUG Generic Implementation Procedure. Prior to the start of this project, Mr. Kalantari completed the SQUG Equipment Selection and Relay Evaluation Training Course.

Involved in the implementation of IPEEE Fire Induced Vulnerability Evaluation (FIVE) for Cooper Nuclear Station.

Participated in Fire Protection/Appendix R safe shutdown projects at Monticello, D.C. Cook, Point Beach, James A. Fitzpatrick, Peach Bottom, Indian Point 3 and Cooper where the following functions were performed:

- Reviewed plant design to identify systems and components required for safe shutdown.
- Performed safe shutdown analysis and proposed design changes to resolve any areas of noncompliance.
- Prepared Fire Hazards Analysis.

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EPM

- Reviewed Plant documents and submittals to identify the Licensing Commitments.

- Reviewed Licensing Commitments and prepared comprehensive documents detailing the Fire Protection/Appendix R Compliance Program.

- Wrote alternate safe shutdown procedure to achieve hot and cold shutdown conditions in the event of fire coincident with loss of off-site power.

- Participated in various Appendix R/Fire Protection Audits.

Involved in technical assessment of Appendix R compliance at various power plants.

Performed equipment classification services at J. A. FitzPatrick, Cooper, Zion, and Calvert Cli.. work included the following:

- Reviewed NRC, IEEE, ASME, and ANSI guidelines and requirements for safety-related systems to establish criteria for equipment classification.

- Reviewed FSARs and various other licensing commitments to establish specific criteria for equipment classification.

Prepared procedures and design criteria for equipment classification projects at Cooper, Zion and J. A. FitzPatrick, work included the following:

- Classified electrical, instrumentation, and mechanical components through detailed review of design drawings, operating manuals, and safety analysis reports.

Performed equipment classification training at Cooper Nuclear Station and J.A. FitzPatrick.

Reviewed and provided guidance for equipment classification projects at Zion, LaSalle and Calvert Cliffs Stations.

Performed comprehensive audit of Calvert Cliff's Q-List Program.

Participated in Environmental Qualification projects for various clients and performed the following:

- Reviewed environmental analysis to identify components required for qualification.

- Prepared a comprehensive EQ component list for Cooper and James A. FitzPatrick Nuclear Stations.

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- Participated in technical evaluation of EQ documentation for D.C. Cook, Turkey Point, St. Lucie and Boston Edison.

- Reviewed Vendor Manuals and qualification documents to establish maintenance program for environmentally qualified components.

PREVIOUS EXPERIENCE

Prior to joining EPM, Mr. Kalantari Performed engineering services for Bechtel and Boston Edison. Highlights of this experience follow:

- Provided start-up support for nuclear power plants.

- Ensured completion and operability of start-up systems in accordance with design criteria.

- Provided engineering interpretation of design drawings and specifications.

- Maintained and/or modified design through field changes.

- Involved in development of various site engineering procedures such as, safety tagging, termination, cable pulling and raceway installation procedures.

- Coordinated functions of such groups as Electrical Engineering, Quality Control, Superintendents and Crafts to ensure system completion in accordance with start-up schedule.

- Served as Lead System Engineer for various start-up systems including 4KV, 480V AC, 120V AC, and the entire DC system at Hope Creek Generating Station. Activities included vendor interface for purchasing, installation, and testing.

- Investigated, reviewed, and evaluated tasks for safety and reliability of plant operation.

- Involved in calculation, design, and preparation of design changes and associated instructions.

PROFESSIONAL AFFILIATIONS

- Institute of Electrical and Electronics Engineers, Member
- Society of Fire Protection Engineers, Member Grade
- American Nuclear Society, Member

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ADDITIONAL RESUMES

NYPA REVIEWERS

JOHN F. BRETTI
NUCLEAR SYSTEM ANALYSIS ENGINEER

SUMMARY:

Mr. Bretti has over six years of experience in the area of Probabilistic Risk Assessment (PRA). He has actively participated in the development of the Individual Plant Examinations (IPEs) for the Seabrook Station and Indian Point Unit 3 (IP3) nuclear power plants. In addition to experience performing systems and event tree analyses and quantification, Mr. Bretti was responsible for the human reliability analyses for Seabrook Station and IP3. He has a working knowledge of the IP3 Emergency Operating Procedures (EOPs).

EXPERIENCE:

9/92 - Present

New York Power Authority

Nuclear Systems Analysis Engineer, Nuclear Generation Department
Provide engineering support in the area of Probabilistic Risk Assessment for the IP3 and James A. Fitzpatrick (JAF) nuclear power plants. Responsibilities include performing system and human reliability analyses and performing engineering evaluations to support plant operation. Currently assisting in the external events analysis for JAF. Major accomplishments include:

- Performed human reliability analysis (HRA) for the IP3 IPE, which resulted in improvements to plant emergency operating procedures.
- Provided HRA training to site personnel.
- Prioritized motor-operated valves (MOVs) to support Generic Letter 89-10 MOV program at IP3.

6/89 - 9/92

Yankee Atomic Electric Company

Nuclear Engineer, Safety Assessment Group, Nuclear Engineering Department
Provided engineering support in the area of Probabilistic Risk Assessment for the Seabrook Nuclear Power Station. Responsibilities included performing system and event tree analyses and maintaining "living" Seabrook Station Probabilistic Safety Study (SSPSS). Performed engineering evaluations to support maintenance prioritization activities and technical specification modifications. Major accomplishments include:

- Co-authored the Seabrook Station IPE Report.

EXPERIENCE (Continued):

- Assisted in the seismic and fire risk analyses for Seabrook Station's IPEEE Report.
- Performed human reliability analysis for Seabrook Station, which resulted in improvements to plant emergency operating procedures.

6/88 - 9/88 **Yankee Atomic Electric Company**

Intern, Safety Assessment Group, Nuclear Engineering Department
Provided technical assistance in the area of Probabilistic Risk Assessment for the Yankee and Maine Yankee nuclear power stations, including utilization of applicable computer codes.

7/87 - 1/88 **Pilgrim Nuclear Power Station**

Intern, Computer Engineering, Nuclear Operations Department
Provided technical assistance with the maintenance of the database for the Emergency and Plant Information Computer (EPIC) System.

EDUCATION:

M.S., University of Massachusetts at Lowell, 1993
Major: Energy Engineering
G.P.A. 3.8/4.0
I.N.P.O. Fellowship

B.S., University of Lowell (Massachusetts), 1988
Major: Nuclear Engineering
G.P.A. 3.7/4.0
Magna Cum Laude
I.N.P.O. Scholarship
Member *Alpha Nu Sigma* (Nuclear Engineering Honor Society)
Academic All-American

AFFILIATIONS: Member American Nuclear Society

REFERENCES: Excellent references available upon request.

JOHN A. FAVARA

TITLE: Nuclear System Analysis Engineer

SPECIAL SKILLS:

Computer Languages; Fortran, Basic and Vector Fortran.
Experience in NOS and Vector (205) operating systems JCL.
Experience in DOS and MS-DOS software applications.
Experience in operating the following Probabilistic Risk Assessment (PRA) computer programs:

- Set Equation Transformation System (SETS)
- Event Tree Analysis (ETA-II)
- Meltdown Accident Response Characteristics (MARCH 3.0)
- Modular Accident Analysis Program for Pressurized Water Reactor (MAAP/PWR)
- Boiling Water Reactor Severe Accident Response code (BWRSAR)
- Event Progress Analysis Code (EVNTRE).

EDUCATIONAL TRAINING:

Manhattan College, Riverdale, New York
Bachelor of Mechanical Engineering (1982)
Master of Mechanical Engineering (1987)

Attended short courses in CAFTA and SETS computer codes, IPEEE, root cause analysis, human reliability analysis, system reliability engineering, probabilistic risk assessment, risk base technical specification evaluations, component failure data analysis, common cause failure analysis, GO modeling, fault tree modeling, and nuclear power plant generation technology.

PROFESSIONAL SOCIETIES:

Member of American Society of Mechanical Engineers

WORK EXPERIENCE:

1982 - PRESENT: NEW YORK POWER AUTHORITY

- Assisted in the development of safety analysis computer codes for severe accident evaluations by debugging and rewriting of the MARCH computer program and the CONTEMPT-DG program.

- Assisted in developing the containment model used in the main steam line analysis for IP3NPP, along with performing calculations in support of the analysis.

- Assisted on shielding calculations done in support of the IP3NPP Hydrogen Recombiner Panel accessibility during post-accident operations analysis.

- Assisted in obtaining and debugging the implementation of various code modifications for the purpose of improving the NYPA version of the NRC source term computer code set (TRAPMELT, CORSOR, MERGE, and MATADOR) used in the source term study for NYPA IP3NPP and JAFNPP, respectively.

- Assisted in the development of coupling the CORCON computer code to MARCH 3.0 in order to account for physical phenomenon that occurs between core-concrete interactions and its effects on containment integrity.

- Performed thermal balance of plant calculations for JAFNPP using the computer code PEPSE.

- Involved in field work at IP3 and JAF, where I supported site personnel in such areas as steam generators maintenance activities involving deconning operations, sludge lancing operations, and tube plugging operations. During the IP3 summer/fall 1985 outage I was in charged of the night shift program for the inspection and maintenance of safety related limitorque actuators under the environmental qualification program. During the JAF winter 1986 outage I was in charged of the both main boiler feedpump turbine maintenance activities.

- Developed DBASE IV program establishing a component failure database in support of the JAF Individual Plant Examination (IPE) study.

- Developed JAF IPE system's fault tree models for the plant cooling water and balance of plant systems.

- Involved in calculating in the JAF IPE pre-accident human error probability (HEP) analysis in regards to post test and maintenance restoration errors, and instrument miscalibration errors.

- Developed for both JAF and IP3 IPE, event trees depicting various accident progressions that follow the occurrence of an initiating event.

- Developed for both JAF and IP3 IPE, success criteria through the use of numerous thermal-hydraulics calculations.

- Responsible engineer for both the JAF and IP3 IPE containment performance analysis.

- Developed accident progressions scenarios for implementation on both the JAF and IP3 simulators in support of calculating post-accident HEP for both the JAF and IP3 IPE.

- Supported the development for both JAF and IP3 maintenance rule compliance.

- Supported the development for both JAF and IP3, " Verification of Seismic Adequacy of Equipment in Operating Plants," (USI A-46).

- Developed the Probabilistic Risk Assessment of the effects of postulated events with 360° shroud through-wall crack for JAF.

- Provided the analysis that examined the effects of a hydrogen explosion in the JAF Turbine Building.

- Developed the Probabilistic Risk Assessment for a tornado-induced station blackout at the Fitzpatrick plant.

- Provided the analysis that examined the effects of additional Feedwater/Condensate on JAF containment pressure analysis for LOCAs.

- Performed the IP3 Control Building 15 Foot Elevation Room Heat-up calculations.

- Developed information on NRC Information Notice 92-36: Intersystem LOCA Outside Containment.

- Performed calculations of Pump Room Temperatures in the Event of a Screenwell Fire for JAF.

- Supported numerous JAF and IP3 request for information regarding thermal-hydraulic behavior of the primary system and containment, Appendix R issues, changes in core damage frequency given pre-existing conditions.

JOSEPH D. KLEVORN
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(315) 349-6313 (O)

EDUCATION

MASTER OF BUSINESS ADMINISTRATION 1993
Syracuse University, Syracuse, New York
Finance Concentration

BACHELOR OF SCIENCE 1981
Massachusetts Institute of Technology
Cambridge, Massachusetts
Mechanical Engineering

EXPERIENCE

NEW YORK POWER AUTHORITY, FitzPatrick Nuclear Power Plant
Control Room Supervisor 1989-Present
Senior Reactor Operator license holder.

- Supervise a crew of ten bargaining unit plant operators.
- Direct equipment lineups to support maintenance, testing, and operation.
- Troubleshoot technical problems.
- Creatively manage human resources in demanding, rotating-shift environment.
- Perform post-trip reviews of plant transients.
- Act as Operations department training coordinator.

Systems Engineer - RHR, Core Sprav, SLC, FPC. 1988-1989

- Engineered equipment improvements in safety and cost.
- Performed nuclear safety evaluations of modifications and special evolutions.
- Analyzed industry experiences to improve systems performance.

CONSULTING ENGINEER 1985-1988

- Performed seismic evaluation of Seabrook Station installation.
- Created Master Equipment List for Salem Station.
- Negotiated project scopes with clients.

UNITED STATES NAVY
Naval Officer 1981-1985

- Served junior officer tour aboard nuclear-powered submarine.

SKILLS

- Proficient with PC software - Excel, Lotus, Minitab, Statographics, Wordperfect.

Frederick A. Weinert

Experience:

2/95 to Present — **New York Power Authority - Indian Point 3** — **Buchanan, NY**
Electrical Design Engineer - Programs

- Responsible for Emergency Diesel Generator Transient Load Study.
- Perform/review Nuclear Safety Evaluations, calculations and reports for power plant electrical systems.

6/93 to 2/95 — **New York Power Authority - White Plains Office** — **White Plains, NY**
Electrical Engineer

- Performed electrical system design basis reviews, calculations and evaluations for power plant electrical systems.
- Coordinate consultants performing in-depth calculations and reports.

6/89 to 6/93 — **New York Power Authority - J.A. FitzPatrick** — **Lycoming, NY**
System Engineer - Electrical

- Provided technical support for AC distribution systems including 345 KV and 115 KV switchyards, 24 KV isophase bus, 4160 V, 600 V, and 120 V switchgear.
- Responsible for Emergency Diesel Generators (electrical), Plant UPS and Reactor Protection System power systems.

9/77 to 9/83 — **United States Navy** — **Groton, CT**
First Class Electrician (submarine qualified)

- Maintained and operated a nuclear plant as an electrician, electrical plant operator, and shutdown reactor operator.

Education:

Clarkson University — **Potsdam, NY**
BS, Electrical Engineering (Power) — 5/89

Orange County Community College — **Middletown, NY**
AS, Engineering Science — 5/87

License: New York State EIT, 1989

Awards: J.A. FitzPatrick 1992 Employee of the Quarter

References: **Available upon request**

CLEMENT YEH

Experience:

Over twenty-four years experience in probabilistic risk and reliability analyses and applications, nuclear power plant system safety reviews, licensing and radiological assessment.

1986-date Supervisory Engineer II - Reactor Engineering/Nuclear System Analysis. New York Power Authority.

Supervising Nuclear System Analysis (NSA) team performing James A. FitzPatrick Nuclear Power Plant Individual Plant Examination by the External Events (IPEEE) study.

Led NSA team completed both James A. FitzPatrick (JAF) and Indian Point unit 3 (IP3) Nuclear Power Plants Individual Plant Examination (IPE) studies. Provided principal technical guidelines on fault tree model development, component failure data and maintenance unavailability analyses, human reliability and recovery analyses and living IPEs.

Interacted with plant staff and provided support in the application of the IPE insights to review engineering modification packages, and safety related functional assessment, improve procedures, evaluate surveillance test interval and allowable outage time relaxation. Participated in the system performance monitoring and trending, GL 89-10 MOVs risk ranking and prioritization, maintenance rule compliance, on-line maintenance, graded quality assurance, USI A-46 and severe accident management guidelines development programs.

Developed IPE training modules and conducted IPE training seminars for WPO, IP3 and JAF staff.

Led NSA team to susscessfully defend JAF IPE on NRC step 2 review and harden vent study to avoid costly modification.

Performed a reliability assessment of recirculation pump trip coil for James A. FitzPatrick to avoid ATWS modifications.

Performed a reliability study of feedwater turbine oil control system for Indian Point 3.

Performed a reliability study and spare parts management of SCADA system for the Niagara hydro projects.

1980-1986 Principal Engineer - Risk Assessment.
Ebasco Services, Inc.

Lead Engineer - Plant Modeling, Responsible for supervising and performing risk/reliability studies for Ebasco power projects and other stand-alone work including:

- Risk analysis of diesel generator spare parts study for Turkey Point Units 3 & 4, and St Lucie Units 1 & 2.
- RAM program development and evaluation on the conceptual design of electrical distribution system expansion/upgrade for Indian Point Unit 3.
- Fault tree verification on the pipe damage study for Commanche Peak Steam Electric Station Units 1 & 2.
- Control room fire spurious signal analysis for Sandia National Laboratory (as subcontractor to the NRC).
- Fault tree development and evaluation on the USI A-47 "Safety Implication of Control Systems" for Waterford Steam Electric Station Unit 3 and Shearon Harris Unit 1.
- Fault tree development and analysis on the Appendix R spurious signal analysis for Waterford Steam Electric Station Unit 3.
- Fault tree development, analysis and procedure enhancement on the IE Bulletin 79-27 "Loss of Non-Class 1E Instrumentation and Control Power System during Operation" for Waterford Steam Electric Station Unit 3.
- Simplified flow diagram, instrumented fault tree development and analysis of safety systems on the System Operability Assurance Review Program for Waterford Steam Electric Station Unit 3.

Senior Engineer - Nuclear Licensing.

Responsible for detailed PSAR defense review with respect to NRC Standard Review Plans, Regulatory Guides and development of feasible recommendations on non-compliance regulatory positions for WPPSS Units 3 & 5.

1972-1980 Nuclear Engineer. Gibbs & Hill, Inc.

Lead Job Engineer - Responsible for accident analysis, radiological assessment, SAR, ER preparation and review for various domestic and foreign nuclear power plants.

1970-1972 Physicist. Taiwan Power Company.

Responsible for safety anlysis, system design review and fuel cycle cost evaluations for Chin Shan Nuclear Power Stations, Units 1 & 2.

Education:

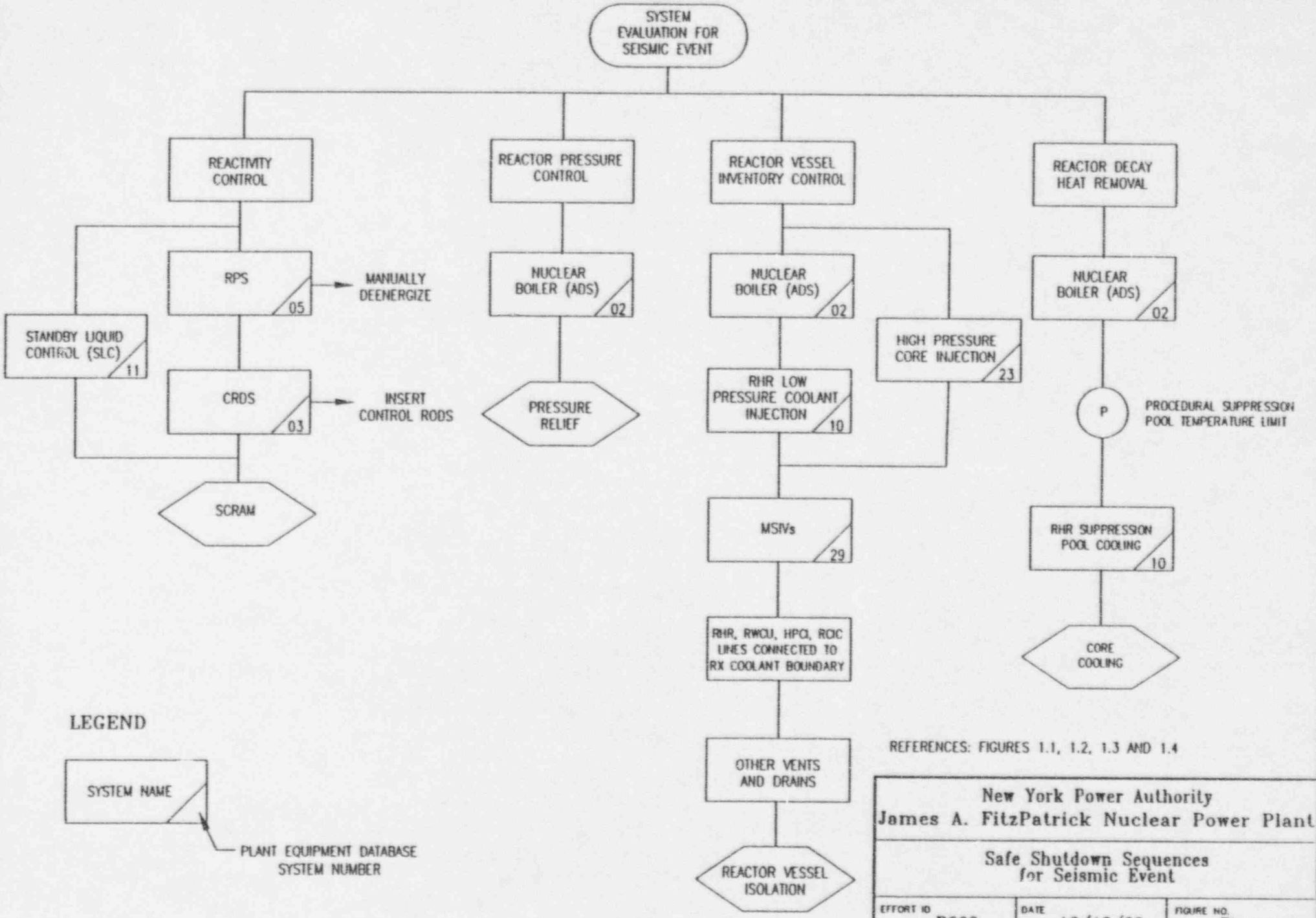
ME, Mechanical Engineering, Stevens Institute of Technology, 1980

ME, Nuclear Engineering, New York University, 1975

BS, Mathematics, National Cheng Kung University, Taiwan, 1969.

Attended short courses in fire risk analysis, root cause analysis, human reliability, reliability engineering, risk assessment, risk based technical specification evaluations, component failure data analysis, common cause failure analysis, reactor safety and environmental impact assessment, and nuclear power plant generation technology.

Member -- ASME, ANS and EPRI Risk and Reliability Target Steering committee.



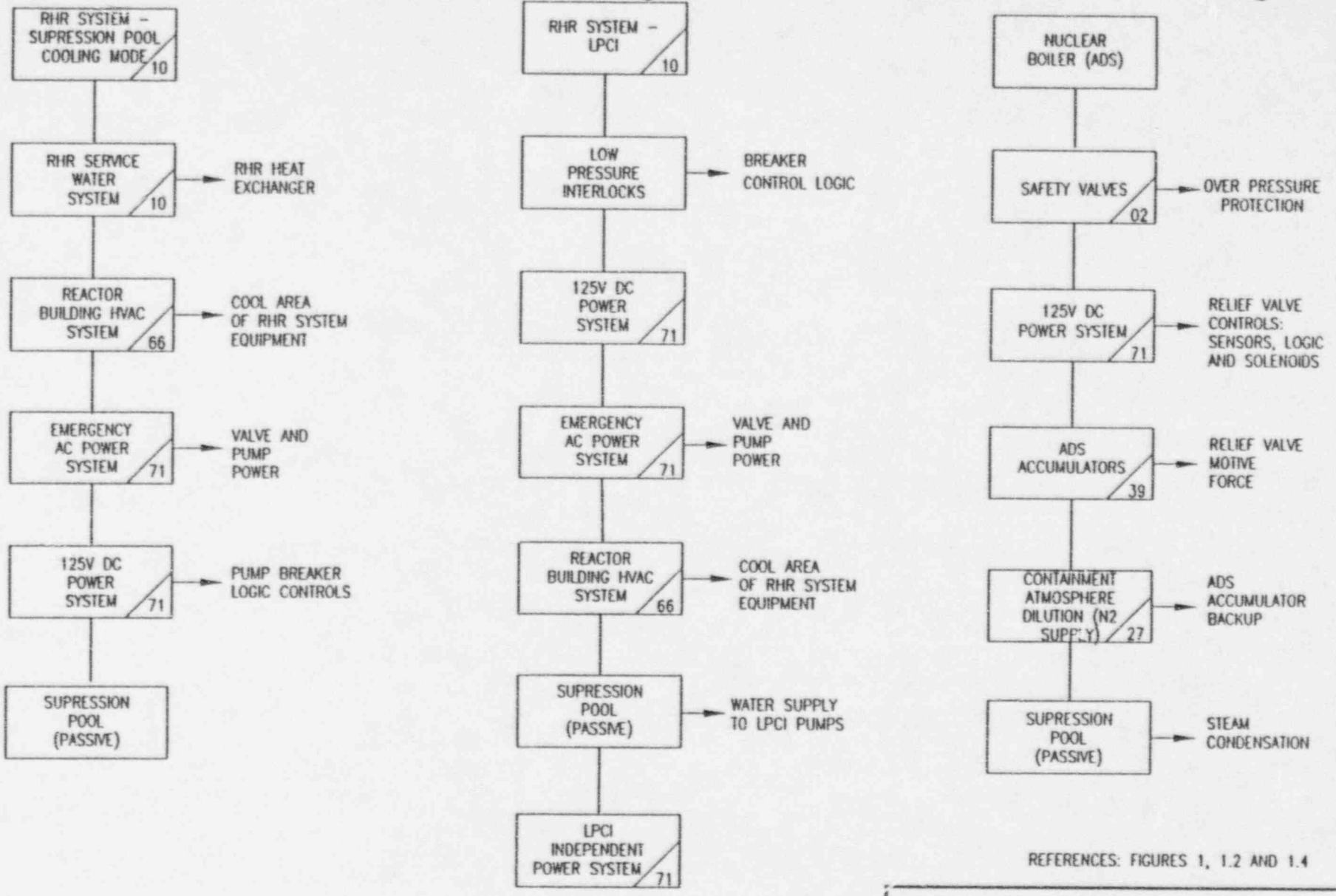
REFERENCES: FIGURES 1.1, 1.2, 1.3 AND 1.4

New York Power Authority
James A. FitzPatrick Nuclear Power Plant

Safe Shutdown Sequences for Seismic Event

EFFORT ID	DATE	FIGURE NO.
P909	12/13/93	Figure 1

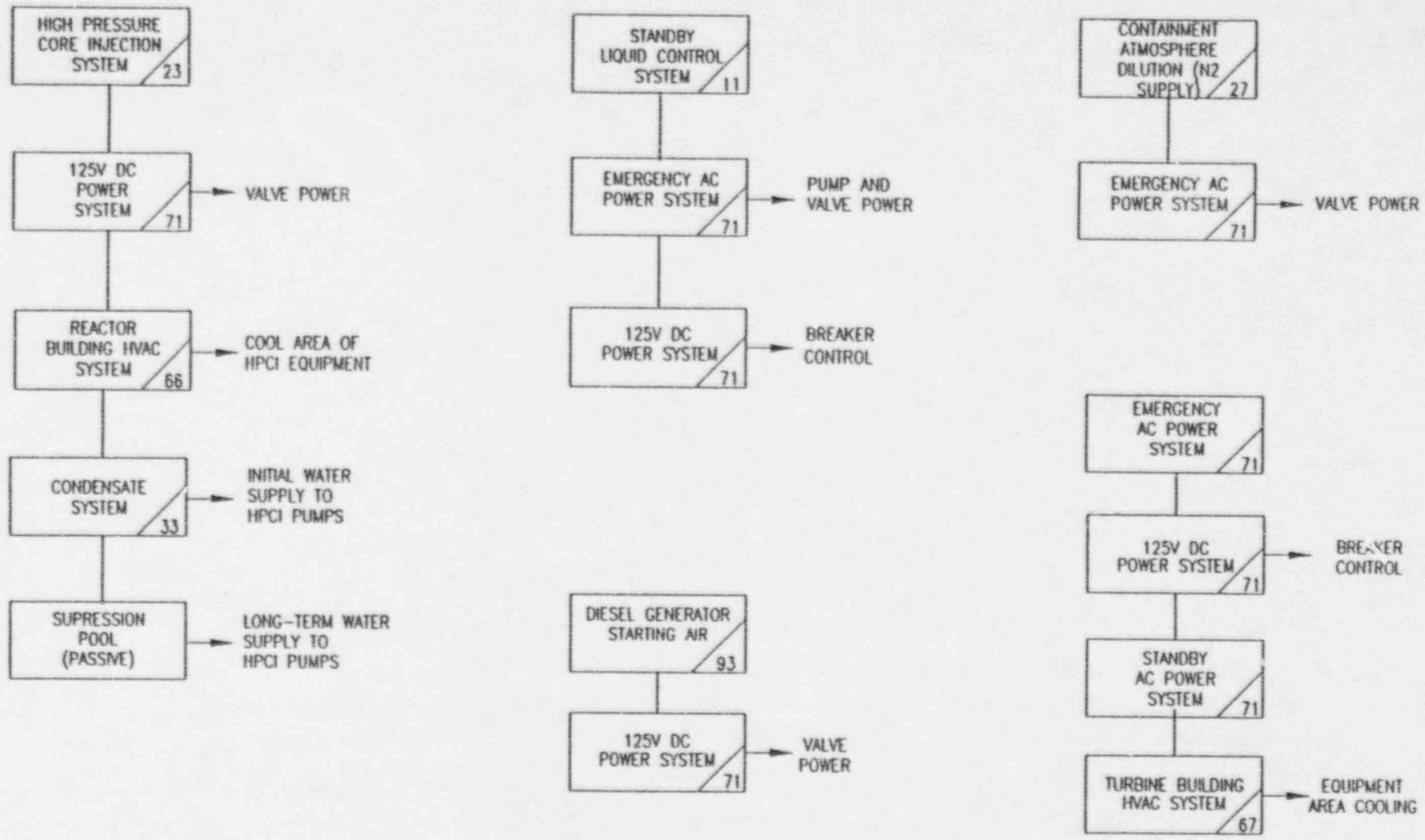
93-093A



REFERENCES: FIGURES 1, 1.2 AND 1.4

New York Power Authority James A. FitzPatrick Nuclear Power Plant Safe Shutdown System Auxiliaries for Seismic Event		
EFFORT ID P909	DATE 12/13/93	FIGURE NO. Figure 1.1

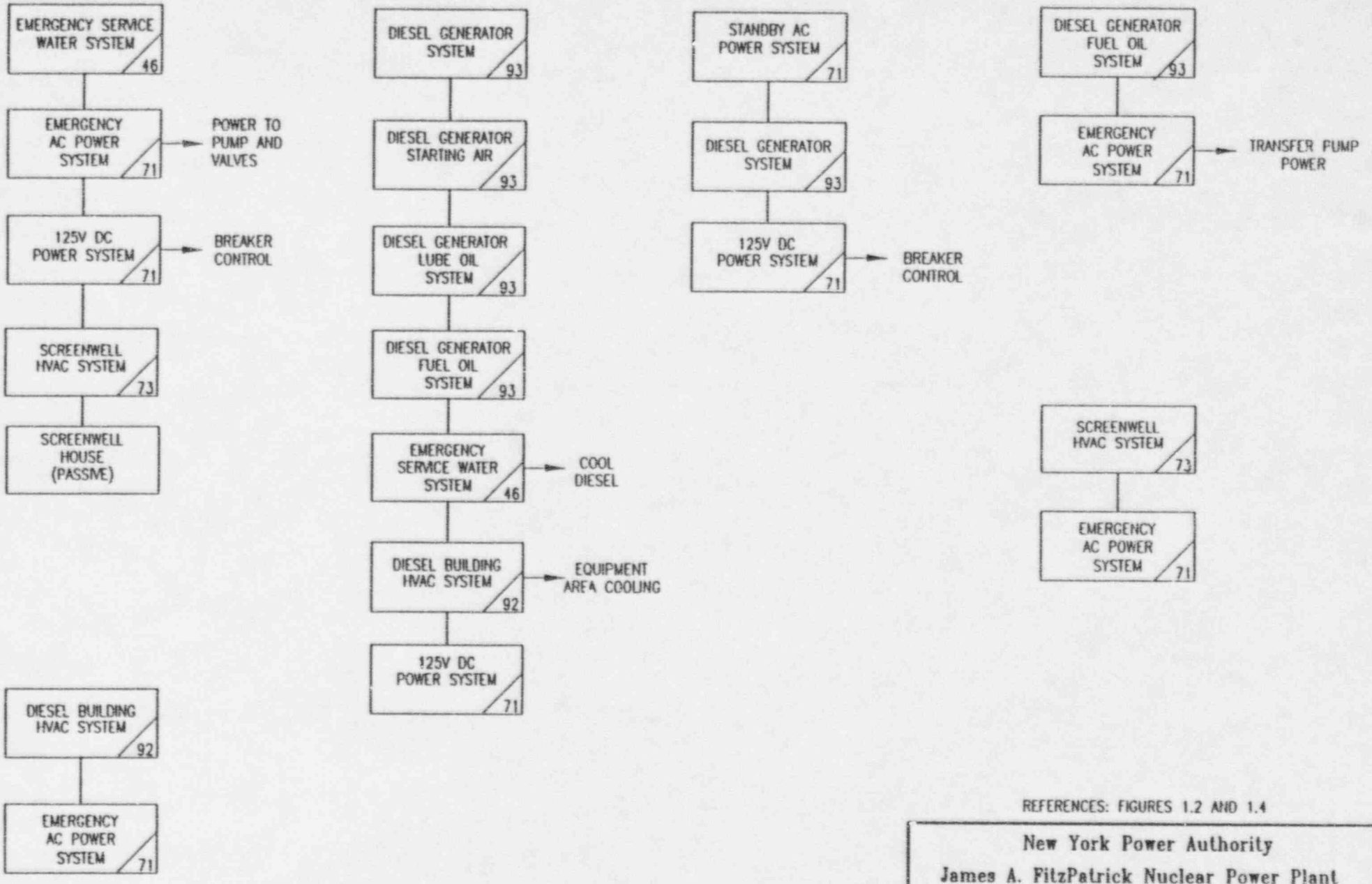
93-0938



REFERENCES: FIGURES 1, 1.1, 1.3 AND 1.4

New York Power Authority		
James A. FitzPatrick Nuclear Power Plant		
Safe Shutdown System Auxiliaries for Seismic Event		
EFFORT ID: P909	DATE: 12/13/93	FIGURE NO.: Figure 1.2

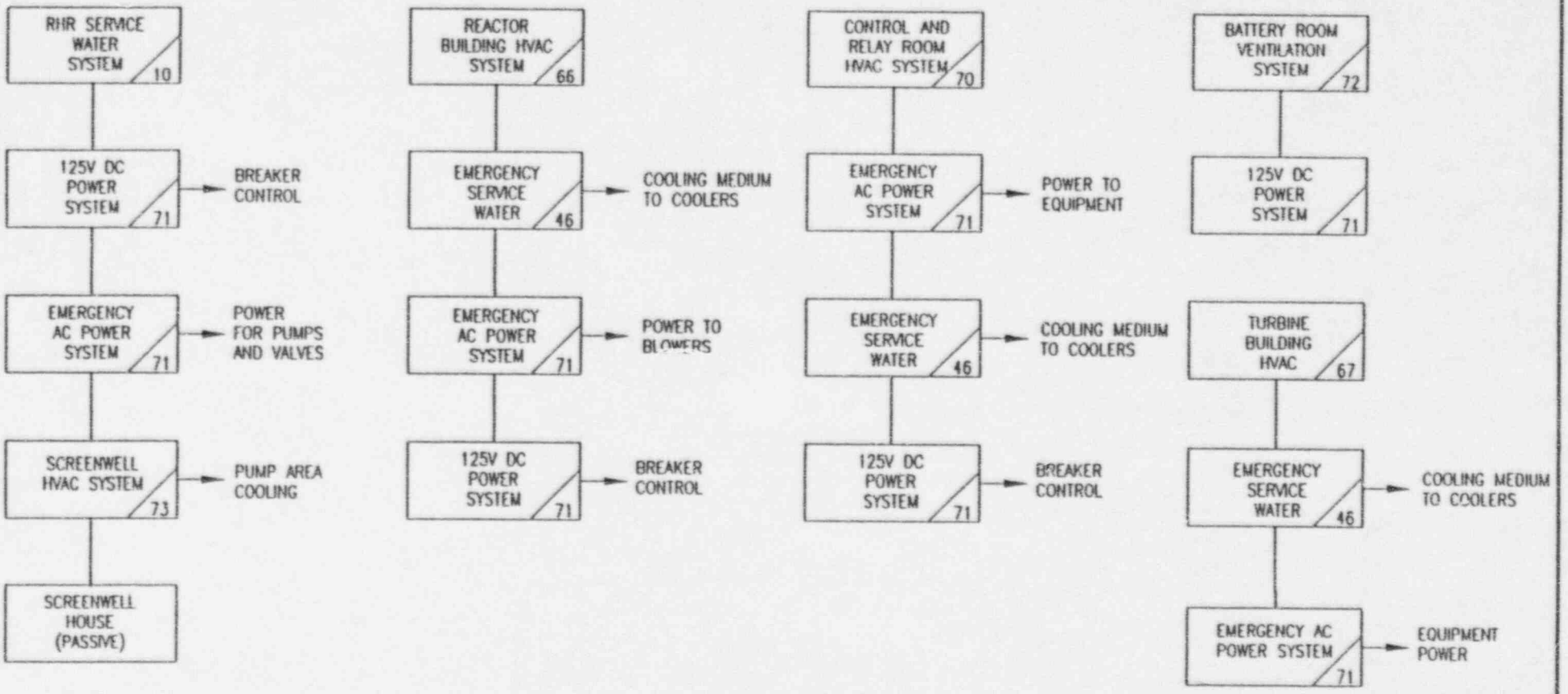
93-093E



REFERENCES: FIGURES 1.2 AND 1.4

New York Power Authority James A. FitzPatrick Nuclear Power Plant		
Safety System Auxiliaries for Auxiliary Support Systems		
EFFORT ID P909	DATE 12/13/93	FIGURE NO. Figure 1.3

93-093C



NOTES:
1. CRD HYDRAULIC SYSTEM SCRAM PILOT AIR SOLENOIDS RECEIVE RPS SIGNAL TO DEENERGIZE RESULTING IN CONTROL ROD INSERTION.

SYSTEMS NOT SHOWN IN SAFETY SYSTEM AUXILIARIES	PASSIVE	FAIL-SAFE	SELF-CONTAINED
CRD HYDRAULIC SYSTEM		NOTE 1	
RPS		✓	
MSIVs		✓	
SAFETY VALVES			✓
SCREENWELL HOUSE	✓		
SUPPRESSION POOL	✓		
DIESEL GENERATOR LUBE OIL SYSTEM			✓
ADS ACCUMULATORS			✓

REFERENCES: FIGURES 1, 1.1, 1.2 AND 1.3

New York Power Authority

James A. FitzPatrick Nuclear Power Plant

Safe Shutdown System Auxiliaries for Seismic Event

EFFORT ID	DATE	FIGURE NO.
P909	12/13/93	Figure 1.4

New York Power Authority
James A. Fitzpatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equipment List (SSEL)
Composite SSEL

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
1	A	20	02-3LI-85A	REACTOR VESSEL LEVEL INDIC	CR	300EL	10.5 C	09-5	RELAY RULE OF BOX	NO RELAYS IN INSTRUMENT LOOP.	ON	ON	Y
2	B	20	02-3LR-85B	DIV I RX WATER LEVEL RECORDER	CR	300EL	10.5 E	09-5	RELAY RULE OF BOX	NO RELAYS IN INSTRUMENT LOOP. PER RESOLUTION TO OPEN ITEM P909-20, THIS RECORDER HAS BEEN ADDED TO THE SSEL IN LIEU OF 02-3LI-85B (PER RESOLUTION OF THE OPEN ITEM THIS INDICATOR DOES NOT EXIST). REFER TO CURRENT LOOP DRAWING NO. 11825-LP-02-3AE.	ON	ON	Y
3	A	18	02-3LT-85A	REACTOR VESSEL WIDE RANGE LEVEL XMITTER EQ	RB	300EL	3 R	25-05	RELAY RULE OF BOX	LOOP DRAWING LP-02-3AD REV 001. NO RELAYS IN INSTRUMENT LOOP.	ON	ON	Y
4	B	18	02-3LT-85B	REACTOR VESSEL WIDE RANGE LEVEL XMITTER EQ	RB	300EL	6 W	25-06	RELAY RULE OF BOX	NO RELAYS IN INSTRUMENT LOOP.	ON	ON	Y
5	X	7	02AOV-17	ADS REACTOR HEAD VENT INBD AIR OPER VALVE	PC	333'3E L	4.5 R	NA	N/A	RX PRESSURE BOUNDARY. SEE 02SOV-17 FOR RELAY EVALUATION REGARDING CHATTER UNACCEPTABILITY.	CLOSED	CLOSED	N
6	X	7	02AOV-18	ADS REACTOR HEAD VENT OUTBD AIR OPER VALVE	PC	333'3E L	4.5 R	NA	N/A	RX PRESSURE BOUNDARY. SEE 02SOV-18 FOR RELAY EVALUATION REGARDING CHATTER UNACCEPTABILITY.	CLOSED	CLOSED	N
7	X	7	02RV-71A	ADS MAIN STEAM LINE A SAFETY/RELIEF VALVE	PC	295'11 EL	5 R	NA	SEISMIC	REFER TO 02SOV-71A1, A2 FOR RELAY CHATTER EVAL AND CONTROL POWER.	CLOSED	OPEN/CLOSED	N

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
8	X	7	02RV-71B	ADS MAIN STEAM LINE A SAFETY/RELIEF VALVE	PC	295'11 EL	5 R	NA	SEISMIC	REFER TO 02SOV-B1 & B2 FOR RELAY CHATTER EVAL AND CONTROL POWER.	CLOSED	OPEN/CLOSED	N
9	X	7	02RV-71C	ADS MAIN STEAM LINE B SAFETY/RELIEF VALVE	PC	295'11 EL	5 R	NA	SEISMIC	REFER TO 02SOV-71C1 & C2 FOR RELAY CHATTER EVAL AND CONTROL POWER.	CLOSED	OPEN/CLOSED	N
10	X	7	02RV-71D	ADS MAIN STEAM LINE B SAFETY/RELIEF VALVE	PC	295'11 EL	4.5 R	NA	SEISMIC	REFER TO 02SOV-71D1 & D2 FOR RELAY CHATTER EVAL AND CONTROL POWER.	CLOSED	OPEN/CLOSED	N
11	X	7	02RV-71E	ADS MAIN STEAM LINE C SAFETY/RELIEF VALVE	PC	295'11 EL	5 W	NA	SEISMIC	REFER TO 02SOV-71E1 & E2 FOR RELAY CHATTER EVAL AND CONTROL POWER.	CLOSED	OPEN/CLOSED	N
12	X	7	02RV-71F	ADS MAIN STEAM LINE C SAFETY/RELIEF VALVE	PC	295'11 EL	5 W	NA	SEISMIC	REFER TO 02SOV-71F1 & F2 FOR RELAY CHATTER EVAL AND CONTROL POWER.	CLOSED	OPEN/CLOSED	N
13	X	7	02RV-71G	ADS MAIN STEAM LINE C SAFETY/RELIEF VALVE	PC	295'11 EL	4.5 W	NA	SEISMIC	REFER TO SOV-71G1 & G2 FOR RELAY CHATTER EVAL AND CONTROL POWER.	CLOSED	OPEN/CLOSED	N
14	X	7	02RV-71H	ADS MAIN STEAM LINE D SAFETY/RELIEF VALVE	PC	295'11 EL	5 W	NA	SEISMIC	REFER TO 02SOV-71H1 & H2 FOR RELAY CHATTER EVAL AND CONTROL POWER.	CLOSED	OPEN/CLOSED	N
15	X	7	02RV-71J	ADS MAIN STEAM LINE D SAFETY/RELIEF VALVE	PC	295'11 EL	5 W	NA	SEISMIC	REFER TO 02SOV-71J1 & J2 FOR RELAY CHATTER EVAL AND CONTROL POWER.	CLOSED	OPEN/CLOSED	N

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
16	X	7	02RV-71K	ADS MAIN STEAM LINE A SAFETY/RELIEF VALVE	PC	295'11 EL	5.5 R	NA	SEISMIC	REFER TO 02SOV-71K1 & K2 FOR RELAY CHATTER EVAL AND CONTROL POWER.	CLOSED	OPEN/CLOSED	N
17	X	7	02RV-71L	ADS MAIN STEAM LINE D SAFETY/RELIEF VALVE	PC	295'11 EL	5.5 W	NA	SEISMIC	REFER TO 02SOV-71L1 & L2 FOR RELAY CHATTER EVAL AND CONTROL POWER.	CLOSED	OPEN/CLOSED	N
18	X	8B	02SOV-17	ADS REACTOR HEAD VENT VALVE PILOT SOLENOID VALVE	PC	333'3E L	4.5 R	NA	RELAY	FAILURE OF VALVE TO REMAIN DE-ENERGIZED MAY RESULT IN HI-LO PRESSURE BOUNDARY COMPROMISE.	OFF	OFF	N
19	X	8B	02SOV-18	ADS REACTOR HEAD VENT VALVE PILOT SOLENOID VALVE	PC	333'3E L	4.5 R	NA	RELAY	FAILURE OF VALVE TO REMAIN DE-ENERGIZED MAY RESULT IN HI-LO PRESSURE BOUNDARY COMPROMISE.	OFF	OFF	N
20	X	8B	02SOV-71A1	ADS/MST A 02RV-71A AUTO/CR MANUAL PILOT SOLENOID VALVE	PC	295'10 EL	5 R	02RV-71A	RELAY RULE OF BOX	BACKUP CONTROL POWER PROVIDED BY 71DC-B2.	CLOSED	OPEN/CLOSED	Y
21	X	8B	02SOV-71A2	ADS/MST A 02RV-71A REMOTE MANUAL PILOT SOLENOID VALVE	PC	295'11 EL	5 R	NA	RELAY	CONCERN ONLY IF SPURIOUSLY OPENS.	CLOSED	CLOSED	N
22	X	8B	02SOV-71B1	ADS/MST A 02RV-71B AUTO/CR MANUAL PILOT SOLENOID VALVE	PC	295'10 EL	5 R	02RV-71B	RELAY RULE OF BOX	BACKUP CONTROL POWER PROVIDED BY 71DC-B2.	CLOSED	OPEN/CLOSED	Y
23	X	8B	02SOV-71B2	ADS/MST A	PC	295'10	5	NA	RELAY	CONCERN ONLY IF SPURIOUSLY OPENS.	CLOSED	CLOSED	N

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
				02RV-71B REMOTE MANUAL PILOT SOLENOID VALVE		EL	R						
24	X	8B	02SOV-71C1	ADS/MST B 02RV-71C AUTO/CR MANUAL PILOT SOLENOID VALVE	PC	295'10 EL	5 R	02RV-71C	RELAY RULE OF BOX	BACKUP POWER AVAILABLE FROM 71DC-B2.	CLOSED	OPEN/CLOSED	Y
25	X	8B	02SOV-71C2	ADS/MST B 02RV-71C REMOTE MANUAL PILOT SOLENOID VALVE	PC	295'11 EL	5 R	NA	RELAY	CONCERN ONLY IF SPURIOUSLY OPENS.	CLOSED	CLOSED	N
26	X	8B	02SOV-71D1	ADS/MST B 02RV-71D AUTO/CR MANUAL PILOT SOLENOID VALVE	PC	295'10 EL	4.5 R	02RV-71D	RELAY RULE OF BOX	BACKUP POWER AVAILABLE FROM 71DC-B2.	CLOSED	OPEN/CLOSED	Y
27	X	8B	02SOV-71D2	ADS/MST B 02RV-71D REMOTE MANUAL PILOT SOLENOID VALVE	PC	295'10 EL	4.5 R	NA	RELAY	CONCERN ONLY IF SPURIOUSLY OPENS.	CLOSED	CLOSED	N
28	X	8B	02SOV-71E1	ADS/MST C 02RV-71E AUTO/CR MANUAL PILOT SOLENOID VALVE	PC	295'10 EL	5 W	02RV-71E	RELAY RULE OF BOX	BACKUP POWER AVAILABLE FROM 71DC-B2.	CLOSED	OPEN/CLOSED	Y
29	X	8B	02SOV-71E2	ADS/MST C 02RV-71E REMOTE MANUAL PILOT SOLENOID VALVE	PC	295'10 EL	5 W	NA	RELAY	CONCERN ONLY IF SPURIOUSLY OPENS.	CLOSED	CLOSED	N

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
30	X	8B	02SOV-71F1	ADS/MST C 02RV-71F AUTO/CR MANUAL PILOT SOLENOID VALVE	PC	295'10 EL	5	02RV-71F	RELAY	BACKUP POWER AVAILABLE FROM 71DC-B2.	CLOSED	OPEN/CLOSED	Y
							W		RULE OF BOX				
31	X	8B	02SOV-71F2	ADS/MST C 02RV-71F REMOTE MANUAL PILOT SOLENOID VALVE	PC	295'10 EL	5	NA	RELAY	CONCERN ONLY IF SPURIOUSLY OPENS.	CLOSED	CLOSED	N
							W						
32	X	8B	02SOV-71G1	ADS/MST C 02RV-71G AUTO/CR MANUAL PILOT SOLENOID VALVE	PC	295'10 EL	4.5	02RV-71G	RELAY	BACKUP POWER AVAILABLE FROM 71DC-B2.	CLOSED	OPEN/CLOSED	Y
							W		RULE OF BOX				
33	X	8B	02SOV-71G2	ADS/MST C 02RV-71G REMOTE MANUAL PILOT SOLENOID VALVE	PC	295'10 EL	4.5	NA	RELAY	CONCERN ONLY IF SPURIOUSLY OPENS.	CLOSED	CLOSED	N
							W						
34	X	8B	02SOV-71H1	ADS/MST D 02RV-71H AUTO/CR MANUAL PILOT SOLENOID VALVE	PC	295'10 EL	5	02RV-71H	RELAY	BACKUP POWER AVAILABLE FROM 71DC-B2.	CLOSED	OPEN/CLOSED	Y
							N		RULE OF BOX				
35	X	8B	02SOV-71H2	ADS/MST D 02RV-71H REMOTE MANUAL PILOT SOLENOID VALVE	PC	295'10 EL	5	NA	RELAY	CONCERN ONLY IF SPURIOUSLY OPENS.	CLOSED	CLOSED	N
							W						
36	X	8B	02SOV-71J1	ADS/MST D 02RV-71J AUTO/CR MANUAL PILOT SOLENOID VALVE	PC	295'10 EL	5	02RV-71J	RELAY	BACKUP POWER AVAILABLE FROM 71DC-B2.	CLOSED	OPEN/CLOSED	Y

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							W		RULE OF BOX				
37	X	8B	02SOV-71J2	ADS/MST D 02RV-71J REMOTE MANUAL PILOT SOLENOID VALVE	PC	295'10 EL	5 W	NA	RELAY	CONCERN ONLY IF SPURIOUSLY OPENS.	CLOSED	CLOSED	N
38	X	8B	02SOV-71K1	ADS/MST A 02RV-71K AUTO/CR MANUAL PILOT SOLENOID VALVE	PC	295'10 EL	4.5 R	02RV-71K	RELAY RULE OF BOX	BACKUP POWER AVAILABLE FROM 71DC-B2.	CLOSED	OPEN/CLOSED	Y
39	X	8B	02SOV-71K2	ADS/MST A 02RV-71K REMOTE MANUAL PILOT SOLENOID VALVE	PC	295'10 EL	4.5 R	NA	RELAY	CONCERN ONLY IF SPURIOUSLY OPENS.	CLOSED	CLOSED	N
40	X	8B	02SOV-71L1	ADS/MST D 02RV-71L AUTO/CR MANUAL PILOT SOLENOID VALVE	PC	295'10 EL	4.5 W	02RV-71L	RELAY RULE OF BOX	BACKUP POWER AVAILABLE FROM 71DC-B2.	CLOSED	OPEN/CLOSED	Y
41	X	8B	02SOV-71L2	ADS/MST D 02RV-71L REMOTE MANUAL PILOT SOLENOID VALVE	PC	295'10 EL	4.5 W	NA	RELAY	CONCERN ONLY IF SPURIOUSLY OPENS.	CLOSED	CLOSED	N
42	X	7	03AOV-126(HCU-02-19)	HCU INLET SCRAM AIR OPER VALVE	RB	272EL	5 Y	03HCU-02-19	SEISMIC	VALVE OPENS ON LOSS OF AIR (SCRAM SIGNAL). TYPICAL OF 137; REFER TO SOV-117 AND 118 FOR RELAY EVAL AND CONTROL POWER.	CLOSED	OPEN	N
43	X	7	03AOV-127(HCU-02-19)	HCU OUTLET SCRAM AIR OPER VALVE	RB	272EL	5 Y	03HCU-02-19	SEISMIC	VALVE OPENS ON LOSS OF AIR (SCRAM SIGNAL).	CLOSED	OPEN	N

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										TYPICAL OF 137; REFER TO SOV-117 AND 118 FOR RELAY EVAL AND CONTROL POWER.			
44	X	7	03AOV-32	CRD B SDIV TANK B INNER VENT ISOL VALVE	RB	272EL	3 D	NA	SEISMIC	VALVE CLOSES ON LOSS OF AIR ON SCRAM SIGNAL. REFER TO SOV-31A, 31B, 140A AND 140B FOR RELAY EVAL AND CONTROL POWER.	OPEN	CLOSED	N
45	X	7	03AOV-33	CRD B SDIV TANK B INNER DRAIN ISOL VALVE	RB	272EL	3 D	NA	SEISMIC	VALVE CLOSES ON LOSS OF AIR ON SCRAM SIGNAL. REFER TO SOV-31A, 31B, 140A, 140B FOR RELAY EVAL AND CONTROL POWER.	OPEN	CLOSED	N
46	X	7	03AOV-34	CRD B SDIV TANK B OUTER VENT ISOL VALVE	RB	272EL	3 D	NA	SEISMIC	VALVE CLOSES ON LOSS OF AIR ON SCRAM SIGNAL. REFER TO SOV-31A, 31B, 140A, 140B FOR RELAY EVAL AND CONTROL POWER.	OPEN	CLOSED	N
47	X	7	03AOV-35	CRD B SDIV TANK B OUTER DRAIN ISOL VALVE	RB	272EL	3 D	NA	SEISMIC	VALVE CLOSES ON LOSS OF AIR ON SCRAM SIGNAL. REFER TO SOV-31A, 31B, 140A, 140B FRO RELAY EVAL AND CONTROL POWER.	OPEN	CLOSED	N
48	X	7	03AOV-36	CRD A SDIV TANK A INNER VENT ISOL VALVE	RB	272EL	2 P	NA	SEISMIC	VALVE CLOSES ON LOSS OF AIR ON SCRAM SIGNAL. REFER TO SOV-31A, 31B, 140A, 140B FOR RELAY EVAL AND CONTROL POWER.	OPEN	CLOSED	N
49	X	7	03AOV-37	CRD A SDIV TANK A INNER DRAIN ISOL VALVE	RB	272EL	2 P	NA	SEISMIC	VALVE CLOSES ON LOSS OF AIR ON SCRAM SIGNAL. REFER TO SOV-31A, 31B, 140A, 140B FOR RELAY EVAL AND CONTROL POWER.	OPEN	CLOSED	N
50	X	7	03AOV-38	CRD A SDIV TANK A OUTER VENT	RB	272EL	2	NA	SEISMIC	VALVE CLOSES ON LOSS OF AIR ON SCRAM SIGNAL.	OPEN	CLOSED	N

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				ISOL VALVE			P			REFER TO SOV-31A, 31B, 140A, 140B FOR RELAY EVAL AND CONTROL POWER.			
51	X	7	03AOV-39	CRD A SDIV TANK A OUTER DRAIN ISOL VALVE	RB	272EL	2	NA	SEISMIC	VALVE CLOSES ON LOSS OF AIR ON SCRAM SIGNAL.	OPEN	CLOSED	N
							P			REFER TO SOV-31A, 31B, 140A, 140B FOR RELAY EVAL AND CONTROL POWER.			
52	X	8B	03SOV-117(HCU-02-19)	HCU-02-19 SCRAM PILOT AIR SOLENOID OPER VALVE	RB	272EL	5	03HCU-02-19	RELAY	TYPICAL OF 137 HCUs.	ON	OFF	N
							Y		SEISMIC	VALVE DEENERGIZES TO VENT HCU SCRAM AIR HEADER.			
53	X	8B	03SOV-118(HCU-02-19)	HCU-02-19 SCRAM PILOT AIR SOLENOID OPER VALVE	RB	272EL	5	03HCU-02-19	RELAY	TYPICAL OF 137 HCUs.	ON	OFF	N
							Y		SEISMIC	VALVE DEENERGIZES TO VENT HCU SCRAM AIR HEADER.			
54	X	8B	03SOV-120(HCU-02-19)	HCU-02-19 WITHDRAW SETTLE SOLENOID OPER VALVE	RB	272EL	5	03HCU-02-19	RELAY	NORMALLY CLOSED, ENERGIZE TO OPEN.	CLOSED	CLOSED	N
							Y			TYPICAL OF 137 HCUs.			
55	X	8B	03SOV-121(HCU-02-19)	HCU-02-19 INSERT EXHAUST WATER SOLENOID OPER VALVE	RB	272EL	5	03HCU-02-19	RELAY	NORMALLY CLOSED, ENERGIZE TO OPEN.	CLOSED	CLOSED	N
							Y			TYPICAL OF 137 HCUs.			
56	X	8B	03SOV-122(HCU-02-19)	HCU-02-19 WITHDRAW DRIVE WATER SOLENOID OPER VALVE	RB	272EL	5	03HCU-02-19	RELAY	NORMALLY CLOSED, ENERGIZE TO OPEN.	CLOSED	CLOSED	N
							Y						

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										TYPICAL OF 137 HCUs.			
57	X	8B	03SOV-123(HCU-02-19)	HCU-02-19 INSERT DRIVE WATER SOLENOID OPER VALVE	RB	272EL	5	03HCU-02-19	RELAY	NORMALLY CLOSED, ENERGIZE TO OPEN.	CLOSED	CLOSED	N
							Y			TYPICAL OF 137 HCUs.			
58	X	8B	03SOV-140A	HYDRAULIC CONTROL UNITS BACKUP SCRAM PILOT SOLENOID VLV EQ	RB	272EL	3.5	NA	RELAY	ACTUATED BY RPS.	OFF	ON	Y
							A		SEISMIC	NORMALLY DEENERGIZED, ENERGIZES TO VENT SDV AIR HEADER AND HCU SCRAM PILOT VALVE AIR HEADER.			
59	X	8B	03SOV-140B	HYDRAULIC CONTROL UNITS BACKUP SCRAM PILOT SOLENOID VLV EQ	RB	272EL	3.5	NA	RELAY	ACTUATED BY RPS.	OFF	ON	Y
							A		SEISMIC	NORMALLY DEENERGIZED, ENERGIZES TO VENT SDV AIR HEADER AND HCU SCRAM PILOT VALVE AIR HEADER.			
60	X	8B	03SOV-29	SDIV ISOL TEST SOLENOID VALVE	RB	272EL	3.5	NA	RELAY	ENERGIZES TO VENT SDV AOV AIR HEADER TO TEST AOVs WHILE MAITAINING HCU SCRAM PILOT VALVE AIR HEADER PRESSURIZED.	OFF	OFF	N
							A			NORMALLY DEENERGIZED, PASSES AIR TO SDV AOVs 32-39 OPERATORS.			
61	X	8B	03SOV-31A	SDIV A AOV INSTRUMENT AIR SUPPLY SOLENOID VALVE EQ	RB	272EL	3.5	NA	RELAY	IN SERIES WITH SOV-31B; BOTH REQD TO OPERATE TO EFFECT SCRAM.	ON	OFF	N
							A		SEISMIC	NORMALLY ENERGIZED, DEENERGIZE TO VENT SDV AIR HEADER AND HCU SCRAM PILOT VALVE AIR HEADER.			
62	X	8B	03SOV-31B	SDIV B AOV INSTRUMENT AIR	RB	272EL	3.5	NA	RELAY	IN SERIES WITH SOV-31A; BOTH REQD TO OPERATE TO EFFECT SCRAM.	ON	OFF	N

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				SUPPLY SOLENOID VALVE B EQ			A		SEISMIC	SEE SOV-31A REMARK.			
63	X	0	03TK-125(HCU -02-19)	WATER ACCUMULATOR	RB	272EL	5 Y	03HCU-02-19	SEISMIC	TYPICAL OF 137; PROVIDES INITIAL FORCE FOR ROD INSERTION.	N/A	N/A	N
64	X	0	03TK-128(HCU -02-19)	NITROGEN ACCUMULATOR	RB	272EL	5 Y	03HCU-02-19	SEISMIC	TYPICAL OF 137; PROVIDES INITIAL FORCE FOR ROD INSERTION.	N/A	N/A	N
65	X	21	03TK-1A	CRD A SDIV SCRAM DISCH INSTRUMENT AIR VOLUME TANK	RB	272EL	2 P	NA	SEISMIC		N/A	N/A	N
66	X	21	03TK-1B	CRD B SDIV SCRAM DISCH INSTRUMENT AIR VOLUME TANK	RB	272EL	3 D	NA	SEISMIC		N/A	N/A	N
67	A	20	06PI-61A	REACTOR VESSEL PRESS INDIC	CR	300EL	10 F	09-3	RELAY RULE OF BOX	06PI-61A: THERE ARE NO RELAYS ASSOCIATED WITH REACTOR PRESSURE INDICATION.	ON	ON	Y
68	B	20	06PI-61B	REACTOR VESSEL PRESS INDIC	CR	300EL	10 F	09-3	RELAY RULE OF BOX	06PI-61B: THERE ARE NO RELAYS ASSOCIATED WITH REACTOR PRESSURE INDICATION.	ON	ON	Y
69	A	18	06PT-61A	ECCS LOOP A FEEDWATER CONTROL REACTOR PRESS XMITTER EQ	RB	300EL	3.5 R	25-05	RELAY RULE OF BOX	06PT-61A: THERE ARE NO RELAYS ASSOCIATED WITH REACTOR PRESSURE INDICATION.	ON	ON	Y
70	B	18	06PT-61B	ECCS LOOP B FEEDWATER CONTROL REACTOR PRESS XMITTER	RB	300EL	5.5	25-06	RELAY	06PT-61B: THERE ARE NO RELAYS ASSOCIATED WITH REACTOR PRESSURE INDICATION.	ON	ON	Y

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				EQ			Y		RULE OF BOX				
71	X	20	09-21	NUCLEAR STEAM TEMP RECORD PANEL	CR	300EL	9.5 C	09-21	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
72	X	20	09-3	NUCLEAR STATION MAIN CONTROL BOARD	CR	300EL	10 F	NA	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
73	A	20	09-32	CHANNEL "A" RHR/RCIC RELAY PANEL	RR	284'8E L	9.5 F	09-32	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
74	B	20	09-33	CHANNEL "B" RHR/RCIC RELAY PANEL	RR	284'8E L	9 F	09-33	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
75	X	20	09-39	HPCI RELAY PANEL	RR	284'8E L	9 G	09-39	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
76	X	20	09-45	AUTO BLOWDOWN RELAY CABINET	RR	284'8E L	9.5 FG	09-45	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
77	A	20	09-46	CORE SPRAY CHANNEL "A" RELAY CABINET	RR	284'8E L	9.5 FG	09-46	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
78	B	20	09-47	CORE SPRAY CHANNEL "B" RELAY CABINET	RR	284'8E L	9 FG	09-47	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
79	X	20	09-5	REACTOR CONTROL MAIN CONTROL BOARD	CR	300EL	10.5 E	NA	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N

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80	X	20	09-6	BALANCE OF PLANT (MECH) MAIN CONTROL BOARD	CR	300EL	10 E	NA	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
81	X	20	09-95	EMERGENCY CORE COOLING SYSTEM DIV 1 A/C TRIP CABINET	RR	284'8E L	10.5 G	09-95	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
82	X	20	09-96	EMERGENCY CORE COOLING SYSTEM DIV 2 B/D TRIP CABINET	RR	284'8E L	10.5 F	09-96	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
83	A	20	09AR-5A	(RED) A AUXILIARY RELAY CABINET	RR	284'8E L	10.5 E	09AR-5A	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
84	B	20	09AR-5B	(BLUE) B AUXILIARY RELAY CABINET	RR	284'8E L	10.5 E	09AR-5B	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
85	A	7	10AOV-68A	RHR A LPCI TESTABLE CHECK VALVE	PC	284EL	5 R	NA	SEISMIC	THIS VALVE IS CREDITED WITH PERFORMING A RCPB FUNCTION DURING NORMAL AND INITIAL (HI PRESS) SHUTDOWN OPERATION. IT IS REQUIRED TO OPEN FOR LPCI OPERATION. HOWEVER SINCE THIS VALVE HAS AN EXTERNAL ACTUATOR, IT HAS BEEN LISTED FOR SEISMIC EVALUATION PER THE GIP.	CLOSED	OPEN/CLOSED	N
86	B	7	10AOV-68B	RHR B LPCI TESTABLE CHECK VALVE	PC	284EL	4.5 W	NA	SEISMIC	THIS VALVE IS CREDITED WITH PERFORMING A RCPB FUNCTION DURING NORMAL AND INITIAL (HI PRESS) SHUTDOWN OPERATION. IT IS REQUIRED TO OPEN FOR LPCI OPERATION. HOWEVER SINCE THIS VALVE HAS AN EXTERNAL ACTUATOR, IT HAS BEEN LISTED FOR SEISMIC EVALUATION PER THE GIP.	CLOSED	OPEN/CLOSED	N
87	A	7	10AOV-71A	RHR HEAT	RB	273EL	2.5	NA	N/A	SEE 10SOV-71A FOR RELAY EVAL.	CLOSED	CLOSED	N

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				EXCHANGER A OUTLET TO TORUS OR RCIC ISOL VALVE			A						
88	B	7	10AOV-71B	RHR HEAT EXCHANGER B OUTLET TO TORUS OR RCIC ISOL VALVE	RB	273EL	2.5 D	NA	N/A	SEE 10SOV-71B FOR RELAY EVAL.	CLOSED	CLOSED	N
89	A	18	10DPIS-125A	RHR LOOP A DIFF PRESS INDIC SWITCH EQ	RB	242'8E L	4 A	NA	SEISMIC	FIELD MOUNTED INSTRUMENT. INDIVIDUALLY MOUNTED ON STAND. DEMAND: 3.90 PEAK/0.90 ZPA (4.5 X RB 242 FRS).	N/A	N/A	N
90	B	18	10DPIS-125B	RHR B DISCH HDR FLOW DIFF PRESS INDIC SWITCH	RB	242'8E L	3 D	NA	SEISMIC	FIELD MOUNTED INSTRUMENT. INDIVIDUALLY MOUNTED ON STAND. DEMAND: 3.9 PEAK/0.90 ZPA (4.5 X RB 242 FRS).	N/A	N/A	N
91	A	21	10E-2A	RESIDUAL HEAT REMOVAL SYSTEM HEAT EXCHANGER A	RB	272EL	2.5 A	NA	SEISMIC		N/A	N/A	N
92	B	21	10E-2B	RESIDUAL HEAT REMOVAL SYSTEM HEAT EXCHANGER B	RB	272EL	2.5 D	NA	SEISMIC		N/A	N/A	N
93	A	20	10FI-132A	RHRSW PUMPS A&C DISCH FLOW INDIC	CR	300EL	10 F	09-3	RELAY RULE OF BOX	10FI-132A: THERE ARE NO RELAYS ASSOCIATED WITH REACTOR AND CONTAINMENT LOOP FLOW INDICATION.	ON	ON	Y
94	B	20	10FI-132B	RHRSW PUMPS B&D DISCH FLOW INDIC	CR	300EL	10 F	09-3	RELAY RULE OF BOX	10FI-132B: THERE ARE NO RELAYS ASSOCIATED WITH REACTOR AND CONTAINMENT LOOP FLOW INDICATION.	ON	ON	Y

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95	A	20	10FI-133A	A REACTOR AND CONTAINMENT SPRAY LOOP FLOW INDIC	CR	300EL	10 F	09-3	RELAY RULE OF BOX	10FI-133A: THERE ARE NO RELAYS ASSOCIATED WITH RHR LOOP FLOW INDICATION.	ON	ON	Y
96	B	20	10FI-133B	B REACTOR AND CONTAINMENT SPRAY LOOP FLOW INDIC	CR	300EL	10 F	09-3	RELAY RULE OF BOX	10FI-133B: THERE ARE NO RELAYS ASSOCIATED WITH RHR LOOP FLOW INDICATION.	ON	ON	Y
97	A	18	10FT-109A	RHR LOOP A FLOW XMITTER EQ	RB	242'8E L	1 R	25-50	RELAY RULE OF BOX	10FT-109A: THERE ARE NO RELAYS ASSOCIATED WITH RHR LOOP FLOW INDICATION.	ON	ON	Y
98	B	18	10FT-109B	RHR B DISCH HDR FLOW XMITTER	RB	227'6E L	1 W	NA	RELAY SEISMIC	10FT-109B: THERE ARE NO RELAYS ASSOCIATED WITH RHR LOOP FLOW INDICATION.	ON	ON	Y
99	A	18	10FT-97A	RHRSW A DISCH HDR FLOW XMITTER	RB	242EL	4 A	25-59	RELAY RULE OF BOX	10FT-97A: THERE ARE NO RELAYS ASSOCIATED WITH REACTOR AND CONTAINMENT LOOP FLOW INDICATION.	ON	ON	Y
100	B	18	10FT-97B	RHRSW LOOP B FLOW XMITTER EQ	RB	242EL	4 D	25-62	RELAY RULE OF BOX	10FT-97B: THERE ARE NO RELAYS ASSOCIATED WITH REACTOR AND CONTAINMENT LOOP FLOW INDICATION.	ON	ON	Y
101	A	8A	10MOV-12A	RHR HEAT EXCH A OUTLET ISOL VALVE	RB	272EL	2 A	NA	RELAY	SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE FLOW THRU HX NOT REQUIRED IN LPCI MODE.	OPEN	OPEN	N
102	B	8A	10MOV-12B	RHR HEAT EXCH B OUTLET ISOL VALVE	RB	272EL	2 D	NA	RELAY	SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE FLOW THRU HX NOT REQUIRED IN LPCI MODE.	OPEN	OPEN	N
103	A	8A	10MOV-13A	RHR PUMP A SUCT TORUS ISOL	RB	227'6E L	3.5	NA	RELAY	VALVE CLOSURE WHILE PUMP RUNNING COULD BE DETRIMENTAL TO SSD.	OPEN	OPEN	N

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
				VALVE			A						
104	B	8A	10MOV-13B	RHR PUMP B SUCT TORUS ISOL VALVE	RB	227'6E L	2 D	NA	RELAY	VALVE CLOSURE WHILE PUMP RUNNING COULD BE DETRIMENTAL TO SSD.	OPEN	OPEN	N
105	A	8A	10MOV-13C	RHR PUMP C SUCT TORUS ISOL VALVE	RB	227'6E L	3.5 A	NA	RELAY	VALVE CLOSURE WHILE PUMP RUNNING COULD BE DETRIMENTAL TO SSD.	OPEN	OPEN	N
106	B	8A	10MOV-13D	RHR PUMP D SUCT TORUS ISOL VALVE	RB	227'6E L	2 D	NA	RELAY	VALVE CLOSURE WHILE PUMP RUNNING COULD BE DETRIMENTAL TO SSD.	OPEN	OPEN	N
107	A	8A	10MOV-148A	RHRSW A TO RHR CROSS TIE UPSTR ISOL VALVE	RB	272EL	3 P	NA	RELAY	SYSTEMS COMMENT: CHATTER UNACCEPTABLE - NO PROCEDURE ALIGNMENT NOTED FOR THIS VALVE.	CLOSED	CLOSED	N
108	B	8A	10MOV-148B	RHRSW B TO RHR CROSS TIE UPSTR ISOL VALVE	RB	272EL	3 Y	NA	RELAY	SYSTEMS COMMENT: CHATTER UNACCEPTABLE - NO PROCEDURE ALIGNMENT NOTED FOR THIS VALVE.	CLOSED	CLOSED	N
109	A	8A	10MOV-151A	RHR PUMPS A&C SUCT SUPPR POOL ISOL VALVE	SU	227'6E L	5 A	NA	N/A	MOTOR DEACTIVATED - IN-LINE MOV LISTED FOR REFERENCE ONLY.	OPEN	OPEN	N
110	B	8A	10MOV-151B	RHR PUMPS B&D SUCT SUPPR POOL ISOL VALVE	SU	227'6E L	5 D	NA	N/A	MOTOR DEACTIVATED - IN-LINE MOV LISTED FOR REFERENCE ONLY.	OPEN	OPEN	N
111	A	8A	10MOV-15A	RHR PUMP A SUCT SHUTDOWN COOLING ISOL VALVE	RB	227'6E L	2 A	NA	RELAY SEISMIC	CLOSED DURING LPCI AND SUPPRESSION POOL COOLING MODE; OPENED DURING SHUTDOWN COOLING MODE.	CLOSED	OPEN/CLOSED	Y
112	B	8A	10MOV-15B	RHR PUMP B SUCT SHUTDOWN COOLING ISOL	RB	227'6E L	2	NA	RELAY	CLOSED DURING LPCI AND SUPPRESSION POOL COOLING MODE; OPENED DURING SHUTDOWN COOLING MODE.	CLOSED	OPEN/CLOSED	Y

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				VALVE			D		SEISMIC				
113	A	8A	10MOV-15C	RHR PUMP C SUCT SHUTDOWN COOLING ISOL VALVE	RB	227'6E L	3.5	NA	RELAY	CLOSED DURING LPCI AND SUPPRESSION POOL COOLING MODE; OPENED DURING SHUTDOWN COOLING MODE.	CLOSED	OPEN/CLOSED	Y
							A		SEISMIC				
114	B	8A	10MOV-15D	RHR PUMP D SUCT SHUTDOWN COOLING ISOL VALVE	RB	227'6E L	3	NA	RELAY	CLOSED DURING LPCI AND SUPPRESSION POOL COOLING MODE; OPENED DURING SHUTDOWN COOLING MODE.	CLOSED	OPEN/CLOSED	Y
							D		SEISMIC				
115	A	8A	10MOV-166A	RHR HEAT EXCH A UPSTR VENT TO TORUS ISOL VALVE	RB	272EL	2	NA	RELAY	REQUIRED CLOSED TO ENSURE HX INTEGRITY DURING COOLDOWN.	CLOSED	CLOSED	N
							A						
116	B	8A	10MOV-166B	RHR HEAT EXCH B UPSTR VENT TO TORUS ISOL VALVE	RB	272EL	2	NA	RELAY	REQUIRED CLOSED TO ENSURE HX INTEGRITY DURING COOLDOWN.	CLOSED	CLOSED	N
							D						
117	A	8A	10MOV-16A	RHR A MIN FLOW ISOL VALVE	RB	242'8E L	2	NA	RELAY	SYSTEMS COMMENT: CHATTER UNACCEPTABLE - VALVE MUST INITIALLY REMAIN OPEN TO PREVENT POSSIBLE PUMP DAMAGE.	OPEN	OPEN/CLOSED	Y
							A		SEISMIC				
118	B	8A	10MOV-16B	RHR B MIN FLOW ISOL VALVE	RB	242'8E L	3	NA	RELAY	SYSTEMS COMMENT: CHATTER UNACCEPTABLE - VALVE MUST INITIALLY REMAIN OPEN TO PREVENT POSSIBLE PUMP DAMAGE.	OPEN	OPEN/CLOSED	Y
							D		SEISMIC				
119	B	8A	10MOV-17	RHR SHUTDOWN COOLING OUTBD ISOL VALVE	RB	272EL	3	NA	RELAY	CLOSED TO MAINTAIN RX PRESSURE BOUNDARY AND OPENED WHEN OPERATING IN SHUTDOWN COOLING MODE.	CLOSED	OPEN/CLOSED	Y
							R		SEISMIC				
120	A	8A	10MOV-18	RHR SHUTDOWN COOLING INBD ISOL VALVE	PC	272EL	3	NA	RELAY	CLOSED TO MAINTAIN RX PRESSURE BOUNDARY AND OPENED WHEN OPERATING IN SHUTDOWN COOLING MODE.	CLOSED	OPEN/CLOSED	Y
							T		SEISMIC				

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
121	A	8A	10MOV-21A	RHR HEAT EXCH A DISCH TO TORUS ISOL VALVE	RB	254EL	3 A	NA	RELAY	SYSTEMS COMMENT: CHATTER UNACCEPTABLE - NO PROCEDURE ALIGNMENT IDENTIFIED FOR THIS VALVE.	CLOSED	CLOSED	N
122	B	8A	10MOV-21B	RHR HEAT EXCH B DISCH TO TORUS ISOL VALVE	RB	242'8E L	4 D	NA	RELAY	SYSTEMS COMMENT: CHATTER UNACCEPTABLE - NO PROCEDURE ALIGNMENT IDENTIFIED FOR THIS VALVE.	CLOSED	CLOSED	N
123	A	8A	10MOV-25A	RHR A LPCI INBD INJ VALVE	RB	286'6E L	3 R	NA	RELAY SEISMIC	SYSTEMS COMMENT: CHATTER ACCEPTABLE - CREDIT TAKEN FOR UPSTREAM CHECK VALVE TO PERFORM RCPB FUNCTION SHOULD THIS VALVE SPURIOUSLY OPEN DUE TO RELAY CHATTER.	CLOSED	OPEN/CLOSED	Y
124	B	8A	10MOV-25B	RHR B LPCI INBD INJ VALVE	RB	286'6E L	2 T	NA	RELAY SEISMIC	SYSTEMS COMMENT: CHATTER ACCEPTABLE - CREDIT TAKEN FOR UPSTREAM CHECK VALVE TO PERFORM RCPB FUNCTION SHOULD THIS VALVE SPURIOUSLY OPEN DUE TO RELAY CHATTER.	CLOSED	OPEN/CLOSED	Y
125	A	8A	10MOV-26A	RHR A CONT SPRAY OUTBD ISOL VALVE	RB	311EL	3 T	NA	RELAY	SYSTEMS COMMENT: CHATTER UNACCEPTABLE - VALVE IS NOT PROCEDURALLY VERIFIED TO REMAIN CLOSED AS PART OF LPCI STARTUP.	CLOSED	CLOSED	N
126	B	8A	10MOV-26B	RHR B CONT SPRAY OUTBD ISOL VALVE	RB	300EL	6 T	NA	RELAY	SYSTEMS COMMENT: CHATTER UNACCEPTABLE - VALVE IS NOT PROCEDURALLY VERIFIED TO REMAIN CLOSED AS PART OF LPCI STARTUP.	CLOSED	CLOSED	N
127	A	8A	10MOV-27A	RHR A LPCI OUTBD INJ VALVE	RB	286'6E L	3 R	NA	RELAY SEISMIC	SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE MOV IS POSITIONED BY OP-13 (D.1.b).	OPEN	OPEN/CLOSED	Y
128	B	8A	10MOV-27B	RHR B LPCI OUTBD INJ VALVE	RB	286'6E L	2 T	NA	RELAY SEISMIC	SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE MOV IS POSITIONED BY OP-13 (D.1.d).	OPEN	OPEN/CLOSED	N
129	A	8A	10MOV-34A	RHR A TORUS COOLING SUPPLY VALVE	RB	254EL	3 A	NA	RELAY SEISMIC	SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE MOV IS POSITIONED BY OP-13 (D.2.d).	CLOSED	OPEN/CLOSED	Y
130	B	8A	10MOV-34B	RHR B TORUS COOLING SUPPLY	RB	242'8E L	3	NA	RELAY	SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE MOV IS POSITIONED BY OP-13 (D.2.d).	CLOSED	OPEN/CLOSED	Y

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
				VALVE			D		SEISMIC				
131	A	8A	10MOV-38A	RHR A TO TORUS SPRAY ISOL VALVE	RB	254EL	3 A	NA	RELAY SEISMIC	SYSTEMS COMMENT: CHATTER UNACCEPTABLE - NO PROCEDURAL STEP TO VERIFY CLOSE THIS VALVE AS PART OF RHR-SPC OPERATING SEQUENCE. OPENING OF THIS VALVE DURING THE SPC MODE OF OPERATION MAY HAVE ADVERSE AFFECTS ON COOLDOWN DUE TO SUPPRESSION POOL PRESSURE CHANGES.	CLOSED	CLOSED	N
132	B	8A	10MOV-38B	RHR B TO TORUS SPRAY ISOL VALVE	RB	254EL	3 D	NA	RELAY SEISMIC	SYSTEMS COMMENT: CHATTER UNACCEPTABLE - NO PROCEDURAL STEP TO VERIFY CLOSE THIS VALVE AS PART OF RHR-SPC OPERATING SEQUENCE. OPENING OF THIS VALVE DURING SPC MODE OF OPERATION MAY HAVE ADVERSE AFFECTS ON COOLDOWN DUE TO SUPPRESSION POOL PRESSURE CHANGES.	CLOSED	CLOSED	N
133	A	8A	10MOV-39A	RHR A TORUS COOLING ISOL VALVE	RB	242'8E L	3 A	NA	RELAY SEISMIC	SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE MOV IS POSITIONED BY OP-13 (D.2.c).	CLOSED	OPEN/CLOSED	Y
134	B	8A	10MOV-39B	RHR B TORUS COOLING ISOL VALVE	RB	254EL	3 D	NA	RELAY SEISMIC	SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE MOV IS POSITIONED BY OP-13 (D.2.c).	CLOSED	OPEN/CLOSED	Y
135	A	8A	10MOV-65A	RHR HEAT EXCH A SHELL INLET ISOL VALVE	RB	242'8E L	3 A	NA	RELAY	SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE FLOW THRU HX NOT REQUIRED IN LPCI MODE.	OPEN	OPEN	N
136	B	8A	10MOV-65B	RHR HEAT EXCH B SHELL INLET ISOL VALVE	RB	242'8E L	2 D	NA	RELAY	SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE FLOW THRU HX NOT REQUIRED IN LPCI MODE.	OPEN	OPEN	N
137	A	8A	10MOV-66A	RHR HEAT EXCH A BYPASS VALVE	RB	242'8E L	2 P	NA	RELAY SEISMIC	SYSTEMS COMMENT: CHATTER UNACCEPTABLE SINCE PROCEDURE STEPS NOT IDENTIFIED TO ENSURE THIS VALVE IS OPEN DURING LPCI OPERATION.	OPEN	OPEN/CLOSED	Y

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
138	B	8A	10MOV-66B	RHR HEAT EXCH B BYPASS VALVE	RB	242'8E L	2	NA	RELAY	SYSTEMS COMMENT: CHATTER UNACCEPTABLE SINCE PROCEDURE STEPS NOT IDENTIFIED TO ENSURE THIS VALVE IS OPEN DURING LPCI OPERATION.	OPEN	OPEN/CLOSED	Y
							D		SEISMIC				
139	X	8A	10MOV-70A	RHR HEAT EXCH A STEAM INLET ISOL VALVE	RB	272EL	2	NA	RELAY	SYSTEMS COMMENT: CHATTER UNACCEPTABLE SINCE NO PROCEDURE STEPS IDENTIFIED TO ENSURE THIS VALVE REMAINS CLOSED DURING RHR SYSTEM OPERATION.	CLOSED	CLOSED	N
							A						
140	X	8A	10MOV-70B	RHR HEAT EXCH B STEAM INLET ISOL VALVE	RB	272EL	1	NA	RELAY	SYSTEMS COMMENT: CHATTER UNACCEPTABLE SINCE NO PROCEDURE STEPS IDENTIFIED TO ENSURE THIS VALVE REMAINS CLOSED DURING RHR SYSTEM OPERATION.	CLOSED	CLOSED	N
							T						
141	A	8A	10MOV-89A	RHR HEAT EXCH A SERV WATER OUTLET ISOL VALVE	RB	272EL	2	NA	RELAY	SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE MOV IS POSITIONED BY OP-13 [D.2.f(3)].	CLOSED	OPEN/CLOSED	Y
							A		SEISMIC				
142	B	8A	10MOV-89B	RHR HEAT EXCH B SERV WATER OUTLET ISOL VALVE	RB	272EL	2.5	NA	RELAY	SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE MOV IS POSITIONED BY OP-13 [D.2.f(3)].	CLOSED	OPEN/CLOSED	Y
							D		SEISMIC				
143	A	6	10P-1A	RHR SERVICE WATER PUMP A	SP	255EL	26	NA	RELAY	SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE PUMP IS OPERATED BY OP-13 [D.2.f(2)].	OFF	ON	Y
							B		SEISMIC				
144	B	6	10P-1B	RHR SERVICE WATER PUMP B	SP	255EL	25	NA	RELAY	SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE PUMP IS OPERATED BY OP-13 [D.2.f(2)].	OFF	ON	Y
							B		SEISMIC				
145	A	6	10P-1C	RHR SERVICE WATER PUMP C	SP	255EL	26.5	NA	RELAY	SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE PUMP IS OPERATED BY OP-13 [D.2.f(2)].	OFF	ON	Y
							B		SEISMIC				
146	B	6	10P-1D	RHR SERVICE WATER PUMP D	SP	255EL	25	NA	RELAY	SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE PUMP IS OPERATED BY OP-13 [D.2.f(2)].	OFF	ON	Y
							B		SEISMIC				
147	A	6	10P-3[illegible]	RESIDUAL HEAT	RB	227'6E	3	NA	RELAY	SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE	OFF	ON	Y

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				REMOVAL PUMP A		L	A		SEISMIC	PUMP IS OPERATED BY OP-13 (D.1.a).			
148	B	6	10P-3B	RESIDUAL HEAT REMOVAL PUMP B	RB	227'6E L	3 D	NA	RELAY SEISMIC	RHR LOOP B PUMP POWERED FROM TRAIN A. SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE PUMP IS OPERATED BY OP-13 (D.1.a).	OFF	ON	Y
149	A	6	10P-3C	RESIDUAL HEAT REMOVAL PUMP C	RB	227'6E L	3 A	NA	RELAY SEISMIC	RHR LOOP A PUMP POWERED FROM TRAIN B. SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE PUMP IS OPERATED BY OP-13 (D.1.a).	OFF	ON	Y
150	B	6	10P-3D	RESIDUAL HEAT REMOVAL PUMP D	RB	227'6E L	3 D	NA	RELAY SEISMIC	SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE PUMP IS OPERATED BY OP-13 (D.1.a).	OFF	ON	Y
151	B	0	10RHR-260	RHR LOOP B REACTOR HEAD SPRAY KEEP-FULL 10PCV-266 BYPASS VALVE	RB	272EL	3 W	NA	N/A	MANUAL VALVE THAT MAY NEED TO BE CLOSED DURING SUPPRESSION POOL COOLING MODE. THIS COMPONENT IS SPECIFICALLY CALLED OUT IN OP-13 AS REQUIRING LOCAL OPERATION IF CERTAIN CONDITIONS EXIST BETWEEN THE RHR AND CONDENSATE XFER KEEP FULL SYSTEM. FOR THIS REASON, THIS COMPONENT APPEARS ON THE SSEL.	OPEN/CLOSED	CLOSED	N
152	A	0	10RHR-274	RHR LOOP A CONTAINMENT SPRAY KEEP-FULL COND XFER CONNECTION VALVE	RB	300EL	3 A	NA	N/A	MANUAL VALVE THAT MAY NEED TO BE CLOSED DURING SUPPRESSION POOL COOLING MODE. THIS COMPONENT IS SPECIFICALLY CALLED OUT IN OP-13 AS REQUIRING LOCAL OPERATION IF CERTIAN CONDITIONS EXIST BETWEEN THE RHR AND CONDENSATE XFER KEEP FULL SYSTEM. FOR THIS REASON, THIS COMPONENT APPEARS ON THE SSEL.	OPEN/CLOSED	CLOSED	N
153	A	7	10RV-41A	RHR PUMP A	RB	227'6E	2	NA	SEISMIC		CLOSED	CLOSED	N

Seq#	Safety Train	Equip. Class	Main..... Equipment... Designation	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
				SHUTDOWN COOLING SUCT RELIEF VALVE		L	A						
154	B	7	10RV-41B	RHR PUMP B SHUTDOWN COOLING SUCT RELIEF VALVE	RB	227'6E L	2 D	NA	SEISMIC		CLOSED	CLOSED	N
155	A	7	10RV-41C	RHR PUMP C SHUTDOWN COOLING SUCT RELIEF VALVE	RB	227'6E L	2 A	NA	SEISMIC		CLOSED	CLOSED	N
156	B	7	10RV-41D	RHR PUMP D SHUTDOWN COOLING SUCT RELIEF VALVE	RB	227'6E L	2 D	NA	SEISMIC		CLOSED	CLOSED	N
157	A	7	10RV-43A	RHR HEAT EXCHANGER A TUBE SIDE RELIEF VALVE	RB	272EL	2.5 A	NA	SEISMIC		CLOSED	CLOSED	N
158	B	7	10RV-43B	RHR HEAT EXCHANGER B TUBE SIDE RELIEF VALVE	RB	272EL	2.5 D	NA	SEISMIC		CLOSED	CLOSED	N
159	A	7	10RV-46A	RHR HEAT EXCHANGE A SHELL SIDE RELIEF VALVE	RB	272EL	2.5 A	NA	SEISMIC		CLOSED	CLOSED	N
160	B	7	10RV-46B	RHR HEAT EXCHANGER B SHELL SIDE RELIEF VALVE	RB	272EL	2.5 D	NA	SEISMIC		CLOSED	CLOSED	N

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161	A	8B	10SOV-101A	RHRSW PUMP A MOTOR COOLING WATER RETURN SOLENOID VALVE	SP	255EL	26	NA	RELAY	10SOV-101A IS ASSOCIATED WITH PROVIDING COOLING WATER TO THE BEARINGS OF THE RHR SERVICE WATER PUMP 10P-1A. THE VALVE DOES NOT HAVE A DEDICATED CONTROL SCHEME BUT INSTEAD IS OPERATED VIA THE RHR SERVICE WATER PUMP 10P-1A CONTROL SCHEME AS SHOWN ON ESK-5BG REV. 12. THE SOV IS CONTROLLED BY A "52-" AUXILIARY CONTACT WHICH IS NOT VULNERABLE TO SEISMIC CHATTER.	ON	OFF	N
							B		SEISMIC	ENERGIZE-TO-CLOSE; OPENS WHEN PUMP STARTS.			
162	B	8B	10SOV-101B	RHRSW PUMP B MOTOR COOLING WATER RETURN SOLENOID VALVE	SP	255EL	25	NA	RELAY	10SOV-101B IS ASSOCIATED WITH PROVIDING COOLING WATER TO THE BEARINGS OF THE RHR SERVICE WATER PUMP 10P-1B. THE VALVE DOES NOT HAVE A DEDICATED CONTROL SCHEME BUT INSTEAD IS OPERATED VIA THE RHR SERVICE WATER PUMP 10P-1B CONTROL SCHEME AS SHOWN ON ESK-5BH REV. 16. THE SOV IS CONTROLLED BY A "52-" AUXILIARY CONTACT WHICH IS NOT VULNERABLE TO SEISMIC CHATTER.	ON	OFF	N
							B		SEISMIC	ENERGIZE-TO-CLOSE; OPENS WHEN PUMP STARTS.			
163	A	8B	10SOV-101C	RHRSW PUMP C MOTOR COOLING WATER RETURN SOLENOID VALVE	SP	255EL	26.5	NA	RELAY	10SOV-101C IS ASSOCIATED WITH PROVIDING COOLING WATER TO THE BEARINGS OF THE RHR SERVICE WATER PUMP 10P-1C. THE VALVE DOES NOT HAVE A DEDICATED CONTROL SCHEME BUT INSTEAD IS OPERATED VIA THE RHR SERVICE WATER PUMP 10P-1C CONTROL SCHEME AS SHOWN ON ESK-5BQ REV. 11. THE SOV IS CONTROLLED BY A "52-" AUXILIARY CONTACT WHICH IS NOT VULNERABLE TO SEISMIC CHATTER.	ON	OFF	N
							B		SEISMIC	ENERGIZE-TO-CLOSE; OPENS WHEN PUMP STARTS.			
164	B	8B	10SOV-101D	RHRSW PUMP D MOTOR COOLING WATER RETURN SOLENOID VALVE	SP	255EL	25	NA	RELAY	10SOV-101D IS ASSOCIATED WITH PROVIDING COOLING WATER TO THE BEARINGS OF THE RHR SERVICE WATER PUMP 10P-1D. THE VALVE DOES NOT HAVE A DEDICATED CONTROL SCHEME BUT INSTEAD IS OPERATED VIA THE RHR SERVICE WATER PUMP 10P-1D CONTROL SCHEME AS SHOWN ON ESK-5BR REV. 12. THE SOV IS CONTROLLED BY A "52-" AUXILIARY CONTACT WHICH IS NOT VULNERABLE TO SEISMIC CHATTER.	ON	OFF	N
							B		SEISMIC	ENERGIZE-TO-CLOSE; OPENS WHEN PUMP STARTS.			

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165	A	8B	10SOV-263A	RHR HEAT EXCHANGER A OUTLET INNER SAMPLE SOLENOID VALVE	RB	272EL	2.5 A	NA	RELAY		OFF	OFF	N
166	B	8B	10SOV-263B	RHR HEAT EXCHANGER B OUTLET INNER SAMPLE SOLENOID VALVE	RB	272EL	2.5 D	NA	RELAY		OFF	OFF	N
167	A	8B	10SOV-68A	RHR A TESTABLE CHECK AIR SUPPLY ISOL SOLENOID VALVE	PC	272EL	5 R	NA	SEISMIC	THIS VALVE GETS A SEISMIC EVALUATION PER THE GIP SECTION 3.3.5 (I.E., EXTERNAL ACTUATOR FOR CHECK VALVE). NO RELAY EVALUATION NECESSARY SINCE AIR NOT CAPABLE OF OPENING CHECK VALVE AGAINST SYSTEM PRESSURE.	OFF	OFF	N
168	B	8B	10SOV-68B	RHR B TESTABLE CHECK AIR SUPPLY ISOL SOLENOID VALVE	PC	272EL	4.5 W	NA	SEISMIC	THIS VALVE GETS A SEISMIC EVALUATION PER THE GIP SECTION 3.3.5 (I.E., EXTERNAL ACTUATOR FOR CHECK VALVE). NO RELAY EVALUATION NECESSARY SINCE AIR NOT CAPABLE OF OPENING CHECK VALVE AGAINST SYSTEM PRESSURE.	OFF	OFF	N
169	A	8B	10SOV-71A	RHR HEAT EXCHANGER A TO TORUS OR RCIC ISOL VALVE 10AOV-71A SOLENOID VALVE	RB	272EL	2 A	NA	RELAY	10SOV-71A: LIMIT SWITCHES SHOWN ON ESK-7G ARE NOT VULNERABLE TO CHATTER AND DO NOT AFFECT CONTROL OF THIS VALVE. 10SOV-71A: IT IS ASSUMED THAT WHEN 10-SOV-71A IS DE-ENERGIZED, ITS ASSOCIATED AOV IS CLOSED.	OFF	OFF	N
170	B	8B	10SOV-71B	RHR HEAT EXCHANGER B TO TORUS OR RCIC ISOL VALVE 10AOV-71B SOLENOID VALVE	RB	272EL	2 D	NA	RELAY	10SOV-71B: LIMIT SWITCHES SHOWN ON ESK-7G ARE NOT VULNERABLE TO CHATTER AND DO NOT AFFECT CONTROL OF THIS VALVE. 10SOV-71B: IT IS ASSUMED THAT WHEN 10SOV-71B IS DE-ENERGIZED, ITS ASSOCIATED AOV IS CLOSED.	OFF	OFF	N
171	A	7	10SV-35A	RHR LOOP A	RB	242'8E	1	NA	SEISMIC		CLOSED	CLOSED	N

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				SAFETY VALVE		L	R						
172	B	7	10SV-35B	RHR LOOP B SAFETY VALVE	RB	242'8E L	1 W	NA	SEISMIC		CLOSED	CLOSED	N
173	B	7	10SV-44	REACTOR HEAD SPRAY LINE SAFETY VALVE	RB	272EL	3 W	NA	SEISMIC		CLOSED	CLOSED	N
174	A	7	10SV-74A	RHR HEAT EXCHANGER A STEAM INLET SAFETY VALVE	RB	294EL	2 A	NA	SEISMIC		CLOSED	CLOSED	N
175	B	7	10SV-74B	RHR HEAT EXCHANGER B STEAM INLET SAFETY VALVE	RB	272EL	2 D	NA	SEISMIC		CLOSED	CLOSED	N
176	A	21	11ACC-2A	STANDBY LIQUID CONTROL PUMP 2A SUCTION PULSATION DAMPENER	RB	326'9E L	*	11P-2A	RULE OF BOX	THIS EQUIPMENT ADDED BASED ON NYPA RESPONSE TO OPEN ITEM P909-013.	N/A	N/A	N
177	B	21	11ACC-2B	STANDBY LIQUID CONTROL PUMP 2B SUCTION PULSATION DAMPENER	RB	326'9E L	*	11P-2B	RULE OF BOX	THIS EQUIPMENT ADDED BASED ON NYPA RESPONSE TO OPEN ITEM P909-013.	N/A	N/A	N
178	X	0	11EV-14A	SLC A DOUBLE SQUIB ACTIVATED SHEAR EXPLOSIVE VALVE	RB	326'9E L	6 R	NA	RELAY SEISMIC	DRAWING 1.72-7 REV T. SYSTEMS COMMENT: CHATTER UNACCEPTABLE IF IT RESULTS IN OPENING EXPLOSIVE VALVE.	CLOSED	OPEN	Y
179	X	0	11EV-14B	SLC B DOUBLE SQUIB ACTIVATED SHEAR EXPLOSIVE	RB	326'9E L	6	NA	RELAY	DRAWING 1.72-7 REV T.	CLOSED	OPEN	Y

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
				VALVE			R		SEISMIC	SYSTEMS COMMENT: CHATTER UNACCEPTABLE IF IT RESULTS IN OPENING EXPLOSIVE VALVE.			
180	A	5	11P-2A	STANDBY LIQUID CONTROL A PUMP	RB	326'9E L	6	NA	RELAY	DRAWING 1.72-7 REV T.	OFF	ON	Y
							P		SEISMIC	SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE OPERATING INSTRUCTION WOULD CONTROL PUMP OPS.			
181	B	5	11P-2B	STANDBY LIQUID CONTROL B PUMP	RB	326'9E L	6	NA	RELAY	DRAWING 1.72-7 REV T.	OFF	ON	Y
							P		SEISMIC	SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE OPERATING INSTRUCTION WOULD CONTROL PUMP OPS.			
182	A	7	11SV-39A	SLC PUMP 2A DISCH SAFETY VALVE	RB	326'9E L	6	NA	SEISMIC	RELIEF VALVE FOR PUMP 2A.	CLOSED	OPEN/CLOSED	N
							P						
183	B	7	11SV-39B	SLC PUMP 2B DISCH SAFETY VALVE	RB	326'9E L	6	NA	SEISMIC	RELIEF VALVE FOR PUMP 2B.	CLOSED	OPEN/CLOSED	N
							P						
184	X	21	11TK-1	STANDBY LIQUID CONTROL TANK	RB	326'9E L	6	NA	RELAY	11TK-1: RELAY EVALUATION IS SPECIFICALLY FOR THE SLC TANK IMMERSION HEATER, 11H-150. SINCE THE HEATER IS MOUNTED ON THE TANK, RULE OF THE BOX APPLIES.	ON	ON	Y
							P		SEISMIC	DRAWING 1.72-7 REV T. TANK INCLUDES IMMERSION HEATERS WHICH HAVE NO COMPONENT ID ON P&ID. SYSTEMS COMMENT: SEISMIC EVAL FOR TANK, RELAY EVAL FOR IMMERSION HEATERS. RELAY CHATTER ACCEPTABLE ASSUMING SPB REMAINS IN SOLUTION UNTIL HEATERS ARE REENERGIZED. IMMERSION HEATERS NORMALLY ON/REQUIRED ON.			
185	A	8A	12MOV-15	RWCU SUPPLY INBD ISOL VALVE	PC	292EL	4	NA	RELAY	MOTOR CONTROLLER WAS CONSERVATIVELY MADE ESSENTIAL TO ENSURE THAT SEISMIC CHATTER WOULD NOT ADVERSELY AFFECT CLOSURE OF THIS VALVE AT ANY TIME.	OPEN	CLOSED	Y

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							T		SEISMIC	VALVE INTERLOCKED WITH SLC SYSTEM INITIATION. RX PRESSURE BOUNDARY.			
186	B	8A	12MOV-18	RWCU SUPPLY OUTBD ISOL VALVE	RB	314'6E L	3	NA	RELAY	MOTOR CONTROLLER WAS CONSERVATIVELY MADE ESSENTIAL TO ENSURE THAT SEISMIC CHATTER WOULD NOT ADVERSELY AFFECT CLOSURE OF THE VALVE AT ANY TIME.	OPEN	CLOSED	Y
							R		SEISMIC	VALVE INTERLOCKED WITH SLC SYSTEM INITIATION. RX PRESSURE BOUNDARY.			
187	B	8A	13MOV-15	RCIC STEAM SUPPLY INBD ISOL VALVE	PC	291EL	4	NA	RELAY	RX PRESSURE BOUNDARY.	OPEN	CLOSED	Y
							R		SEISMIC				
188	A	8A	13MOV-16	RCIC TURBINE STEAM SUPPLY OUTBD ISOL VALVE	RB	274EL	3	NA	RELAY	RX PRESSURE BOUNDARY.	OPEN	CLOSED	Y
							R		SEISMIC				
189	A	7	14AOV-13A	CSP A REACTOR ISOL TESTABLE CHECK VALVE	PC	314'9E L	4.5	NA	N/A	ASSUMED: THAT AIR-OPERATOR FEATURE CAN NEITHER OPEN VALVE AGAINST BACKPRESSURE/REVERSE FLOW, NOR CAN IT HOLD VALVE OPEN AGAINST REVERSE FLOW.	CLOSED	CLOSED	N
							R			CHECK VALVE HAS AIR-OPERATOR TO ALLOW VERIFYING FREEDOM OF THE DISC. RX COOLANT PRESSURE BOUNDARY. SEISMIC EVAL NOT REQUIRED (NSSS RUGGED EQUIPMENT); RELAY EVAL NOT REQD BASED ON ASSUMPTION THAT AIR SUPPLY TO VALVE IS NOT CAPABLE OF PREVENTING THE VALVE FROM PERFORMING ITS' FUNCTION DURING NORMAL OPERATING PRESSURE.			
190	B	7	14AOV-13B	CSP B REACTOR ISOL TESTABLE CHECK VALVE	PC	314'9E L	4.5	NA	N/A	SEE AOV-13A REMARKS.	CLOSED	CLOSED	N
							W						
191	A	8A	14MOV-12A	CORE SPRAY LOOP A INBD ISOL VALVE	RB	300EL	4.5	NA	RELAY	RX PRESSURE BOUNDARY.	CLOSED	CLOSED	N

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192	B	8A	14MOV-12B	CORE SPRAY LOOP B INBD ISOL VALVE	RB	300EL	4.5 R	NA	RELAY	RX PRESSURE BOUNDARY.	CLOSED	CLOSED	N
193	X	18	15PS-122A	RBCLC PUMPS DISCH HDR PRESS SWITCH	RB	300EL	4 A	NA	SEISMIC	FIELD MOUNTED INSTRUMENT. RIGIDLY MOUNTED TO R-C WALL. DEMAND: 1.07 PEAK/0.31 ZPA (1.0 X RB 326 FRS).	N/A	N/A	N
194	X	18	15PS-122B	RBCLC PUMPS DISCH HDR PRESS SWITCH	RB	300EL	4.5 A	NA	SEISMIC	FIELD MOUNTED INSTRUMENT. RIGIDLY MOUNTED TO R-C WALL. DEMAND: 1.07 PEAK/0.31 ZPA (1.0 X RB 326 FRS).	N/A	N/A	N
195	X	18	15PS-122C	RBCLC PUMPS DISCH HDR PRESS SWITCH	RB	300EL	4 A	NA	SEISMIC	FIELD MOUNTED INSTRUMENT. RIGIDLY MOUNTED TO R-C WALL. DEMAND: 1.07 PEAK/0.31 ZPA (1.0 X RB 326 FRS).	N/A	N/A	N
196	X	18	15PS-122D	RBCLC PUMPS DISCH HDR PRESS SWITCH	RB	300EL	4.5 A	NA	SEISMIC	FIELD MOUNTED INSTRUMENT. RIGIDLY MOUNTED TO R-C WALL. DEMAND: 1.07 PEAK/0.31 ZPA (1.0 X RB 326 FRS).	N/A	N/A	N
197	A	19	16-1RTD-131A	TORUS BULK TEMP MONITOR 0 AZIMUTH BAY L X-232 RESIST TEMP DETECTOR EQ	SU	227'6E L	4 P	NA	SEISMIC	THIS RTD HAS NO MECHANICAL CONTACTS AND IS NOT CONSIDERED TO BE A RELAY. WITH THE EXCEPTION OF TWO SELECTOR SWITCHES IDENTIFIED UNDER THE LOOP INDICATOR, THERE ARE NO RELAYS ASSOCIATED WITH TORUS BULK TEMPERATURE MONITORING. SEE TI-131A FOR RELAY EVAL.	ON	ON	Y
198	B	19	16-1RTD-131B	TORUS BULK TEMP MONITOR 0 AZIMUTH BAY L X-232 RESIST TEMP DETECTOR EQ	SU	227'6E L	4 P	NA	SEISMIC	THIS RTD HAS NO MECHANICAL CONTACTS AND IS NOT CONSIDERED TO BE A RELAY. WITH THE EXCEPTION OF TWO SELECTOR SWITCHES IDENTIFIED UNDER THE LOOP INDICATOR, THERE ARE NO RELAYS ASSOCIATED WITH TORUS BULK TEMPERATURE MONITORING. TYPICAL OF 16 (131B THRU 146B) SEE TI-131B FOR RELAY EVAL.	ON	ON	Y
199	A	19	16-1RTD-132A	TORUS BULK TEMP	SU	227'6E	5	NA	SEISMIC	THIS RTD HAS NO MECHANICAL CONTACTS AND IS	ON	ON	Y

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				MONITOR 22.5 AZIMUTH BAY K X-233 RESIST TEMP DETECTOR EQ			L P			NOT CONSIDERED TO BE A RELAY. WITH THE EXCEPTION OF TWO SELECTOR SWITCHES IDENTIFIED UNDER THE LOOP INDICATOR, THERE ARE NO RELAYS ASSOCIATED WITH TORUS BULK TEMPERATURE MONITORING. SEE TI-131A FOR RELAY EVAL.			
200	B	19	16-1RTD-132B	TORUS BULK TEMP MONITOR 22.5 AZIMUTH BAY K X-233 RESIST TEMP DETECTOR EQ	SU	227'6E	5 L P	NA	SEISMIC	THIS RTD HAS NO MECHANICAL CONTACTS AND IS NOT CONSIDERED TO BE A RELAY. WITH THE EXCEPTION OF TWO SELECTOR SWITCHES IDENTIFIED UNDER THE LOOP INDICATOR, THERE ARE NO RELAYS ASSOCIATED WITH TORUS BULK TEMPERATURE MONITORING. SEE TI-131B FOR RELAY EVAL.	ON	ON	Y
201	A	19	16-1RTD-133A	TORUS BULK TEMP MONITOR 45 AZIMUTH BAY J X-234 RESIST TEMP DETECTOR EQ	SU	227'6E	6 L R	NA	SEISMIC	THIS RTD HAS NO MECHANICAL CONTACTS AND IS NOT CONSIDERED TO BE A RELAY. WITH THE EXCEPTION OF TWO SELECTOR SWITCHES IDENTIFIED UNDER THE LOOP INDICATOR, THERE ARE NO RELAYS ASSOCIATED WITH TORUS BULK TEMPERATURE MONITORING. SEE TI-131A FOR RELAY EVAL.	ON	ON	Y
202	B	19	16-1RTD-133B	TORUS BULK TEMP MONITOR 45 AZIMUTH BAY J X-234 RESIST TEMP DETECTOR EQ	SU	227'6E	6 L R	NA	SEISMIC	THIS RTD HAS NO MECHANICAL CONTACTS AND IS NOT CONSIDERED TO BE A RELAY. WITH THE EXCEPTION OF TWO SELECTOR SWITCHES IDENTIFIED UNDER THE LOOP INDICATOR, THERE ARE NO RELAYS ASSOCIATED WITH TORUS BULK TEMPERATURE MONITORING. SEE TI-131B FOR RELAY EVAL.	ON	ON	Y
203	A	19	16-1RTD-134A	TORUS BULK TEMP MONITOR 67.5 AZIMUTH BAY I X-235 RESIST THERMAL DETECTOR EQ	SU	277'6E	6 L R	NA	SEISMIC	THIS RTD HAS NO MECHANICAL CONTACTS AND IS NOT CONSIDERED TO BE A RELAY. WITH THE EXCEPTION OF TWO SELECTOR SWITCHES IDENTIFIED UNDER THE LOOP INDICATOR, THERE ARE NO RELAYS ASSOCIATED WITH TORUS BULK TEMPERATURE MONITORING. SEE TI-131A FOR RELAY EVAL	ON	ON	Y
204	B	19	16-1RTD-134B	TORUS BULK TEMP MONITOR 67.5 AZIMUTH BAY I	SU	277'6E	6 L	NA	SEISMIC	THIS RTD HAS NO MECHANICAL CONTACTS AND IS NOT CONSIDERED TO BE A RELAY. WITH THE EXCEPTION OF TWO SELECTOR SWITCHES	ON	ON	Y

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
				X-235 RESIST TEMP DETECTOR EQ			R			IDENTIFIED UNDER THE LOOP INDICATOR, THERE ARE NO RELAYS ASSOCIATED WITH TORUS BULK TEMPERATURE MONITORING. SEE TI-131B FOR RELAY EVAL.			
205	A	19	16-1RTD-135A	TORUS BULK TEMP MONITOR 90 AZIMUTH BAY H X-236 RESIST TEMP DETECTOR EQ	SU	227'6E L	6 T	NA	SEISMIC	THIS RTD HAS NO MECHANICAL CONTACTS AND IS NOT CONSIDERED TO BE A RELAY. WITH THE EXCEPTION OF TWO SELECTOR SWITCHES IDENTIFIED UNDER THE LOOP INDICATOR, THERE ARE NO RELAYS ASSOCIATED WITH TORUS BULK TEMPERATURE MONITORING. SEE TI-131A FOR RELAY EVAL.	ON	ON	Y
206	B	19	16-1RTD-135B	TORUS BULK TEMP MONITOR 90 AZIMUTH BAY H X-236 RESIST TEMP DETECTOR EQ	SU	227'6E L	6 T	NA	SEISMIC	THIS RTD HAS NO MECHANICAL CONTACTS AND IS NOT CONSIDERED TO BE A RELAY. WITH THE EXCEPTION OF TWO SELECTOR SWITCHES IDENTIFIED UNDER THE LOOP INDICATOR, THERE ARE NO RELAYS ASSOCIATED WITH TORUS BULK TEMPERATURE MONITORING. SEE TI-131B FOR RELAY EVAL.	ON	ON	Y
207	A	19	16-1RTD-136A	TORUS BULK TEMP MONITOR 112.5 AZIMUTH BAY G X-237 RESIST TEMP DETECTOR EQ	SU	227'6E L	6 W	NA	SEISMIC	DRAWING 1.51-366 INDICATES THAT THIS RTD IS "NOT INSTALLED." THIS RTD HAS NO MECHANICAL CONTACTS AND IS NOT CONSIDERED TO BE A RELAY. WITH THE EXCEPTION OF TWO SELECTOR SWITCHES IDENTIFIED UNDER THE LOOP INDICATOR, THERE ARE NO RELAYS ASSOCIATED WITH TORUS BULK TEMPERATURE MONITORING. SEE TI-131A FOR RELAY EVAL.	ON	ON	Y
208	B	19	16-1RTD-136B	TORUS BULK TEMP MONITOR 112.5 AZIMUTH BAY G X-237 RESIST TEMP DETECTOR EQ	SU	227'6E L	6 W	NA	SEISMIC	DRAWING 1.51-371 INDICATES THAT THIS RTD IS "NOT INSTALLED." THIS RTD HAS NO MECHANICAL CONTACTS AND IS	ON	ON	Y

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
										NOT CONSIDERED TO BE A RELAY. WITH THE EXCEPTION OF TWO SELECTOR SWITCHES INDENTIFIED UNDER THE LOOP INDICATOR, THERE ARE NO RELAYS ASSOCIATED WITH TORUS BULK TEMPERATURE MONITORING. SEE TI-131B FOR RELAY EVAL.			
209	A	19	16-1RTD-137A	TORUS BULK TEMP MONITOR 135 AZIMUTH BAY F X-238 RESIST TEMP DETECTOR EQ	SU	227'6E L	6 W	NA	SEISMIC	THIS RTD HAS NO MECHANICAL CONTACTS AND IS NOT CONSIDERED TO BE A RELAY. WITH THE EXCEPTION OF TWO SELECTOR SWITCHES IDENTIFIED UNDER THE LOOP INDICATOR, THERE ARE NO RELAYS ASSOCIATED WITH TORUS BULK TEMPERATURE MONITORING. SEE TI-131A FOR RELAY EVAL.	ON	ON	Y
210	B	19	16-1RTD-137B	TORUS BULK TEMP MONITOR 135 AZIMUTH BAY F X-238 RESIST TEMP DETECTOR EQ	SU	227'6E L	6 W	NA	SEISMIC	THIS RTD HAS NO MECHANICAL CONTACTS AND IS NOT CONSIDERED TO BE A RELAY. WITH THE EXCEPTION OF TWO SELECTOR SWITCHES IDENTIFIED UNDER THE LOOP INDICATOR, THERE ARE NO RELAYS ASSOCIATED WITH TORUS BULK TEMPERATURE MONITORING. SEE TI-131B FOR RELAY EVAL.	ON	ON	Y
211	A	19	16-1RTD-138A	TORUS BULK TEMP MONITOR 157.5 AZIMUTH BAY E X-239 RESIST TEMP DETECTOR EQ	SU	227'6E L	5 Y	NA	SEISMIC	THIS RTD HAS NO MECHANICAL CONTACTS AND IS NOT CONSIDERED TO BE A RELAY. WITH THE EXCEPTION OF TWO SELECTOR SWITCHES IDENTIFIED UNDER THE LOOP INDICATOR, THERE ARE NO RELAYS ASSOCIATED WITH TORUS BULK TEMPERATURE MONITORING. SEE TI-131A FOR RELAY EVAL.	ON	ON	Y
212	B	19	16-1RTD-138B	TORUS BULK TEMP MONITOR 157.5 AZIMUTH BAY E X-239 RESIST TEMP DETECTOR EQ	SU	227'6E L	5 Y	NA	SEISMIC	THIS RTD HAS NO MECHANICAL CONTACTS AND IS NOT CONSIDERED TO BE A RELAY. WITH THE EXCEPTION OF TWO SELECTOR SWITCHES IDENTIFIED UNDER THE LOOP INDICATOR, THERE ARE NO RELAYS ASSOCIATED WITH TORUS BULK TEMPERATURE MONITORING. SEE TI-131B FOR RELAY EVAL.	ON	ON	Y
213	A	19	16-1RTD-139A	TORUS BULK TEMP MONITOR 180 AZIMUTH BAY D X-240 RESIST	SU	227'6E L	5	NA	SEISMIC	THIS RTD HAS NO MECHANICAL CONTACTS AND IS NOT CONSIDERED TO BE A RELAY. WITH THE EXCEPTION OF TWO SELECTOR SWITCHES IDENTIFIED UNDER THE LOOP INDICATOR, THERE	ON	ON	Y

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				TEMP DETECTOR EQ			Y			ARE NO RELAYS ASSOCIATED WITH TORUS BULK TEMPERATURE MONITORING. SEE TI-131A FOR RELAY EVAL.			
214	B	19	16-1RTD-139B	TORUS BULK TEMP MONITOR 180 AZIMUTH BAY D X-240 RESIST TEMP DETECTOR EQ	SU	227'6E L	5 Y	NA	SEISMIC	THIS RTD HAS NO MECHANICAL CONTACTS AND IS NOT CONSIDERED TO BE A RELAY. WITH THE EXCEPTION OF TWO SELECTOR SWITCHES IDENTIFIED UNDER THE LOOP INDICATOR, THERE ARE NO RELAYS ASSOCIATED WITH TORUS BULK TEMPERATURE MONITORING. SEE TI-131B FOR RELAY EVAL.	ON	ON	Y
215	A	19	16-1RTD-140A	TORUS BULK TEMP MONITOR 202.5 AZIMUTH BAY C X-241 RESIST TEMP DETECTOR EQ	SU	227'6E L	4 Y	NA	SEISMIC	THIS RTD HAS NO MECHANICAL CONTACTS AND IS NOT CONSIDERED TO BE A RELAY. WITH THE EXCEPTION OF TWO SELECTOR SWITCHES IDENTIFIED UNDER THE LOOP INDICATOR, THERE ARE NO RELAYS ASSOCIATED WITH TORUS BULK TEMPERATURE MONITORING. SEE TI-131A FOR RELAY EVAL.	ON	ON	Y
216	B	19	16-1RTD-140B	TORUS BULK TEMP MONITOR 202.5 AZIMUTH BAY C X-241 RESIST TEMP DETECTOR EQ	SU	227'6E L	4 Y	NA	SEISMIC	THIS RTD HAS NO MECHANICAL CONTACTS AND IS NOT CONSIDERED TO BE A RELAY. WITH THE EXCEPTION OF TWO SELECTOR SWITCHES IDENTIFIED UNDER THE LOOP INDICATOR, THERE ARE NO RELAYS ASSOCIATED WITH TORUS BULK TEMPERATURE MONITORING. SEE TI-131B FOR RELAY EVAL.	ON	ON	Y
217	A	19	16-1RTD-141A	TORUS BULK TEMP MONITOR 22.5 AZIMUTH BAY B X-242 RESIST TEMP DETECTOR EQ	SU	227'6E L	3 W	NA	SEISMIC	THIS RTD HAS NO MECHANICAL CONTACTS AND IS NOT CONSIDERED TO BE A RELAY. WITH THE EXCEPTION OF TWO SELECTOR SWITCHES IDENTIFIED UNDEK THE LOOP INDICATOR, THERE ARE NO RELAYS ASSOCIATED WITH TORUS BULK TEMPERATURE MONITORING. SEE TI-131A FOR RELAY EVAL.	ON	ON	Y
218	B	19	16-1RTD-141B	TORUS BULK TEMP MONITOR 22.5 AZIMUTH BAY B X-242 RESIST TEMP DETECTOR EQ	SU	227'6E L	3	NA	SEISMIC	THIS RTD HAS NO MECHANICAL CONTACTS AND IS NOT CONSIDERED TO BE A RELAY. WITH THE EXCEPTION OF TWO SELECTOR SWITCHES IIDENTIFIED UNDER THE LOOP INDICATOR, THERE ARE NO RELAYS ASSOCIATED WITH TORUS BULK TEMPERATURE MONITORING.	ON	ON	Y

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							W			SEE TI-131B FOR RELAY EVAL.			
219	A	19	16-1RTD-142A	TORUS BULK TEMP MONITOR 247.5 AZIMUTH BAY A X-243 RESIST TEMP DETECTOR EQ	SU	227'6E L	3 W	NA	SEISMIC	THIS RTD HAS NO MECHANICAL CONTACTS AND IS NOT CONSIDERED TO BE A RELAY. WITH THE EXCEPTION OF TWO SELECTOR SWITCHES IDENTIFIED UNDER THE LOOP INDICATOR, THERE ARE NO RELAYS ASSOCIATED WITH TORUS BULK TEMPERATURE MONITORING. SEE TI-131A FOR RELAY EVAL.	ON	ON	Y
220	B	19	16-1RTD-142B	TORUS BULK TEMP MONITOR 247.5 AZIMUTH BAY A X-243 RESIST TEMP DETECTOR EQ	SU	227'6E L	3 W	NA	SEISMIC	THIS RTD HAS NO MECHANICAL CONTACTS AND IS NOT CONSIDERED TO BE A RELAY. WITH THE EXCEPTION OF TWO SELECTOR SWITCHES IDENTIFIED UNDER THE LOOP INDICATOR, THERE ARE NO RELAYS ASSOCIATED WITH TORUS BULK TEMPERATURE MONITORING. SEE TI-131B FOR RELAY EVAL.	ON	ON	Y
221	A	19	16-1RTD-143A	TORUS BULK TEMP MONITOR 270 AZIMUTH BAY P X-244 RESIST TEMP DETECTOR EQ	SU	227'6E L	3 T	NA	SEISMIC	THIS RTD HAS NO MECHANICAL CONTACTS AND IS NOT CONSIDERED TO BE A RELAY. WITH THE EXCEPTION OF TWO SELECTOR SWITCHES IDENTIFIED UNDER THE LOOP INDICATOR, THERE ARE NO RELAYS ASSOCIATED WITH TORUS BULK TEMPERATURE MONITORING. SEE TI-131A FOR RELAY EVAL.	ON	ON	Y
222	B	19	16-1RTD-143B	TORUS BULK TEMP MONITOR 270 AZIMUTH BAY P X-244 RESIST TEMP DETECTOR EQ	SU	227'6E L	3 T	NA	SEISMIC	THIS RTD HAS NO MECHANICAL CONTACTS AND IS NOT CONSIDERED TO BE A RELAY. WITH THE EXCEPTION OF TWO SELECTOR SWITCHES IDENTIFIED UNDER THE LOOP INDICATOR, THERE ARE NO RELAYS ASSOCIATED WITH TORUS BULK TEMPERATURE MONITORING. SEE TI-131B FOR RELAY EVAL.	ON	ON	Y
223	A	19	16-1RTD-144A	TORUS BULK TEMP MONITOR 292.5 AZIMUTH BAY O X-245 RESIST TEMP DETECTOR EQ	SU	227'6E L	3 R	NA	SEISMIC	THIS RTD HAS NO MECHANICAL CONTACTS AND IS NOT CONSIDERED TO BE A RELAY. WITH THE EXCEPTION OF TWO SELECTOR SWITCHES IDENTIFIED UNDER THE LOOP INDICATOR, THERE ARE NO RELAYS ASSOCIATED WITH TORUS BULK TEMPERATURE MONITORING. SEE TI-131A FOR RELAY EVAL.	ON	ON	Y

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
224	B	19	16-1RTD-144B	TORUS BULK TEMP MONITOR 292.5 AZIMUTH BAY O X-245 RESIST TEMP DETECTOR EQ	SU	227'6E L	3 R	NA	SEISMIC	THIS RTD HAS NO MECHANICAL CONTACTS AND IS NOT CONSIDERED TO BE A RELAY. WITH THE EXCEPTION OF TWO SELECTOR SWITCHES IDENTIFIED UNDER THE LOOP INDICATOR, THERE ARE NO RELAYS ASSOCIATED WITH TORUS BUILK TEMPERATURE MONITORING. SEE TI-131B FOR RELAY EVAL.	ON	ON	Y
225	A	19	16-1RTD-145A	TORUS BULK TEMP MONITOR 315 AZIMUTH BAY N X-246 RESIST TEMP DETECTOR EQ	SU	227'6E L	3 R	NA	SEISMIC	THIS RTD HAS NO MECHANICAL CONTACTS AND IS NOT CONSIDERED TO BE A RELAY. WITH THE EXCEPTION OF TWO SELECTOR SWITCHES IDENTIFIED UNDER THE LOOP INDICATOR, THERE ARE NO RELAYS ASSOCIATED WITH TORUS BULK TEMPERATURE MONITORING. SEE TI-131A FOR RELAY EVAL.	ON	ON	Y
226	B	19	16-1RTD-145B	TORUS BULK TEMP MONITOR 315 AZIMUTH BAY N X-246 RESIST TEMP DETECTOR EQ	SU	227'6E L	3 R	NA	SEISMIC	THIS RTD HAS NO MECHANICAL CONTACTS AND IS NOT CONSIDERED TO BE A RELAY. WITH THE EXCEPTION OF TWO SELECTOR SWITCHES IDENTIFIED UNDER THE LOOP INDICATOR, THERE ARE NO RELAYS ASSOCIATED WITH TORUS BULK TEMPERATURE MONITORING. SEE TI-131B FOR RELAY EVAL.	ON	ON	Y
227	A	19	16-1RTD-146A	TORUS BULK TEMP MONITOR 337.5 AZIMUTH BAY M X-247 RESIST TEMP DETECTOR EQ	SU	227'6E L	4 P	NA	SEISMIC	THIS RTD HAS NO MECHANICAL CONTACTS AND IS NOT CONSIDERED TO BE A RELAY. WITH THE EXCEPTION OF TWO SELECTOR SWITCHES IDENTIFIED UNDER THE LOOP INDICATOR, THERE ARE NO RELAYS ASSOCIATED WITH TORUS BULK TEMPERATURE MONITORING. SEE TI-131A FOR RELAY EVAL.	ON	ON	Y
228	B	19	16-1RTD-146B	TORUS BULK TEMP MONITOR 337.5 AZIMUTH BAY M X-247 RESIST TEMP DETECTOR EQ	SU	227'6E L	4 P	NA	SEISMIC	THIS RTD HAS NO MECHANICAL CONTACTS AND IS NOT CONSIDERED TO BE A RELAY. WITH THE EXCEPTION OF TWO SELECTOR SWITCHES IDENTIFIED UNDER THE LOOP INDICATOR, THERE ARE NO RELAYS ASSOCIATED WITH TORUS BULK TEMPERATURE MONITORING. SEE TI-131B FOR RELAY EVAL.	ON	ON	Y
229	A	20	16-1TI-131A	SUPPRESSION CHAMBER A TEMP	RR	284'8E L	10.5	27MAP	RELAY		ON	ON	Y

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				INDIC									
							I		RULE OF BOX				
230	B	20	16-1TI-131B	SUPPRESSION CHAMBER B TEMP INDIC	RR	284'8E L	10.5	27MAP	RELAY		ON	ON	Y
							I		RULE OF BOX				
231	A	20	16-1TR-131A	TORUS BULK TEMP MON AVERAGE TEMP RECORDER	CR	300EL	10	09-3	RELAY	16-1TR-131A: WITH THE EXCEPTION OF TWO SELECTOR SWITCHES IDENTIFIED UNDER 16-1TI-131A, THERE ARE NO RELAYS ASSOCIATED WITH TORUS BULK TEMPERATURE MONITORING.	ON	ON	Y
							F		RULE OF BOX				
232	B	20	16-1TR-131B	TORUS BULK TEMP MON AVERAGE TEMP RECORDER	CR	300EL	10	09-3	RELAY	16-1TR-131B: WITH THE EXCEPTION OF TWO SELECTOR SWITCHES IDENTIFIED UNDER 16-1TI-131B, THERE ARE NO RELAYS ASSOCIATED WITH TORUS BULK TEMPERATURE MONITORING.	ON	ON	Y
							F		RULE OF BOX				
233	A	7	23AOV-42	HPCI TURBINE STEAM SUPPLY UPSTR DRAIN ISOL VALVE	RB	227'6E L	1	NA	SEISMIC	NEED TO ENSURE VALVE IS CLOSED TO ISOLATE STEAM SUPPLY LINE DRAIN DURING HPCI OPERATION. REFER TO SOV-42 FOR POWER SUPPLY. ASSUMES STEAM TRAP CAN BE CREDITED IF AOV-42 FAILS OPEN.	OPEN	CLOSED	Y
							T						
234	B	7	23AOV-53	HPCI TURBINE STEAM SUPPLY DRAIN TRAP T-3 BYPASS VALVE	RB	227'6E L	1	NA	RELAY	VALVE IS PASSIVE AND NOT SUBJECT TO SIESMIC EVALUATION; REFER TO SOV-53 FOR RELAY EVALUATION INFORMATION.	CLOSED	CLOSED	N
							T						
235	B	21	23E-2	HPCI LUBE OIL COOLER	RB	227'6E L	1	23TU-2	RULE OF BOX		N/A	N/A	N
							T						
236	B	20	23FI-108-1	HPCI PUMP DISCHARGE FLOW INDICATOR	CR	300EL	10	09-3	RELAY	DRAWING LP-23H REV 001.	ON	ON	Y
							F		RULE OF				

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
									BOX	NO RELAYS IN INSTRUMENT LOOP. SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE INSTRUMENT IS NOT REQUIRED TO FUNCTION UNTIL SYSTEM STARTUP.			
237	B	18	23FT-82	HPCI MAIN PUMP P-1M DISCH FLOW XMITTER EQ	RB	242'8E L	4	25-60	RELAY	SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE INSTRUMENT IS NOT REQUIRED TO FUNCTION UNTIL SYSTEM STARTUP.	ON	ON	Y
							D		RULE OF BOX	NO RELAYS IN INSTRUMENT LOOP.			
238	B	7	23HOV-1	HPCI TURBINE STOP VALVE	RB	227'6E L	1	NA	RELAY	23HOV-1: LIMIT SWITCH CONSIDERED TO BE INHERENTLY RUGGED.	CLOSED	OPEN/CLOSED	Y
							T		SEISMIC	RELAY SELECTION ENCOMPASSES COMPONENT 23SOV-102. SOLENOID VALVE IS RULE OF BOX FOR 23HOV-1. THIS HYDRAULIC-OPERATED VALVE IS CONSIDERED FLUID OPERATED (CLASS 7). CHATTER ACCEPTABLE SINCE HOVs ARE OBSERVED DURING TURBINE STARTUP AND CAN BE RESET IF NECESSARY.			
239	B	7	23HOV-2	HPCI TURBINE CONTROL VALVE	RB	227'6E L	1	23TU-2	RELAY	23HOV-2: LIMIT SWITCHES LS1 AND LS2 ARE CONSIDERED TO BE INHERENTLY RUGGED. EGM CONTROL BOX CONSIDERED TO BE SOLID-STATE DEVICE AND NOT VULNERABLE TO SEISMIC CHATTER. CREDIT IS TAKEN FOR MANUAL INITIATION OF HPCI.	CLOSED	OPEN/CLOSED	Y
							T		RULE OF BOX	THIS HYDRAULIC-OPERATED VALVE IS CONSIDERED FLUID-OPERATED (CLASS 7) FOR GIP PURPOSES. HYDRAULIC VALVE THAT IS TIED INTO THE HPCI TURBINE CONTROL LOGIC. CHATTER ACCEPTABLE SINCE HOVs ARE OBSERVED DURING TURBINE STARTUP AND CAN BE RESET IF NECESSARY.			
240	A	20	23LI-202A	SUPPRESSION CHAMBER WATER LEVEL INDIC	CR	300EL	10	09-3	RELAY	DRAWING LP-23AG REV 001.	ON	ON	Y
							F		RULE OF BOX	NO RELAYS IN INSTRUMENT LOOP.			

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										SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE LI PROVIDES NO AUXILIARY FUNCTIONS.			
241	B	20	23LI-202B	SUPPRESSION CHAMBER WATER LEVEL INDIC	CR	300EL	10	09-3	RELAY	DRAWING LP-23AH REV 001.	ON	ON	Y
							F		RULE OF BOX	NO RELAYS IN INSTRUMENT LOOP. SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE LI PROVIDES NO AUXILIARY FUNCTIONS.			
242	A	18	23LT-202A	SUPPRESSION POOL HPCI LOGIC LEVEL XMITTER EQ	RB	227'6E L	4.5	NA	RELAY	SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE LT PROVIDES NO AUXILIARY FUNCTIONS.	ON	ON	Y
							A		SEISMIC	NO RELAYS IN INSTRUMENT LOOP.			
243	B	18	23LT-202B	SUPPRESSION POOL HPCI LOGIC LEVEL XMITTER EQ	RB	227'6E L	4.5	NA	RELAY	SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE LT PROVIDES NO AUXILIARY FUNCTIONS.	ON	ON	Y
							D		SEISMIC	NO RELAYS IN INSTRUMENT LOOP.			
244	B	8A	23MOV-14	HPCI TURBINE STEAM SUPPLY ISOL VALVE	RB	227'6E L	1	NA	RELAY	SYSTEMS COMMENT: MOV IS OPENED BY OP-15 (D.1.e) AND IS CREDITED FOR ISOLATION (PREVENTING HPCI TURBINE FROM STARTING).	CLOSED	OPEN/CLOSED	Y
							T		SEISMIC				
245	A	8A	23MOV-15	HPCI STEAM SUPPLY INBD ISOL VALVE	PC	269'9E L	4	NA	RELAY	SYSTEMS COMMENT: 23MOV-15 HAS BEEN MADE CHATTER ACCEPTABLE BECAUSE 23MOV-14, 23MOV-16 AND 23MOV-60 ARE EVALUATED TO FORM RCPB AND PREVENT HPCI TURBINE FROM STARTING.	OPEN	OPEN/CLOSED	Y
							W		SEISMIC				
246	B	8A	23MOV-16	HPCI TURBINE STEAM SUPPLY OUTBD ISOL VALVE	RB	273'4E L	2	NA	RELAY	23MOV-16: VALVE REQUIRED TO BE OPERABLE POST SSE. RELAY EVALUATION PERFORMED TO ENSURE VALVE DOES NOT OPEN DUE TO CONTACT CHATTER. HPCI SYSTEM MANUALLY INITIATED, AT WHICH TIME THE VALVE WILL BE OPENED OR CYCLED.	CLOSED	OPEN/CLOSED	Y
							W		SEISMIC	DRAWING 1.61-140 REV L. SYSTEMS COMMENT: RX PRESSURE BOUNDARY.			

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										CHATTER NOT ACCEPTABLE SINCE MOV PROVIDES RCPB ISOLATION FUNCTION.			
247	B	8A	23MOV-17	HPCI BOOSTER PUMP P-1B SUCT FROM 33?K-1A & B ISOL VALVE	RB	242'8E L	3	NA	RELAY	23MOV-17: CHATTER ACCEPTABLE BECAUSE VALVE IS IN CONDENSATE TANK RETURN LINE FROM HPCI TURBINE DRIVEN PUMP. HPCI TURBINE INITIALLY PREVENTED FROM OPERATING POST SSE BY RELYING ON RCPB ISOLATION.	OPEN	OPEN/CLOSED	Y
							A		SEISMIC	SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE HI/LO RCPB ISOLATION IS RELIED UPON TO PREVENT HPCI TURBINE OPERATION WITH SUCTION VALVE INADVERTENTLY CLOSED. OP-15 (C.1.b) VERIFIES MOV OPEN DURING STARTUP.			
248	B	8A	23MOV-19	HPCI PUMP DISCH TO REACTOR INBD ISOL VALVE	SU	262EL	7	NA	RELAY	23MOV-19: ASSOCIATED RELAYS ARE CHATTER ACEPTABLE BECAUSE UPSTREAM VALVES 23MOV-14, 23MOV-16, AND 23MOV-60 ARE RELIED UPON FOR RCPB ISOLATION, THEREBY INITIALLY PREVENTING OPERATION OF HPCI TURBINE DRIVEN PUMP POST SSE.	CLOSED	OPEN	Y
							W		SEISMIC	SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE OP-15 (D.1) OPENS MOV DURING STARTUP SEQUENCE.			
249	B	8A	23MOV-20	HPCI PUMP DISCH TO REACTOR OUTBD ISOL VALVE	SU	262EL	7	NA	RELAY	23MOV-20: VALVE NORMALLY OPEN AND REQUIRED OPEN, THEREFORE CLOSING CIRCUIT HAS BEEN MADE ESSENTIAL TO PREVENT SPURIOUS CHATTER FROM CLOSING VALVE.	OPEN	OPEN	N
							W			SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE OP-15 (C.1.b) VERIFIES MOV OPEN DURING STARTUP. CHECK VALVES HPI18 AND FWS28A CREDITED FOR RCPB INTEGRITY.			
250	B	8A	23MOV-21	HPCI FULL FLOW TEST RETURN TO CST 33?K-1A & B UPSTR ISOL VALVE	RB	262'5E L	5	NA	RELAY	VALVE REQUIRED TO OPERATE TO ENSURE SUPPRESSION POOL TEMPERATURE LIMITS ARE MAINTAINED.	CLOSED	OPEN/CLOSED	Y
							T		SEISMIC	SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE OP-15 (D.2) CONTROLS MOV OPERATION.			
251	B	8A	23MOV-24	HPCI FULL FLOW TEST RETURN TO	RB	262'5E L	3	NA	RELAY	23MOV-24: ASSOCIATED RELAYS ARE CHATTER ACCEPTABLE BECAUSE VALVE IS ASSOCIATED	CLOSED	OPEN/CLOSED	Y

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				CST 33TK-1A & B DNSTR ISOL VALVE						WITH DISCHARGE PIPING FROM HPCI TURBINE DRIVEN PUMP. HPCI PUMP IS INITIALLY PREVENTED FROM OPERATING POST SSE BY RELYING UPON RCPB ISOLATION. CREDIT IS TAKEN FOR MANUAL INITIATION OF HPCI.			
							P		SEISMIC	VALVE REQUIRED TO OPERATE TO ENSURE SUPPRESSION POOL TEMPERATURE LIMITS ARE MAINTAINED. SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE OP-15 (D.2) CONTROLS MOV OPERATION.			
252	B	8A	23MOV-25	HPCI MAIN PUMP P-1M MIN FLOW ISOL VALVE	SU	257'1E L	4	NA	RELAY	23MOV-25: ASSOCIATED RELAYS ARE CHATTER ACCEPTABLE BECAUSE VALVE IS ASSOCIATED WITH DISCHARGE PIPING FROM HPCI TURBINE DRIVEN PUMP. HPCI TURBINE IS INITIALLY PREVENTED FROM OPERATING POST SSE BY RELYING ON RCPB ISOLATION. CREDIT IS TAKEN FOR MANUAL INITIATION OF HPCI.	CLOSED	OPEN/CLOSED	Y
							D		SEISMIC	SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE OP-15 (C.1.b) VERIFIES MOV POSITION DURING STARTUP.			
253	B	8A	23MOV-57	HPCI BOOSTER PUMP P-1B SUCT FROM SUPPRESSION POOL DNSTR ISOL VALVE	RB	227'6E L	1	NA	RELAY	23MOV-57: ASSOCIATED RELAYS ARE CHATTER ACEPTABLE BECAUSE VALVE IS IN FLOW PATH TO THE TURBINE DRIVEN HPCI PUMP. HOWEVER, HPCI TURBINE IS INITIALLY PREVENTED FROM OPERATING POST SSE BY RELYING ON RCPB ISOLATION. MANUAL INITIATION OF HPCI IS CREDITED.	CLOSED	OPEN/CLOSED	Y
							R		SEISMIC	SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE OP-15 (C.1.b) VERIFIES MOV POSITION DURING STARTUP.			
254	B	8A	23MOV-58	HPCI BOOSTER PUMP P-1B SUCT FROM SUPPRESSION POOL UPSTR ISOL VALVE	SU	232'1E L	1, T	NA	RELAY	23MOV-58: ASSOCIATED RELAYS ARE CHATTER ACCEPTABLE BECAUSE SPURIOUS OPENING OF THIS VALVE COULD PROVIDE SUPPRESSION POOL SUCTION WATER TO THE TURBINE DRIVEN HPCI PUMPS. SINCE HPCI TURBINE OPERATION IS INITIALLY PREVENTED POST SSE BY RELYING ON RCPB ISOLATION, THE HPCI PUMPS WILL NOT START. MANUAL INITIATION OF HPCI IS CREDITED.	CLOSED	OPEN/CLOSED	Y
									SEISMIC	SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE			

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										OP-15 (C.1.b) VERIFIES MOV POSITION DURING STARTUP.			
255	B	8A	23MOV-59	HPCI TURB EXH LINE VAC BREAKER VALVE	SU	260EL	2 T	NA	RELAY	THIS VALVE IS REQUIRED TO REMAIN OPEN TO ENSURE THE VACUUM BREAKER LINE WILL PREVENT WATER CHUGGING IN THE TURBINE EXHAUST LINE.	OPEN	OPEN	N
256	B	8A	23MOV-60	HPCI TURBINE STEAM SUPPLY OUTBD ISOL VALVE 23MOV-16 BYPASS VALVE	RB	272EL	3 W	NA	RELAY SEISMIC	SYSTEMS COMMENT: CHATTER NOT ACCEPTABLE SINCE MOV PROVIDES RCPB ISOLATION FUNCTION.	OPEN	CLOSED	Y
257	B	5	23P-150	HPCI TURBINE AUX LUBE OIL PUMP	RB	227'6E L	1 T	NA	RELAY SEISMIC	23P-150: ASSOCIATED RELAYS ARE CHATTER ACCEPTABLE BECAUSE HPCI TURBINE INITIALLY PREVENTED FROM OPERATING POST SSE BY RELYING ON RCPB ISOLATION. CREDIT IS TAKEN FOR MANUAL INITIATION OF HPCI. ASSUME HORIZONTAL PUMP (CLASS 5). SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE HPCI PUMP START PREVENTED BY 23MOV-14, 23MOV-16, AND 23MOV-60.	OFF	ON	Y
258	B	5	23P-1B	HPCI BOOSTER PUMP	RB	227'6E L	1 R	23P-1M	RULE OF BOX	ASSUME PUMP IS HORIZONTAL. PUMP IS POWERED FROM STEAM DRIVEN TURBINE.	OFF	ON	N
259	B	5	23P-1M	HPCI MAIN PUMP	RB	227'6E L	1 T	NA	SEISMIC	ASSUME PUMP IS HORIZONTAL. PUMP IS POWERED FROM STEAM-DRIVEN TURBINE.	OFF	ON	N
260	B	5	23P-1MO	HPCI MAIN LUBE OIL PUMP	RB	227'6E L	1 T	23TU-2	RULE OF BOX	ASSUME HORIZONTAL (SHAFT-DRIVEN) PUMP (CLASS 5). PUMP IS SHAFT-DRIVEN.	OFF	ON	N
261	B	7	23RV-106	HPCI AUX OIL PUMP P-150 DISCH RELIEF VALVE	RB	227'6E L	1 T	NA	SEISMIC		CLOSED	CLOSED	N

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262	B	7	23RV-107	HPCI MAIN LUBE OIL PUMP P-1MO DISCH RELIEF VALVE	RB	227'6E L	1 T	NA	SEISMIC		CLOSED	CLOSED	N
263	B	8B	23SOV-42	HPCI TURBINE STEAM SUPPLY UPSTR DRAIN ISOL VALVE SOLENOID VALVE	RB	227'6E L	1 T	23AOV-42	RELAY RULE OF BOX	23SOV-42: LIMIT SWITCHES SHOWN ON ESK-11AX ARE ASSUMED TO BE ASSOCIATED WITH THE AOV AND NOT VULNERABLE TO CHATTER. STEAM FLOW TO THE DRAIN DURING SSE IS ASSUMED NOT TO BE DETRIMENTAL TO HPCI PUMP OPERATION.	ON	OFF	Y
264	B	8B	23SOV-53	HPCI TURBINE STEAM SUPPLY DRAIN TRAP T-3 BYPASS SOLENOID VALVE	RB	227'6E L	1 T	NA	RELAY	SYSTEMS COMMENT: IT IS ASSUMED THAT STEAM FLOW TO SUPPLY DRAIN DURING THE SSE WILL NOT BE DETRIMENTAL TO HPCI PUMP OPERATION. CHATTER ACCEPTABLE DURING SSE ASSUMING AOV-53 RETURNS TO ORIGINAL (CLOSED) POSITION.	OFF	OFF	N
265	B	20	23SPI-161	HPCI TURBINE SPEED INDIC	CR	300EL	10 F	09-3	RELAY RULE OF BOX	NO RELAYS. SYSTEMS COMMENT: CHATTER DURING SSE ACCEPTABLE SINCE INDICATOR NOT REQUIRED UNTIL SYSTEM STARTUP.	ON	ON	Y
266	B	7	23SV-34	HPCI BOOSTER PUMP P-1B SUCT SAFETY VALVE	RB	227'6E L	1 R	NA	SEISMIC		CLOSED	CLOSED	N
267	B	7	23SV-66	HPCI BOOSTER PUMP P-1B RECIRC SAFETY VALVE	RB	227'6E L	1 R	NA	SEISMIC		CLOSED	CLOSED	N
268	B	21	23TK-1	HPCI LUBE OIL SUMP	RB	227'6E L	1 T	23TU-2	RULE OF BOX		N/A	N/A	N

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269	B	5	23TU-2	HPCI PUMP DRIVE TURBINE	RB	227'6E L	1 T	NA	SEISMIC	STEAM PROVIDES MOTIVE FORCE.	OFF	ON	N
270	A	18	25-01	CH "A" CORE SPRAY SYSTEM RACK	RB	242'8E L	4 A	25-01	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
271	A	18	25-05	REACTOR PROTECTION AND NSSS SYSTEM RACK	RB	300EL	3.5 R	NA	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
272	B	18	25-06	REACTOR PROTECTION AND NSSS SYSTEM RACK	RB	300EL	5.5 YW	NA	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
273	A	18	25-50	HPCI INST RACK	RB	242'8E L	1 R	NA	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
274	A	18	25-59	RHR CHANNEL "A" INST RACK	RB	242'8E L	4 A	NA	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
275	B	18	25-60	CORE SPRAY CHANNEL "B" INST RACK	RB	242EL	4 D	NA	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
276	B	18	25-62	RHR CHANNEL "B" INST RACK	RB	242EL	3 D	NA	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
277	A	7	27AOV-126A	AMBIENT VAPORIZER A INLET VALVE	CB	271'8E L	.5 RP	NA	SEISMIC	NORMAL POSITION OF VALVE IS DEPENDENT ON WHICH TRAIN IS IN SERVICE; REFER TO SOV FOR RELAY EVAL AND CONTROL POWER.	OPEN/CLOSED	OPEN/CLOSED	N
278	B	7	27AOV-126B	AMBIENT VAPORIZER B INLET VALVE	CB	271'8E L	.5 TW	NA	SEISMIC	NORMAL POSITION OF VALVE IS DEPENDENT ON WHICH TRAIN IS IN SERVICE; REFER TO SOV FOR RELAY EVAL AND CONTROL POWER.	OPEN/CLOSED	OPEN/CLOSED	N

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262	B	7	23RV-107	HPCI MAIN LUBE OIL PUMP P-1MO DISCH RELIEF VALVE	RB	227'6E L	1 T	NA	SEISMIC		CLOSED	CLOSED	N
263	B	8B	23SOV-42	HPCI TURBINE STEAM SUPPLY UPSTR DRAIN ISOL VALVE SOLENOID VALVE	RB	227'6E L	1 T	23AOV-42	RELAY RULE OF BOX	23SOV-42: LIMIT SWITCHES SHOWN ON ESK-11AX ARE ASSUMED TO BE ASSOCIATED WITH THE AOV AND NOT VULNERABLE TO CHATTER. STEAM FLOW TO THE DRAIN DURING SSE IS ASSUMED NOT TO BE DETRIMENTAL TO HPCI PUMP OPERATION.	ON	OFF	Y
264	B	8B	23SOV-53	HPCI TURBINE STEAM SUPPLY DRAIN TRAP T-3 BYPASS SOLENOID VALVE	RB	227'6E L	1 T	NA	RELAY	SYSTEMS COMMENT: IT IS ASSUMED THAT STEAM FLOW TO SUPPLY DRAIN DURING THE SSE WILL NOT BE DETRIMENTAL TO HPCI PUMP OPERATION. CHATTER ACCEPTABLE DURING SSE ASSUMING AOV-53 RETURNS TO ORIGINAL (CLOSED) POSITION.	OFF	OFF	N
265	B	20	23SPI-161	HPCI TURBINE SPEED INDIC	CR	300EL	10 F	09-3	RELAY RULE OF BOX	NO RELAYS. SYSTEMS COMMENT: CHATTER DURING SSE ACCEPTABLE SINCE INDICATOR NOT REQUIRED UNTIL SYSTEM STARTUP.	ON	ON	Y
266	B	7	23SV-34	HPCI BOOSTER PUMP P-1B SUCT SAFETY VALVE	RB	227'6E L	1 R	NA	SEISMIC		CLOSED	CLOSED	N
267	B	7	23SV-66	HPCI BOOSTER PUMP P-1B RECIRC SAFETY VALVE	RB	227'6E L	1 R	NA	SEISMIC		CLOSED	CLOSED	N
268	B	21	23TK-1	HPCI LUBE OIL SUMP	RB	227'6E L	1 T	23TU-2	RULE OF BOX		N/A	N/A	N

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269	B	5	23TU-2	HPCI PUMP DRIVE TURBINE	RB	227'6E L	1 T	NA	SEISMIC	STEAM PROVIDES MOTIVE FORCE.	OFF	ON	N
270	A	18	25-01	CH "A" CORE SPRAY SYSTEM RACK	RB	242'8E L	4 A	25-01	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY	N/A	N/A	N
271	A	18	25-05	REACTOR PROTECTION AND NSSS SYSTEM RACK	RB	300EL	3.5 R	NA	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
272	B	18	25-06	REACTOR PROTECTION AND NSSS SYSTEM RACK	RB	300EL	5.5 YW	NA	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
273	A	18	25-50	HPCI INST RACK	RB	242'8E L	1 R	NA	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
274	A	18	25-59	RHR CHANNEL "A" INST RACK	RB	242'8E L	4 A	NA	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
275	B	18	25-60	CORE SPRAY CHANNEL "B" INST RACK	RB	242EL	4 D	NA	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
276	B	18	25-62	RHR CHANNEL "B" INST RACK	RB	242EL	3 D	NA	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
277	A	7	27AOV-126A	AMBIENT VAPORIZER A INLET VALVE	CB	271'8E L	.5 RP	NA	SEISMIC	NORMAL POSITION OF VALVE IS DEPENDENT ON WHICH TRAIN IS IN SERVICE; REFER TO SOV FOR RELAY EVAL AND CONTROL POWER.	OPEN/CLOSED	OPEN/CLOSED	N
278	B	7	27AOV-126B	AMBIENT VAPORIZER B INLET VALVE	CB	271'8E L	.5 TW	NA	SEISMIC	NORMAL POSITION OF VALVE IS DEPENDENT ON WHICH TRAIN IS IN SERVICE; REFER TO SOV FOR RELAY EVAL AND CONTROL POWER.	OPEN/CLOSED	OPEN/CLOSED	N

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279	A	7	27AOV-127A	STEAM VAPORIZER NV-8 LIQUID NITROGEN SUPPLY VALVE	CB	271'8E L	.5 RP	NA	SEISMIC	AOV ADDED FOR SEISMIC WALKDOWN ONLY. RULE OF BOX, AOV IS BOX FOR ASSOCIATED COMPONENTS.	CLOSED	CLOSED	N
280	B	7	27AOV-127B	STEAM VAPORIZER NV-8 LIQUID NITROGEN SUPPLY VALVE	CB	271'8E L	.5 TW	NA	SEISMIC	AOV ADDED FOR SEISMIC WALKDOWN ONLY. RULE OF BOX, AOV IS BOX FOR ASSOCIATED COMPONENTS.	CLOSED	CLOSED	N
281	A	7	27AOV-128A	CAD TRAIN A NITROGEN MAKE-UP SUPPLY VALVE	CB	271'8E L	.5 RP	NA	SEISMIC	AOV ADDED FOR SEISMIC WALKDOWN ONLY. RULE OF BOX, AOV IS BOX FOR ASSOCIATED COMPONENTS.	CLOSED	CLOSED	N
282	B	7	27AOV-128B	CAD TRAIN B NITROGEN MAKE-UP SUPPLY VALVE	CB	271'8E L	.5 TW	NA	N/A	COMPOMEMT LISTED FOR CLARIFICATION, ASSOCIATED SOV IS LOCATED IN PANEL 27NS-CB WHICH IS THE "BOX" IN THE "RULE OF BOX". 27AOV-128B IS PASSIVE FOR A-46 AND DOES NOT REQUIRE SEISMIC EVALUATION.	CLOSED	CLOSED	N
283	A	7	27AOV-129A	DRYWELL PCV AND INSTR CAD TRAIN A BACKUP VALVE	CB	271'8E L	.5 RP	27NS-CA	SEISMIC	NORMAL POSITION OF VALVE IS DEPENDENT ON WHICH TRAIN IS IN SERVICE; REFER TO SOV FOR RELAY EVAL & CONTROL POWER.	OPEN/CLOSED	OPEN/CLOSED	N
284	B	7	27AOV-129B	DRYWELL PCV AND INSTR CAD TRAIN B BACKUP VALVE	CB	271'8E L	.5 TW	27NS-CB	RULE OF BOX	NORMAL POSITION OF VALVE IS DEPENDENT ON WHICH TRAIN IS IN SERVICE; REFER TO SOV FOR RELAY EVAL & CONTROL POWER.	OPEN/CLOSED	OPEN/CLOSED	N
285	A	7	27AOV-131A	CAD TRAIN A NITROGEN MAKE-UP ISOL VALVE	SU	262EL	2, T	NA	SEISMIC	PREVENTS DRAIN DOWN OF N2 TO THE TORUS AND DRYWELL. SEE SOV-131A FOR RELAY EVAL AND CONTROL POWER.	CLOSED	CLOSED	N
286	B	7	27AOV-131B	CAD TRAIN B	SU	262EL	2, T	NA	SEISMIC	PREVENTS DRAIN DOWN OF N2 TO THE DRYWELL	CLOSED	CLOSED	N

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
				NITROGEN MAKE-UP ISOL VALVE						AND TORUS. SEE SOV-131B FOR RELAY EVAL AND CONTROL POWER.			
287	A	7	27AOV-132A	CAD TRAIN A TORUS NITROGEN MAKE-UP ISOL VALVE	SU	262EL	2, T	NA	SEISMIC	PREVENTS DRAIN DOWN OF N2 TO THE DRYWELL AND TORUS. SEE SOV 132A FOR RELAY EVAL AND CONTROL POWER.	CLOSED	CLOSED	N
288	B	7	27AOV-132B	CAD TRAIN B TORUS NITROGEN MAKE-UP ISOL VALVE	SU	262EL	2, T	NA	SEISMIC	PREVENTS DRAIN DOWN OF N2 TO THE DRYWELL AND TORUS. SEE SOV-132B FOR RELAY EVAL & CONTROL POWER.	CLOSED	CLOSED	N
289	X	20	27CAD	CONTAINMENT AIR DILUTION PANEL	RR	284'8E L	9 E	27CAD	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
290	A	21	27E-1A	CAD A VALVE OPERATING NITROGEN AMBIENT HEAT EXCHANGER	CB	271'8E L	.5 RP	NA	SEISMIC		N/A	N/A	N
291	B	21	27E-1B	CAD B VALVE OPERATING NITROGEN AMBIENT HEAT EXCHANGER	CB	271'8E L	.5 TW	NA	SEISMIC		N/A	N/A	N
292	A	18	27EH-10A	CAD A AMBIENT VAPORIZER ELECTRIC HEATER	CB	271'8E L	.5 RT	NA	RELAY SEISMIC	OPERATOR ACTION CREDITED TO RESTORE SYSTEM IF ISOLATED ON LOW TEMPERATURE.	ON	ON	Y
293	B	18	27EH-10B	CAD B AMBIENT VAPORIZER ELECTRIC HEATER	CB	271'8E L	.5 RT	NA	RELAY SEISMIC	OPERATOR ACTION CREDITED TO RESTORE SYSTEM IF ISOLATED ON LOW TEMPERATURE.	ON	ON	Y
294	X	20	27MAP	MONITORING ANALYSIS PANEL	RR	284'8E L	10 E	NA	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
295	A	18	27NS-CA	CAD A NITROGEN	CB	271'8E	.5	NA	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N

Seq#	Safety Train	Equip. Class	Main..... Equipment... Designation	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
				SUPPLY INSTR CABINET		L	RP						
296	B	18	27NS-CB	CAD B NITROGEN SUPPLY INSTR CABINET	CB	271'8E L	.5 TW	NA	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
297	A	21	27NV-9A	CAD TRAIN A AMBIENT VAPORIZER	CB	271'8E L	.5 RT	NA	SEISMIC		N/A	N/A	N
298	B	21	27NV-9B	CAD TRAIN B AMBIENT VAPORIZER	CB	271'8E L	.5 RT	NA	SEISMIC		N/A	N/A	N
299	A	7	27PCV-101A	27PC-101A NITROGEN SUPPLY PRESS REGULATOR	CB	271'8E L	.5 RP	27RV-101A	RULE OF BOX		OPEN/CLOSED	OPEN/CLOSED	N
300	B	7	27PCV-101B	27PC-101B NITROGEN SUPPLY PRESS REGULATOR	CB	271'8E L	.5 TW	27RV-101B	RULE OF BOX		OPEN/CLOSED	OPEN/CLOSED	N
301	X	7	27PCV-102A	27FCV-111 POSITIONER NITROGEN SUPPLY PRESS REGULATOR	CB	271'8E L	.5 RP	27NS-CB	RULE OF BOX		OPEN/CLOSED	OPEN/CLOSED	N
302	X	7	27PCV-102B	27FCV-111 SIGNAL CONVERTER NITROGEN SUPPLY PRESS REGULATOR	CB	271'8E L	.5 TW	27NS-CB	RULE OF BOX		OPEN/CLOSED	OPEN/CLOSED	N
303	X	7	27PCV-114	27PCV-120 NITROGEN SUPPLY PRESS REGULATOR	CB	271'8E L	.5 TW	27NS-CB	RULE OF BOX		OPEN/CLOSED	OPEN/CLOSED	N

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304	X	19	27PCV-116A	27FCV-103A SIGNAL CONVERTER NITROGEN SUPPLY PRESS REGULATOR	RB	272EL	2 T	NA	SEISMIC		OPEN/CLOSED	OPEN/CLOSED	N
305	X	18	27PCV-116B	27FCV-103B SIGNAL CONVERTER NITROGEN SUPPLY PRESS REGULATOR	RB	272EL	2 T	NA	SEISMIC		OPEN/CLOSED	OPEN/CLOSED	N
306	X	7	27PCV-120	DRYWELL PCV AND INSTR NORMAL SUPPLY PRESS CNTRL VALVE	CB	271'8EL	.5 TW	27NS-CB	RULE OF BOX		OPEN/CLOSED	OPEN/CLOSED	N
307	A	7	27PCV-121A	27PCV-122A POSITIONER NITROGEN SUPPLY PRESS REGULATOR	CB	271'8EL	.5 RP	27PCV-122A	RULE OF BOX		OPEN/CLOSED	OPEN/CLOSED	N
308	B	7	27PCV-121B	27PCV-122B POSITIONER NITROGEN SUPPLY PRESS REGULATOR	CB	271'8EL	.5 TW	27PCV-122B	RULE OF BOX		OPEN/CLOSED	OPEN/CLOSED	N
309	A	7	27PCV-122A	PRESS BUILDING COIL A INLET PRESS CONTROL VALVE	CB	271'8EL	.5 RP	NA	SEISMIC		OPEN/CLOSED	OPEN/CLOSED	N
310	B	7	27PCV-122B	PRESS BUILDING COIL B INLET PRESS CONTROL VALVE	CB	271'8EL	.5 TW	NA	SEISMIC		OPEN/CLOSED	OPEN/CLOSED	N
311	X	7	27PCV-124A1	27AOV-131A NITROGEN SUPPLY PRESS REGULATOR	SU	262EL	2	27AOV-131A	RULE OF BOX		OPEN/CLOSED	OPEN/CLOSED	N

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							T						
312	X	7	27PCV-124A2	27AOV-132A NITROGEN SUPPLY PRESS REGULATOR	SU	262EL	2	27AOV-132A	RULE OF BOX		OPEN/CLOSED	OPEN/CLOSED	N
							T						
313	X	7	27PCV-124B1	27AOV-13'B NITROGEN SUPPLY PRESS REGULATOR	SU	262EL	2	27AOV-131B	RULE OF BOX		OPEN/CLOSED	OPEN/CLOSED	N
							T						
314	X	7	27PCV-124B2	27AOV-132B NITROGEN SUPPLY PRESS REGULATOR	SU	262EL	2	27AOV-132B	RULE OF BOX		OPEN/CLOSED	OPEN/CLOSED	N
							T						
315	X	7	27PCV-125A	27TCV-124 POSITIONER NITROGEN SUPPLY PRESS REGULATOR	CB	271'8E L	.5	27NS-CB	RULE OF BOX		OPEN/CLOSED	OPEN/CLOSED	N
							TW						
316	X	7	27PCV-125B	27TCV-124 CNTRLR NITROGEN SUPPLY PRESS REGULATOR	CB	271'8E L	.5	27NS-CB	RULE OF BOX		OPEN/CLOSED	OPEN/CLOSED	N
							TW						
317	A	7	27PCV-126A	27AOV-126A NITROGEN SUPPLY PRESS REGULATOR	CB	271'8E L	.5	27AOV-126A	RULE OF BOX		OPEN/CLOSED	OPEN/CLOSED	N
							RP						
318	B	7	27PCV-126B	27AOV-126B NITROGEN SUPPLY PRESS REGULATOR	CB	271'8E L	.5	27AOV-126B	RULE OF BOX		OPEN/CLOSED	OPEN/CLOSED	N
							RT						
319	A	7	27PCV-127A	27AOV-127A NITROGEN SUPPLY PRESS REGULATOR	CB	271'8E L	.5	27AOV-127A	RULE OF BOX		OPEN/CLOSED	OPEN/CLOSED	N
							RP						
320	B	7	27PCV-127B	27AOV-127B NITROGEN SUPPLY PRESS REGULATOR	CB	271'8E L	.5	27AOV-127B	RULE OF BOX		OPEN/CLOSED	OPEN/CLOSED	N

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							TW						
321	A	7	27PCV-128A	27AOV-128A NITROGEN SUPPLY PRESS REGULATOR	CB	271'8E L	.5	27AOV-128A	RULE OF BOX		OPEN/CLOSED	OPEN/CLOSED	N
							RP						
322	B	7	27PCV-128B	27AOV-128B NITROGEN SUPPLY PRESS REGULATOR	CB	271'8E L	.5	27NS-CB	RULE OF BOX		OPEN/CLOSED	OPEN/CLOSED	N
							TW						
323	A	7	27PCV-129A	27AOV-129A NITROGEN SUPPLY PRESS REGULATOR	CB	271'8E L	.5	27NS-CA	RULE OF BOX		OPEN/CLOSED	OPEN/CLOSED	N
							RP						
324	B	7	27PCV-129B	27AOV-129B NITROGEN SUPPLY PRESS REGULATOR	CB	271'8E L	.5	27NS-CB	RULE OF BOX		OPEN/CLOSED	OPEN/CLOSED	N
							TW						
325	X	7	27PCV-130	CAD PC-120 PRESSURE REGULATOR	CB	272EL	1	27NS-CB	RULE OF BOX		OPEN/CLOSED	OPEN/CLOSED	N
							TW						
326	A	7	27PCV-132A	27PC-122A NITROGEN SUPPLY PRESS REGULATOR	CB	271'8E L	.5	27PCV-122A	RULE OF BOX		OPEN/CLOSED	OPEN/CLOSED	N
							RP						
327	B	7	27PCV-132B	27PC-122B NITROGEN SUPPLY PRESS REGULATOR	CB	271'8E L	.5	27PCV-122B	RULE OF BOX		OPEN/CLOSED	OPEN/CLOSED	N
							TW						
328	A	7	27PCV-133A	27RV-101A POSITIONER NITROGEN SUPPLY PRESS REGULATOR	CB	271'8E L	.5	27RV-101A	RULE OF BOX		OPEN/CLOSED	OPEN/CLOSED	N
							RP						
329	B	7	27PCV-133B	27RV-101B POSITIONER NITROGEN SUPPLY PRESS REGULATOR	CB	271'8E L	.5	27RV-101B	RULE OF BOX		OPEN/CLOSED	OPEN/CLOSED	N

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							TW						
330	A	7	27PCV-134A	CAD TRAIN A VALVE OPERATING NITROGEN PRESS CONIROL VALVE	CB	271'8E L	.5	NA	SEISMIC		OPEN/CLOSED	OPEN/CLOSED	N
							RP						
331	B	7	27PCV-134B	CAD TRAIN B VALVE OPERATING NITROGEN PRESS CONTROL VALVE	CB	271'8E L	.5	NA	SEISMIC		OPEN/CLOSED	OPEN/CLOSED	N
							TW						
332	X	7	27PCV-140	DRYWELL PCV AND INSTR NITROGEN BACKUP SUPPLY PRESS CONTROL VALVE	CB	272EL	1	NA	SEISMIC		OPEN/CLOSED	OPEN/CLOSED	N
							PR						
333	A	20	27PI-115A2	CAD DRYWELL DIV I PRESS INDIC	CR	300EL	10	09-3	RELAY	THE INSTRUMENT LOOP ASSOCIATED WITH 27PI-115A2 PROVIDES WIDE RANGE DRYWELL PRESSURE. LOOP DEVICES DO NOT HAVE CONTACTS AND THEREFORE NO RELAYS ARE IDENTIFIED.	ON	ON	Y
							F		RULE OF BOX	THE INSTRUMENT LOOP ASSOCIATED WITH 27PI-115B2 PROVIDES WIDE RANGE DRYWELL PRESSURE. LOOP DEVICES DO NOT HAVE CONTACTS AND THEREFORE NO RELAYS ARE IDENTIFIED.			
334	B	20	27PI-115B2	CAD DRYWELL DIV II PRESS INDIC	CR	300EL	10	09-3	RELAY	THE INSTRUMENT LOOP ASSOCIATED WITH 27PI-115B2 PROVIDES WIDE RANGE DRYWELL PRESSURE. LOOP DEVICES DO NOT HAVE CONTACTS AND THEREFORE NO RELAYS ARE IDENTIFIED.	ON	ON	Y
							F		RULE OF BOX				
335	A	18	27PT-115A2	DRYWELL DIV I WIDE RANGE PRESS XMITTER EQ	RB	344'6E L	6	NA	RELAY	THE INSTRUMENT LOOP ASSOCIATED WITH 27PT-115A2 PROVIDES WIDE RANGE DRYWELL PRESSURE. LOOP DEVICES DO NOT HAVE CONTACTS AND THEREFORE NO RELAYS ARE IDENTIFIED.	ON	ON	Y

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
							W		SEISMIC				
336	B	18	27PT-115B2	DRYWELL DIV II WIDE RANGE PRESS XMITTER EQ	RB	344'6E L	6	NA	RELAY	THE INSTRUMENT LOOP ASSOCIATED WITH 27PT-115B2 PROVIDES WIDE RANGE DRYWELL PRESSURE. LOOP DEVICES DO NOT HAVE CONTACTS AND THEREFORE NO RELAYS ARE IDENTIFIED.	ON	ON	Y
							W		SEISMIC				
337	A	7	27RV-101A	LIQUID NITROGEN TANK A RELIEF VALVE	CB	271'8E L	.5	NA	SEISMIC		CLOSED	CLOSED	N
							RP						
338	B	7	27RV-101B	LIQUID NITROGEN TANK B RELIEF VALVE	CB	271'8E L	.5	NA	SEISMIC		CLOSED	CLOSED	N
							TW						
339	A	8B	27SOV-126A	AMBIENT VAPORIZER A INLET VALVE SOLENOID VALVE	CB	271'8E L	.5	27AOV-126A	RELAY	SOV DEENERGIZES TO OPEN ASSOCIATED AOV.	ON	ON	Y
							RP		RULE OF BOX				
340	B	8B	27SOV-126B	AMBIENT VAPORIZER B INLET VALVE SOLENOID VALVE	CB	271'8E L	.5	27AOV-126B	RELAY	SOV DEENERGIZES TO OPEN ASSOCIATED AOV.	ON	ON	Y
							TW		RULE OF BOX				
341	A	8B	27SOV-127A	STEAM VAPORIZER NV-8 LIQUID NITROGEN SUPPLY VALVE SOLENOID VALVE	CB	271'8E L	.5	27AOV-127A	RELAY	SOV DEENERGIZES TO CLOSE ASSOCIATED AOV.	OFF	OFF	N
							RP		RULE OF BOX				
342	B	8B	27SOV-127B	STEAM VAPORIZER NV-8 LIQUID NITROGEN SUPPLY VALVE SOLENOID VALVE	CB	271'8E L	.5	27AOV-127B	RELAY	SOV DEENERGIZES TO CLOSE ASSOCIATED AOV.	OFF	OFF	N
							TW		RULE OF				

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
									BOX				
343	A	8B	27SOV-128A	CAD TRAIN A NITROGEN MAKE-UP SUPPLY VALVE SOLENOID VALVE	CB	271'8E L	.5	27AOV-128A	RELAY	SOV DEENERGIZES TO OPEN ASSOCIATED AOV.	ON	ON	Y
							RP		RULE OF BOX				
344	B	8B	27SOV-128B	CAD TRAIN B NITROGEN MAKE-UP SUPPLY VALVE SOLENOID VALVE	CB	271'8E L	.5	27NS-CB	RELAY	SOV DEENERGIZES TO OPEN ASSOCIATED AOV.	ON	ON	Y
							TW		RULE OF BOX				
345	A	8B	27SOV-129A	DRYWELL PCV AND INSTR CAD TRAIN A BACKUP ISOL VALVE SOLENOID VALVE	CB	271'8E L	.5	27NS-CA	RELAY	SOV DEENERGIZES TO OPEN ASSOCIATED AOV.	ON	ON	Y
							RP		RULE OF BOX				
346	B	8B	27SOV-129B	DRYWELL PCV AND INSTR CAD TRAIN B BACKUP ISOL VALVE SOLENOID VALVE	CB	271'8E L	.5	27NS-CB	RELAY	SOV DEENERGIZES TO OPEN ASSOCIATED AOV.	ON	ON	Y
							TW		RULE OF BOX				
347	A	8B	27SOV-131A	CAD TRAIN A NITROGEN MAKE-UP ISOL VALVE SOLENOID VALVE EQ	SU	227'6E L	2	NA	RELAY	SOV DEENERGIZES TO CLOSE ASSOCIATED AOV.	OFF	OFF	N
							T		RULE OF BOX				
348	B	8B	27SOV-131B	CAD TRAIN B NITROGEN MAKE-UP ISOL VALVE SOLENOID VALVE EQ	SU	227'6E L	2	NA	RELAY	SOV DEENERGIZES TO CLOSE ASSOCIATED AOV.	OFF	OFF	N

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							T		RULE OF BOX				
349	A	8B	27SOV-132A	CAD TRAIN A TORUS N2 MAKE-UP ISOL VALVE SOLENOID VALVE EQ	SU	227'6E L	2	NA	RELAY	SOV DEENERGIZES TO CLOSE ASSOCIATED AOV.	OFF	OFF	N
							T		RULE OF BOX				
350	B	8B	27SOV-132B	CAD TRAIN B TORUS N2 MAKE-UP ISOL VALVE SOLENOID VALVE EQ	SU	227'6E L	2	NA	RELAY	SOV DEENERGIZES TO CLOSE ASSOCIATED AOV.	OFF	OFF	N
							T		RULE OF BOX				
351	B	8B	27SOV-141	DRYWELL PCV AND INSTR INSTR AIR OR NORMAL N2 CROSS-TIE VALVE EQ	RB	291'7E L	6	NA	RELAY		OPEN	OPEN	N
							WY						
352	A	8B	27SOV-145	CAD DRYWELL INSTR NITROGEN BACKUP SUPPLY ISOL VALVE	RB	295'6E L	3	NA	RELAY	PROVIDES BACKUP N2 SUPPLY TO ADS SRV ACCUMULATORS.	OPEN	OPEN	N
							RT						
353	A	7	27SV-114A	CAD TRAIN A VALVE OPERATING SUPPLY SAFETY VALVE	CB	271'8E L	.5	NA	SEISMIC		CLOSED	CLOSED	N
							RP						
354	B	7	27SV-114B	CAD TRAIN B VALVE OPERATING SUPPLY SAFETY VALVE	CB	271'8E L	.5	NA	SEISMIC		CLOSED	CLOSED	N
							TW						
355	A	7	27SV-115A	AMBIENT VAPORIZER A OUTLET SAFETY	CB	271'8E L	.5	27NS-CA	SEISMIC		CLOSED	CLOSED	N

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				VALVE			RP						
356	B	7	27SV-115B	AMBIENT VAPORIZER B OUTLET SAFETY VALVE	CB	271'8E L	.5 TW	NA	SEISMIC		CLOSED	CLOSED	N
357	A	7	27SV-118A	LIQUID NITROGEN TANK A OUTLET SAFETY VALVE	CB	271'8E L	.5 RP	NA	SEISMIC		CLOSED	CLOSED	N
358	B	7	27SV-118B	LIQUID NITROGEN TANK B OUTLET SAFETY VALVE	CB	271'8E L	.5 TW	NA	SEISMIC		CLOSED	CLOSED	N
359	A	7	27SV-119A	PRESS BUILDING COIL A INLET SAFETY VALVE	CB	271'8E L	.5 RP	NA	SEISMIC		CLOSED	CLOSED	N
360	B	7	27SV-119B	PRESS BUILDING COIL B INLET SAFETY VALVE	CB	271'8E L	.5 TW	NA	SEISMIC		CLOSED	CLOSED	N
361	X	7	27SV-121	DRYWELL PCV AND INSTR NORMAL SUPPLY 27PCV-120 BYPASS SAFETY VALVE	CB	271'8E L	.5 TW	NA	SEISMIC		CLOSED	CLOSED	N
362	X	7	27SV-122	STEAM VAPORIZER NV-8 CAD TRAINS A & B INLET CROSS-TIE SAFETY VALVE	CB	271'8E L	.5 TW	NA	SEISMIC	ASSUME CAT M (QR).	CLOSED	CLOSED	N
363	X	7	27SV-201A	DRYWELL PCV AND INSTR NORMAL SUPPLY SAFETY	CB	271'8E L	.5	NA	SEISMIC		CLOSED	CLOSED	N

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				VALVE			TW						
364	X	7	27SV-201B	DRYWELL PCV AND INSTR NORMAL SUPPLY SAFETY VALVE	CB	271'8E L	.5 TW	NA	SEISMIC		CLOSED	CLOSED	N
365	X	7	27SV-202	DRYWELL PCV AND INSTR BACKUP SUPPLY SAFETY VALVE	CB	272EL	1 RT	NA	SEISMIC		CLOSED	CLOSED	N
366	A	21	27TK-7A	CAD A LIQUID NITROGEN TANK	CB	271'8E L	.5 RP	NA	SEISMIC	TANK IS A BACKUP TO THE ADS SRV ACCUMULATORS.	N/A	N/A	N
367	B	21	27TK-7B	CAD B LIQUID NITROGEN TANK	CB	271'8E L	.5 TW	NA	SEISMIC	TANK IS A BACKUP TO THE ADS SRV ACCUMULATORS.	N/A	N/A	N
368	X	21	29AC-1A	MST D OUTBD MSIV AIR ACCUMULATOR	ST	276'8E L	6.5 T	NA	SEISMIC	29AOV-86D ACCUMULATOR.	N/A	N/A	N
369	X	21	29AC-1B	MST A INBD MSIV N2/AIR ACCUMULATOR	PC	276'10 EL	5.5 T	NA	SEISMIC	29AOV-80A ACCUMULATOR.	N/A	N/A	N
370	X	21	29AC-1C	MST D INBD MSIV N2/AIR ACCUMULATOR	PC	276'10 EL	5.5 T	NA	SEISMIC	29AOV-80D ACCUMULATOR.	N/A	N/A	N
371	X	21	29AC-1D	MST B OUTBD MSIV AIR ACCUMULATOR	ST	276'8E L	6.5 T	NA	SEISMIC	29AOV-86B ACCUMULATOR.	N/A	N/A	N
372	X	21	29AC-1E	MST C OUTBD MSIV AIR ACCUMULATOR	ST	276'8E L	6.5 T	NA	SEISMIC	29AOV-86C ACCUMULATOR.	N/A	N/A	N

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
373	X	21	29AC-1F	MST B INBD MSIV N2/AIR ACCUMULATOR	PC	276'10 EL	5.5 T	NA	SEISMIC	29AOV-80B ACCUMULATOR.	N/A	N/A	N
374	X	21	29AC-1G	MST A OUTBD MSIV AIR ACCUMULATOR	ST	276'8E L	6.5 T	NA	SEISMIC	29AOV-86A ACCUMULATOR.	N/A	N/A	N
375	X	21	29AC-1H	MST C INBD MSIV N2/AIR ACCUMULATOR	PC	276'10 EL	5.5 T	NA	SEISMIC	29AOV-80C ACCUMULATOR.	N/A	N/A	N
376	X	7	29AOV-80A	MST A INBD MAIN STEAM ISOL VALVE	PC	276'10 EL	5.5 T	NA	SEISMIC	REFER TO 29SOV-80A2 FOR RELAY CHATTER EVAL & CONTROL POWER.	OPEN	CLOSED	N
377	X	7	29AOV-80B	MST B INBD MAIN STEAM ISOL VALVE	PC	276'10 EL	5.5 T	NA	SEISMIC	REFER TO 29SOV-80B2 FOR RELAY CHATTER EVAL & CONTROL POWER.	OPEN	CLOSED	N
378	X	7	29AOV-80C	MST C INBD MAIN STEAM ISOL VALVE	PC	276'10 EL	5.5 T	NA	SEISMIC	REFER TO 29SOV-80C2 FOR RELAY CHATTER EVAL & CONTROL POWER.	OPEN	CLOSED	N
379	X	7	29AOV-80D	MST D INBD MAIN STEAM ISOL VALVE	PC	276'10 EL	5.5 T	NA	SEISMIC	REFER TO 29SOV-80D2 FOR RELAY CHATTER EVAL & CONTROL POWER.	OPEN	CLOSED	N
380	X	7	29AOV-86A	MST A OUTBD MAIN STEAM ISOL VALVE	ST	276'8E L	6.5 T	NA	SEISMIC	REFER TO 29SOV-86A2 FOR RELAY CHATTER EVAL & CONTROL POWER.	OPEN	CLOSED	N
381	X	7	29AOV-86B	MST B OUTBD MAIN STEAM ISOL VALVE	ST	280EL	6.5 T	NA	SEISMIC	REFER TO 29SOV-86B2 FOR RELAY CHATTER EVAL & CONTROL POWER.	OPEN	CLOSED	N
382	X	7	29AOV-86C	MST C OUTBD MAIN STEAM ISOL	ST	280EL	6.5	NA	SEISMIC	REFER TO 29SOV-86C2 FOR RELAY CHATTER EVAL & CONTROL POWER.	OPEN	CLOSED	N

Seq#	Safety Train	Equip. Class	Main... Equipment... Designation	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
				VALVE			T						
383	X	7	29AOV-86D	MST D OUTBD MAIN STEAM ISOL VALVE	ST	280EL	6.5 T	NA	SEISMIC	REFER TO 29SOV-86D2 FOR RELAY CHATTER EVAL & CONTROL POWER.	OPEN	CLOSED	N
384	A	8A	29MOV-74	MST INBD LINE DRAIN INBD ISOL VALVE	PC	272EL	6 T	NA	RELAY	RX PRESSURE BOUNDARY.	CLOSED	CLOSED	N
385	A	8B	29SOV-80A2	MST A INBD MSIV PILOT SOLENOID VALVE	PC	276'10 EL	5.5 T	NA	RELAY RULE OF BOX	SYSTEMS COMMENT: CHATTER UNACCEPTABLE - MSIV CONTROL CAPABILITY DESIRABLE. PILOT VALVES ASSUMED AS PART OF SOV ASSEMBLY; REFER TO 29AOV-80[illegible] FOR SEISMIC EVAL (RULE OF THE BOX). RELAYS IDENTIFIED UNDER 29SOV-80A2(OP1) AND (OP2). INSTRUMENTS (I.E. DPT, LT, PT, RE, RTD) WHICH INITIATE MSIV CLOSURE ARE LISTED AS ASSOCIATED COMPONENTS. THESE INSTRUMENTS ARE NOT REQUIRED TO SUPPORT A-46 AND ARE LISTED FOR INFORMATION ONLY.	ON	OFF	Y
386	A	8B	29SOV-80A2(OP1)	MST A INBD MSIV PILOT SOLENOID VALVE COIL	PC	276'10 EL	5.5 T	NA	RELAY RULE OF BOX	AC OPERATOR ASSOCIATED WITH 29SOV-80A2. THIS SAME AC OPERATOR IS IDENTIFIED AS 29SOV-80A2 ON ESK-7A REV. 9.	ON	OFF	Y
387	A	8B	29SOV-80A2(OP2)	MST A INBD MSIV PILOT SOLENOID VALVE COIL	PC	276'10 EL	5.5 T	NA	RELAY RULE OF BOX	DC OPERATOR ASSOCIATED WITH 29SOV-80A2. THIS SAME DC OPERATOR IS IDENTIFIED AS 29SOV-80A3 ON ESK-7A REV. 9.	ON	OFF	Y
388	A	8B	29SOV-80B2	MST B INBD MSIV PILOT SOLENOID VALVE	PC	276'10 EL	5.5	NA	RELAY	SYSTEMS COMMENT: CHATTER UNACCEPTABLE - MSIV CONTROL CAPABILITY DESIRABLE. PILOT VALVE ASSUMED PART OF SOV ASSEMBLY. REFER	ON	OFF	Y

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
										TO 29AOV-80B FOR SEISMIC EVAL (RULE OF THE BOX).			
							T		RULE OF BOX				
										RELAYS IDENTIFIED UNDER 29SOV-80B2(OP1) AND (OP2). INSTRUMENTS (I.E. DPT, LT, PT, RE, RTD) WHICH INITIATE MSIV CLOSURE ARE LISTED AS ASSOCIATED COMPONENTS. THESE INSTRUMENTS ARE NOT REQUIRED TO SUPPORT A-46 AND ARE LISTED FOR INFORMATION ONLY.			
389	A	8B	29SOV-80B2(OP1)	MST B INBD MSIV PILOT SOLENOID VALVE COIL	PC	276'10 EL	5.5	NA	RELAY	AC OPERATOR ASSOCIATED WITH 29SOV-80B2.	ON	OFF	Y
							T		RULE OF BOX				
										THIS SAME AC OPERATOR IS IDENTIFIED AS 29SOV-80B2 ON ESK-7A REV. 9.			
390	A	8B	29SOV-80B2(OP2)	MST B INBD MSIV PILOT SOLENOID VALVE COIL	PC	276'10 EL	5.5	NA	RELAY	DC OPERATOR ASSOCIATED WITH 29SOV-80B2.	ON	OFF	Y
							T		RULE OF BOX				
										THIS SAME DC OPERATOR IS IDENTIFIED AS 29SOV-80B3 ON ESK-7A REV. 9.			
391	A	8B	29SOV-80C2	MST C INBD MSIV PILOT SOLENOID VALVE	PC	276'10 EL	5.5	NA	RELAY	SYSTEMS COMMENT: CHATTER UNACCEPTABLE - MSIV CONTROL CAPABILITY DESIRABLE. PILOT VALVE ASSUMED PART OF SOV ASSEMBLY. REFER TO 29AOV-80C FOR SEISMIC EVAL (RULE OF THE BOX).	ON	OFF	Y
							T		RULE OF BOX				
										RELAYS IDENTIFIED UNDER 29SOV-80C2(OP1) AND (OP2). INSTRUMENTS (I.E. DPT, LT, PT, RE, RTD) WHICH INITIATE MSIV CLOSURE ARE LISTED AS ASSOCIATED COMPONENTS. THESE INSTRUMENTS ARE NOT REQUIRED TO SUPPORT A-46 AND ARE LISTED FOR INFORMATION ONLY.			
392	A	8B	29SOV-80C2(OP1)	MST C INBD MSIV PILOT SOLENOID VALVE COIL	PC	276'10 EL	5.5	NA	RELAY	AC OPERATOR ASSOCIATED WITH 29SOV-80C2.	ON	OFF	Y
							T		RULE OF				

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
									BOX	THIS SAME AC OPERATOR IS IDENTIFIED AS 29SOV-80C2 ON ESK-7A REV 9.			
393	A	8B	29SOV-80C2(OP2)	MST C INBD MSIV PILOT SOLENOID VALVE COIL	PC	276'10 EL	5.5 T	NA	RELAY RULE OF BOX	DC OPERATOR ASSOCIATED WITH 29SOV-80C2. THIS SAME DC OPERATOR IS IDENTIFIED AS 29SOV-80C3 ON ESK-7A REV 9.	ON	OFF	Y
394	A	8B	29SOV-80D2	MST D INBD MSIV PILOT SOLENOID VALVE	PC	276'10 EL	5.5 T	NA	RELAY RULE OF BOX	SYSTEMS COMMENT: CHATTER UNACCEPTABLE - MSIV CONTROL CAPABILITY DESIRABLE. PILOT VALVE ASSUMED PART OF SOV ASSEMBLY. REFER TO 29AOV-80D FOR SEISMIC EVAL (RULE OF THE BOX). RELAYS IDENTIFIED UNDER 29SOV-80D2(OP1) AND (OP2). INSTRUMENTS (I.E. DPT, LT, PT, RE, RTD) WHICH INITIATE MSIV CLOSURE ARE LISTED AS ASSOCIATED COMPONENTS. THESE INSTRUEMNTS ARE NOT REQUIRED FOR A-46 AND ARE LISTED FOR INFORMATION ONLY.	ON	OFF	Y
395	A	8B	29SOV-80D2(OP1)	MST D INBD MSIV PILOT SOLENOID VALVE COIL	PC	276'10 EL	5.5 T	NA	RELAY RULE OF BOX	AC OPERATOR ASSOCIATED WITH 29SOV-80D2. THIS SAME AC OPERATOR IS IDENTIFIED AS 29SOV-80D2 ON ESK-7A REV 9.	ON	OFF	Y
396	A	8B	29SOV-80D2(OP2)	MST D INBD MSIV PILOT SOLENOID VALVE COIL	PC	276'10 EL	5.5 T	NA	RELAY RULE OF BOX	DC OPERATOR ASSOCIATED WITH 29SOV-80D2. THIS SAME DC OPERATOR IS IDENTIFIED AS 29SOV-80D3 ON ESK-7A REV. 9.	ON	OFF	Y
397	B	8B	29SOV-86A2	MST A OUTBD MSIV PILOT SOLENOID VALVE	ST	276'8E L	6.5	NA	RELAY	SYSTEMS COMMENT: CHATTER UNACCEPTABLE - MSIV CONTROL CAPABILITY DESIRABLE. ALTERNATE CONTROL POWER AVAILABLE FROM 71BCB-2B; PILOT VALVE CONSIDERED PART OF	ON	OFF	Y

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
										SOV ASSEMBLY. REFER TO 29AOV-86A FOR SEISMIC EVAL (RULE OF THE BOX).			
							T		RULE OF BOX				
										RELAYS IDENTIFIED UNDER 29SOV-86A2(OP1) AND (OP2). INSTRUMENTS (I.E. DPT, LT, PT, RE, RTD) WHICH INITIATE MSIV CLOSURE ARE LISTED AS ASSOCIATED COMPONENTS. THESE INSTRUMENTS ARE NOT REQUIRED TO SUPPORT A-46 AND ARE LISTED FOR INFORMATION ONLY.			
398	B	8B	29SOV-86A2(OP1)	MST A OUTBD MSIV PILOT SOLENOID VALVE COIL	ST	276'8E L	6.5	NA	RELAY	AC OPERATOR ASSOCIATED WITH 29SOV-86A2.	ON	OFF	Y
							T		RULE OF BOX				
										THIS SAME AC OPERATOR IS IDENTIFIED AS 29SOV-86AW ON ESK-7B REV 13.			
399	B	8B	29SOV-86A2(OP2)	MST A OUTBD MSIV PILOT SOLENOID VALVE COIL	ST	276'8E L	6.5	NA	RELAY	DC OPERATOR ASSOCIATED WITH 29SOV-86A2(OP2).	ON	OFF	Y
							T		RULE OF BOX				
										THIS SAME DC OPERATOR IS NOT IDENTIFIED AS 29SOV-86A3 ON ESK-7B REV. 13.			
400	B	8B	29SOV-86B2	MST B OUTBD MSIV PILOT SOLENOID VALVE	ST	276'8E L	6.5	NA	RELAY	SYSTEMS COMMENT: CHATTER UNACCEPTABLE - MSIV CONTROL CAPABILITY DESIRABLE. ALTERNATE CONTROL POWER AVAILABLE FROM 71BCB-2B; PILOT VALVE CONSIDERED PART OF SOV ASSEMBLY. REFER TO 29AOV-86B FOR SEISMIC EVAL (RULE OF THE BOX).	ON	OFF	Y
							T		RULE OF BOX				
										RELAYS IDENTIFIED UNDER 29SOV-86B2(OP1) AND (OP2). INSTRUMENTS (I.E. DPT, LT, PT, RE, RTD) WHICH INITIATE MSIV CLOSURE ARE LISTED AS ASSOCIATED COMPONENTS. THESE INSTRUMENTS ARE NOT REQUIRED TO SUPPORT A-46 AND ARE LISTED FOR INFORMATION ONLY.			
401	B	8B	29SOV-86B2(O	MST B OUTBD	ST	276'8E	6.5	NA	RELAY	AC OPERATOR ASSOCIATED WITH 29SOV-86B2.	ON	OFF	Y

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
			P1)	MSIV PILOT SOLENOID VALVE COIL		L							
							T		RULE OF BOX	THIS SAME AC OPERATOR IS IDENTIFIED AS 29SOV-B2 ON ESK-7B REV. 13.			
402	B	8B	29SOV-86B2(OP2)	MST B OUTBD MSIV PILOT SOLENOID VALVE COIL	ST	276'8E L	6.5	NA	RELAY	DC OPERATOR ASSOCIATED WITH 29SOV-86B2.	ON	OFF	Y
							T		RULE OF BOX	THIS SAME DC OPERATOR IS IDENTIFIED AS 29SOV-86B3 ON ESK-7B REV. 13.			
403	B	8B	29SOV-86C2	MST C OUTBD MSIV PILOT SOLENOID VALVE	ST	276'8E L	6.5	NA	RELAY	SYSTEMS COMMENT: CHATTER UNACCEPTABLE - MSIV CONTROL CAPABILITY DESIRABLE. ALTERNATE CONTROL POWER AVAILABLE FROM 71BCB-2B; PILOT VALVE CONSIDERED PART OF SOV ASSEMBLY. REFER TO 29AOV-86C FOR SEISMIC EVAL (RULE OF THE BOX).	ON	OFF	Y
							T		RULE OF BOX	RELAYS IDENTIFIED UNDER 29SOV-86C2(OP1) AND (OP2). INSTRUMENTS (I.E. DPT, LT, PT, RE, RTD) WHICH INITIATE MSIV CLOSURE ARE LISTED AS ASSOCIATED COMPONENTS. THESE INSTRUMENTS ARE NOT REQUIRED TO SUPPORT A-46 AND ARE LISTED FOR INFORMATION ONLY.			
404	B	8B	29SOV-86C2(OP1)	MST C OUTBD MSIV PILOT SOLENOID VALVE COIL	ST	276'8E L	6.5	NA	RELAY	AC OPERATOR ASSOCIATED WITH 29SOV-86C2.	ON	OFF	Y
							T		RULE OF BOX	THIS SAME AC OPERATOR IS IDENTIFIED AS 29SOV-86C2 ON ESK-7B REV. 13.			
405	B	8B	29SOV-86C2(OP2)	MST C OUTBD MSIV PILOT SOLENOID VALVE COIL	ST	276'8E L	6.5	NA	RELAY	DC OPERATOR ASSOCIATED WITH 29SOV-86C2.	ON	OFF	Y
							T		RULE OF				

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
									BOX	THIS SAME DC OPERATOR IS IDENTIFIED AS 29SOV-86C3 ON ESK-7B REV. 13.			
406	B	8B	29SOV-86D2	MST D OUTBD MSIV PILOT SOLENOID VALVE	ST	276'8E L	6.5	NA	RELAY	SYSTEMS COMMENT: CHATTER UNACCEPTABLE - MSIV CONTROL CAPABILITY DESIRABLE. ALTERNATE CONTROL POWER AVAILABLE FROM 71BCB-2B; PILOT VALVE CONSIDERED PART OF THE SOV ASSEMBLY. REFER TO 29AOV-86D FOR SEISMIC EVAL (RULE OF THE BOX).	ON	OFF	Y
							T		RULE OF BOX	RELAYS IDENTIFIED UNDER 29SOV-86D2(OP1) AND (OP2). INSTRUMENTS (I.E. DPT, LT, PT, RE, RTD) WHICH INITIATE MSIV CLOSURE ARE LISTED AS ASSOCIATED COMPONENTS. THESE INSTRUMENTS ARE NOT REQUIRED TO SUPPORT A-46 AND ARE LISTED FOR INFORMATION ONLY.			
407	B	8B	29SOV-86D2(OP1)	MST D OUTBD MSIV PILOT SOLENOID VALVE COIL	ST	276'8E L	6.5	NA	RELAY	AC OPERATOR ASSOCIATED WITH 29SOV-86D2.	ON	OFF	Y
							T		RULE OF BOX	THIS SAME AC OPERATOR IS IDENTIFIED AS 29SOV-86D2 ON ESK-7B REV 13.			
408	B	8B	29SOV-86D2(OP2)	MST D OUTBD MSIV PILOT SOLENOID VALVE COIL	ST	276'8E L	6.5	NA	RELAY	DC OPERATOR ASSOCIATED WITH 29SOV-86D2.	ON	OFF	Y
							T		RULE OF BOX	THIS SAME DC OPERATOR IS IDENTIFIED AS 29SOV-86D3 ON ESK-7B REV 13			
409	X	20	33LI-101A	CND STORAGE TK-12A & B LEVEL INDIC	CR	300EL	10	09-6	RELAY	33LI-101A: IT IS ASSUMED THAT 33-LS-101 WILL ISOLATE THE CIRCUIT FROM ANY SPURIOUS SIGNALS FROM THE ANNUNCIATOR.	ON	ON	Y
							E		RULE OF BOX	SWAP OVER TO SUPPRESSION POOL CREDITED ON LOW CST LEVEL WHEN HPCI IN OPERATION.			
410	X	18	33LT-101	CONDENSATE	YD	257EL	NA	NA	RELAY	SWAP OVER TO SUPPRESSION POOL CREDITED ON	ON	ON	Y

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
				STORAGE TANKS LEVEL XMITTER			NA		SEISMIC	LOW CST LEVEL WHEN HPCI IN OPERATION.			
411	X	21	33TK-12A	CONDENSATE STORAGE TANK A	YD	NA	NA NA	NA	SEISMIC	BOUNDARY PATHS OFF CST NOT A CONCERN SINCE CREDIT TAKEN FOR SWAP OVER TO SUPPRESSION POOL.	N/A	N/A	N
412	X	21	33TK-12B	CONDENSATE STORAGE TANK B	YD	NA	NA NA	NA	SEISMIC	BOUNDARY PATHS OFF CST NOT A CONCERN SINCE CREDIT TAKEN FOR SWAP OVER TO SUPPRESSION POOL.	N/A	N/A	N
413	X	21	39ACC-256A	IAS 02RV-71A AIR ACCUMULATOR	PC	290'4E	5 L R	NA	SEISMIC		N/A	N/A	N
414	X	21	39ACC-256B	IAS 02RV-71B AIR ACCUMULATOR	PC	290'4E	5 L R	NA	SEISMIC		N/A	N/A	N
415	X	21	39ACC-256C	IAS 02RV-71C AIR ACCUMULATOR	PC	290'4E	5 L R	NA	SEISMIC		N/A	N/A	N
416	X	21	39ACC-256D	IAS 02RV-71D AIR ACCUMULATOR	PC	290'4E	4.5 L R	NA	SEISMIC		N/A	N/A	N
417	X	21	39ACC-256E	IAS 02RV-71E/F AIR ACCUMULATOR	PC	290'4E	5 L W	NA	SEISMIC		N/A	N/A	N
418	X	21	39ACC-256G	IAS 02RV-71G AIR ACCUMULATOR	PC	290'4E	5 L W	NA	SEISMIC		N/A	N/A	N
419	X	21	39ACC-256H	IAS 02RV-71H AIR ACCUMULATOR	PC	290'4E	5 L W	NA	SEISMIC		N/A	N/A	N
420	X	21	39ACC-256J	IAS 02RV-71J AIR ACCUMULATOR	PC	290'4E	5 L W	NA	SEISMIC		N/A	N/A	N
421	X	21	39ACC-256K	IAS 02RV-71K	PC	290'4E	5.5	NA	SEISMIC		N/A	N/A	N

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				AIR ACCUMULATOR		L	R						
422	X	21	39ACC-256L	IAS 02RV-71L AIR ACCUMULATOR	PC	290'4E L	5.5 W	NA	SEISMIC		N/A	N/A	N
423	A	R	46(70)ESW-101	CR/RR VENT 70AHU-3A & 12A ESW SUPPLY ISOL VALVE	AD	300EL	9.5 S	NA	N/A	PROVIDES CAPABILITY TO RUN CR/RR HVAC IF CHILLED WATER SYSTEM FAILS.	CLOSED	OPEN	N
424	B	R	46(70)ESW-102	CR/RR VENT 70AHU-3B & 12B ESW SUPPLY ISOL VALVE	AD	300EL	10.5 S	NA	N/A	PROVIDES CAPABILITY TO RUN CR/RR HVAC IF CHILLED WATER SYSTEM FAILS.	CLOSED	OPEN	N
425	A	R	46(70)ESW-103	CR/RR VENT 70AHU-3A & 12A ESW RETURN ISOL VALVE	AD	300EL	9.5 S	NA	N/A	PROVIDES CAPABILITY TO RUN CR/RR HVAC IF CHILLED WATER SYSTEM FAILS.	CLOSED	OPEN	N
426	B	R	46(70)ESW-104	CR/RR VENT 70AHU-3B & 12B ESW RETURN ISOL VALVE	AD	30[illegible]	9.5 S	NA	N/A	PROVIDES CAPABILITY TO RUN CR/RR HVAC IF CHILLED WATER SYSTEM FAILS.	CLOSED	OPEN	N
427	A	8A	46MOV-101A	EMERGENCY SERVICE WATER LOOP A SUPPLY HEADER ISOL VALVE	SP	255EL	26 B	NA	RELAY SEISMIC	SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE MOV POSITION IS VERIFIED PER OP-21 (D.2.c).	CLOSED	OPEN	Y
428	B	8A	46MOV-101B	EMERGENCY SERVICE WATER LOOP B SUPPLY HEADER ISOL VALVE	SP	255EL	25 B	NA	RELAY SEISMIC	SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE MOV POSITION IS VERIFIED PER OP-21 (D.2.c).	CLOSED	OPEN	Y
429	A	8A	46MOV-102A	EMERGENCY SERVICE WATER	SP	255EL	26	NA	RELAY	SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE MOV POSITION IS VERIFIED PER OP-21	OPEN	CLOSED	Y

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
				PUMP A TEST VALVE			B		SEISMIC	(D.2.b).			
430	B	8A	46MOV-102B	EMERGENCY SERVICE WATER PUMP B TEST VALVE	SP	255EL	25 B	NA	RELAY SEISMIC	SYSTEMS COMMENT: CHATTER ACCEPTABLE SINCE MOV POSITION IS VERIFIED PER OP-21 (D.2.b).	OPEN	CLOSED	Y
431	A	6	46P-2A	EMERGENCY SERVICE WATER PUMP A	SP	255EL	26 B	NA	RELAY SEISMIC	46P-2A: ALL "52" RELAY CONTACTS SHOWN ON ESK-6AF ARE ASSUMED TO BE MECHANICALLY RUGGED AND NOT VULNERABLE TO SEISMIC CHATTER. THIS INCLUDES THE "52BA" AND "52HL" RELAY CONTACTS. ALSO, PUSHBUTTONS ARE ASSUMED TO BE NOT VULNERABLE TO SEISMIC CHATTER. SERVICE WATER ESSENTIAL TO PROPER DIESEL OPERATION.	OFF	ON	Y
432	B	6	46P-2B	EMERGENCY SERVICE WATER PUMP B	SP	255EL	25 B	NA	RELAY SEISMIC	46P-2B: ALL "52" RELAY CONTACTS SHOWN ON ESK-6AL ARE ASSUMED TO BE MECHANICALLY RUGGED AND NOT VULNERABLE TO SEISMIC CHATTER. THIS INCLUDES THE "52BA" AND "52HL" RELAY CONTACTS. ALSO, PUSHBUTTONS ARE ASSUMED TO BE NOT VULNERABLE TO SEISMIC CHATTER. SERVICE WATER ESSENTIAL TO PROPER DIESEL OPERATION.	OFF	ON	Y
433	A	0	46STR-5A1	EMERGENCY SERVICE WATER PUMP A DISCH NORTH BASKET STRAINER	SP	255EL	26 B	NA	N/A	THIS COMPONENT IS CONSIDERED RUGGED PER THE GIP. IT HAS BEEN ADDED TO THE LIST AS REFERENCE ONLY SINCE SPECIFIC LOCAL OPERATION IS REQUIRED TO SHIFT THE STRAINER TO ENSURE PROPER ESW PUMP OPERATION PER OP-21, SECTION G.	N/A	N/A	N
434	A	0	46STR-5A2	EMERGENCY SERVICE WATER PUMP A DISCH SOUTH BASKET STRAINER	SP	255EL	26 B	NA	N/A	THIS COMPONENT IS CONSIDERED RUGGED PER THE GIP. IT HAS BEEN ADDED TO THE LIST AS REFERENCE ONLY SINCE SPECIFIC LOCAL OPERATION IS REQUIRED TO SHIFT THE STRAINER TO ENSURE PROPER ESW PUMP OPERATION PER OP-21, SECTION G.	N/A	N/A	N

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
435	B	0	46STR-5B1	EMERGENCY SERVICE WATER PUMP B DISCH NORTH BASKET STRAINER	SP	255EL	25 B	NA	N/A	THIS COMPONENT IS CONSIDERED RUGGED PER THE GIP. IT HAS BEEN ADDED TO THE LIST AS REFERENCE ONLY SINCE SPECIFIC LOCAL OPERATION IS REQUIRED TO SHIFT THE STRAINER TO ENSURE PROPER ESW PUMP OPERATION PER OP-21, SECTION G.	N/A	N/A	N
436	B	0	46STR-5B2	EMERGENCY SERVICE WATER PUMP B DISCH SOUTH BASKET STRAINER	SP	255EL	25 B	NA	N/A	THIS COMPONENT IS CONSIDERED RUGGED PER THE GIP. IT HAS BEEN ADDED TO THE LIST AS REFERENCE ONLY SINCE SPECIFIC LOCAL OPERATION IS REQUIRED TO SHIFT THE STRAINER TO ENSURE PROPER ESW PUMP OPERATION PER OP-21, SECTION G.	N/A	N/A	N
437	X	7	66PCV-101	RB UNIT COOLERS SWS RETURN HEADER PRESS CONTROL VALVE	RB	272EL	7.5 Y	NA	SEISMIC	ASSUMED ESW RETURN THROUGH THIS FLOW PATH TO DISCHARGE CANAL. ASSUME VALVE IS SELF-REGULATING.	OPEN/CLOSED	OPEN/CLOSED	N
438	A	7	66TCV-107E	EAST CRESCENT AREA UC-22E SWS INLET TEMP CONTROL VALVE	RB	242'8E L	3 A	NA	SEISMIC	THIS VALVE FAILS OPEN ON LOSS OF AIR BASED ON NYPA RESPONSE TO OPEN ITEM P909-012.	OPEN/CLOSED	OPEN	N
439	B	7	66TCV-107F	WEST CRESCENT AREA UC-22F SWS INLET TEMP CONTROL VALVE	RB	242'8E L	3 D	NA	SEISMIC	THIS VALVE FAILS OPEN ON LOSS OF AIR BASED ON NYPA RESPONSE TO OPEN ITEM P909-012.	OPEN/CLOSED	OPEN	N
440	A	10	66UC-22A	WEST CRESCENT AREA UNIT COOLER 22A	RB	242'8E L	1 R	NA	SEISMIC	COOLER IS FOR RCIC OPERATION; SIESMIC EVALUATION ONLY SINCE RCIC NOT CREDITED FOR SSE SAFE SHUTDOWN.	N/A	N/A	N
441	B	10	66UC-22B	EAST CRESCENT AREA UNIT COOLER 22B	RB	242'8E L	4 D	NA	RELAY SEISMIC	COOLER NORMALLY IN AUTO; CREDIT TAKEN FOR POST-SSE OPERATION OF COOLER FROM 09-75 IN CONTROL ROOM PER OP-51A.	ON	ON	Y
442	A	10	66UC-22C	WEST CRESCENT AREA UNIT	RB	242'8E L	2.5	NA	RELAY	COOLER NORMALLY IN AUTO; CREDIT TAKEN FOR POST-SSE OPERATION OF COOLER FROM 09-75 IN	ON	ON	Y

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				COOLER 22C			A		SEISMIC	CONTROL ROOM PER OP-51A.			
443	B	10	66UC-22D	EAST CRESCENT AREA UNIT COOLER 22D	RB	242'8E L	3.5	NA	RELAY	COOLER NORMALLY IN AUTO; CREDIT TAKEN FOR POST-SSE OPERATION OF COOLER FROM 09-75 IN CONTROL ROOM PER OP-51A.	ON	ON	Y
							D		SEISMIC				
444	A	10	66UC-22E	WEST CRESCENT AREA UNIT COOLER 22E	RB	242'8E L	3	NA	RELAY	COOLER NORMALLY IN AUTO; CREDIT TAKEN FOR POST-SSE OPERATION OF COOLER FROM 09-75 IN CONTROL ROOM PER OP-51A.	ON	ON	Y
							A		SEISMIC				
445	B	10	66UC-22F	EAST CRESCENT AREA UNIT COOLER 22F	RB	242'8E L	3	NA	RELAY	COOLER NORMALLY IN AUTO; CREDIT TAKEN FOR POST-SSE OPERATION OF COOLER FROM 09-75 IN CONTROL ROOM PER OP-51A.	ON	ON	Y
							D		SEISMIC				
446	A	10	66UC-22G	WEST CRESCENT AREA UNIT COOLER 22G	RB	242'8E L	3.5	NA	RELAY	COOLER NORMALLY IN AUTO; CREDIT TAKEN FOR POST-SSE OPERATION OF COOLER FROM 09-75 IN CONTROL ROOM PER OP-51A.	ON	ON	Y
							A		SEISMIC				
447	B	10	66UC-22H	EAST CRESCENT AREA UNIT COOLER 22H	RB	242'8E L	2.5	NA	RELAY	COOLER NORMALLY IN AUTO; CREDIT TAKEN FOR POST-SSE OPERATION OF COOLER FROM 09-75 IN CONTROL ROOM PER OP-51A.	ON	ON	Y
							D		SEISMIC				
448	A	10	66UC-22J	WEST CRESCENT AREA UNIT COOLER 22J	RB	242'8E L	4	NA	RELAY	COOLER NORMALLY IN AUTO; CREDIT TAKEN FOR POST-SSE OPERATION OF COOLER FROM 09-75 IN CONTROL ROOM PER OP-51A.	ON	ON	Y
							A		SEISMIC				
449	B	10	66UC-22K	HPCI ROOM UNIT COOLER 22K	RB	242'8E L	1	NA	RELAY	COOLER NORMALLY IN AUTO; CREDIT TAKEN FOR POST-SSE OPERATION OF COOLER FROM 09-75 IN CONTROL ROOM PER OP-51A.	ON	ON	Y
							T		SEISMIC				
450	X	10	67E-11	WEST CABLE TUNNEL VENT SUPPLY COOLING COIL	EB	286EL	18.5	NA	SEISMIC	STRUCTURAL INTEGRITY OF THIS COMPONENT IS REQUIRED TO BE MAINTAINED TO ENSURE ADEQUATE ESW FLOW TO CONTROL ROOM COOLERS.	N/A	N/A	N
							A						
451	X	10	67E-14	EAST CABLE TUNNEL VENT SUPPLY COOLING	EB	286EL	18.5	NA	SEISMIC	STRUCTURAL INTEGRITY OF THIS COMPONENT IS REQUIRED TO BE MAINTAINED TO ENSURE ADEQUATE ESW FLOW TO CONTROL ROOM COOLERS.	N/A	N/A	N

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				COIL			A						
452	A	10	67MOD-16A1	WEST ELECTRIC BAY UC-16A DISCH ISOL DAMPER	EB	286EL	18	67UC-16A	RELAY	DAMPER OPERATES IN CONJUNCTION WITH ASSOCIATED FAN.	OPEN/CLOSED	OPEN	Y
							A1		RULE OF BOX				
453	A	10	67MOD-16A2	WEST ELECTRIC BAY UC-16A DISCH ISOL DAMPER	EB	286EL	18	67UC-16A	RELAY	DAMPER OPERATES IN CONJUNCTION WITH ASSOCIATED FAN.	OPEN/CLOSED	OPEN	Y
							A1		RULE OF BOX				
454	B	10	67MOD-16B1	EAST ELECTRIC BAY UC-16B DISCH ISOL DAMPER	EB	286EL	18	67UC-16B	RELAY	DAMPER OPERATES IN CONJUNCTION WITH ASSOCIATED FAN.	OPEN/CLOSED	OPEN	Y
							A1		RULE OF BOX				
455	B	10	67MOD-16B2	EAST ELECTRIC BAY UC-16B DISCH ISOL DAMPER	EB	286EL	18	67UC-16B	RELAY	DAMPER OPERATES IN CONJUNCTION WITH ASSOCIATED FAN.	OPEN/CLOSED	OPEN	Y
							A1		RULE OF BOX				
456	X	7	67PCV-101	ELECTRIC BAY UC-16A & B SERVICE WATER RETURN PRESS CONTROL VALVE	EB	286EL	19	NA	SEISMIC	ASSUME VALVE IS SELF-REGULATING.	OPEN/CLOSED	OPEN/CLOSED	N
							B						
457	A	10	67UC-16A	WEST ELECTRIC BAY UNIT COOLER	EB	286EL	17	NA	RELAY	67UC-16A IS A UNIT CONTAINING FOUR SUB-COMPONENTS: 67UC-16A1(M), 67UC-16A2(M), 67MOD-16A1, AND 67MOD-16A2. EACH SUB-COMPONENT WILL BE EVALUATED FOR RELAY CHATTER SEPARATELY AS SEPARATE CIRCUIT SCHEMES EXIST FOR EACH.	ON	ON	Y
							A1		SEISMIC	UNIT COOLERS ASSUMED IN AUTO MODE; STARTING/INDICATION CAPABILITY AVAILABLE			

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										IN CONTROL ROOM.			
458	A	10	67UC-16A1(M)	WEST ELECTRIC BAY UNIT COOLER 16A FAN MOTOR A1 71MCC-251-0D1	EB	286EL	17	NA	RELAY	SEISMIC EVALUATION PERFORMED UNDER HOST 67UC-16A.	ON	ON	Y
							A1		RULE OF BOX				
459	A	10	67UC-16A2(M)	WEST ELECTRIC BAY UNIT COOLER 16A FAN MOTOR A2 71MCC-251-0D2	EB	286EL	17	NA	RELAY	SEISMIC EVALUATION PERFORMED UNDER HOST 67UC-16A.	ON	ON	Y
							A1		RULE OF BOX				
460	B	10	67UC-16B	EAST ELECTRIC BAY UNIT COOLER	EB	286EL	17	NA	RELAY	67UC-16B IS A UNIT CONTAINING FOUR SUB-COMPONENTS: 67UC-16B1(M), 67UC-16B2(M), 67MOD-16B1, AND 67MOD-16B2. EACH SUB-COMPONENT WILL BE EVALUATED FOR RELAY CHATTER SEPARATELY AS SEPARATE CIRCUIT SCHEMES EXIST FOR EACH.	ON	ON	Y
							B		SEISMIC	UNIT COOLERS ASSUMED IN AUTO MODE; STARTING/INDICATION CAPABILITY AVAILABLE IN CONTROL ROOM.			
461	B	10	67UC-16B1(M)	EAST ELECTRIC BAY UNIT COOLER 16B FAN MOTOR 16B1 71MCC-262-0D4	EB	286EL	17	NA	RELAY	SEISMIC EVALUATION PERFORMED UNDER HOST 67UC-16B.	ON	ON	Y
							B		RULE OF BOX				
462	B	10	67UC-16B2(M)	EAST ELECTRIC BAY UNIT COOLER 16B FAN MOTOR B2 71MCC-262-0D5	EB	286EL	17	NA	RELAY	SEISMIC EVALUATION PERFORMED UNDER HOST 67UC-16B.	ON	ON	Y
							B		RULE OF BOX				
463	A	10	70AHU-12A	RELAY ROOM VENT AIR HANDLING	AD	300EL	9.5	NA	RELAY	DRAWING 1.81-45 REV E.	ON	ON	Y

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				UNIT A									
							Z		SEISMIC				
										SYSTEM LINEUP FOR ESW DIRECTLY THROUGH COOLING COILS. DEVICES IN CO2 PANELS ARE ASSOCIATED WITH SYSTEM 76.			
464	B	10	70AHU-12B	RELAY ROOM VENT AIR HANDLING UNIT B	AD	300EL	9.5	NA	RELAY	DEVICES IN CO2 PANELS ARE ASSOCIATED WITH SYSTEM 76.	ON	ON	Y
							X		SEISMIC				
										DRAWING 1.81-45 REV E. SYSTEM LINEUP FOR ESW DIRECTLY THROUGH COOLING COILS.			
465	A	10	70AHU-19A	CHILLER ROOM VENT AIR HANDLING UNIT A	AD	300EL	9	NA	RELAY	POSITION SWITCH CONSIDERED AS PART OF OPERATOR, 70TCV-123A(OP).	ON	ON	Y
							S		SEISMIC				
466	B	10	70AHU-19B	CHILLER ROOM VENT AIR HANDLING UNIT B	AD	300EL	9	NA	RELAY	POSITION SWITCH CONSIDERED AS PART OF OPERATOR, 70TCV-123B(OP).	ON	ON	Y
							S		SEISMIC				
467	A	10	70AHU-3A	CONTROL ROOM VENT AIR HANDLING UNIT A	AD	300EL	9.5	NA	RELAY		ON	ON	Y
							Z		SEISMIC				
468	B	10	70AHU-3B	CONTROL ROOM VENT AIR HANDLING UNIT B	AD	300EL	9.5	NA	RELAY		ON	ON	Y
							X		SEISMIC				
469	X	10	70FD-1	RELAY ROOM INLET VENT FIRE DAMPER	AD	300EL	10	NA	SEISMIC	DAMPER REQUIRED TO REMAIN OPEN TO ENSURE PROPER VENTILATION SYSTEM OPERATION.	OPEN	OPEN	N
							C						
470	X	10	70FD-10	SOUTH/NORTH CABLE ROOMS FIRE DAMPER	RR	284'8E L	9.5	NA	SEISMIC	DAMPER REQUIRED TO REMAIN OPEN TO ENSURE PROPER VENTILATION SYSTEM OPERATION.	OPEN	OPEN	N
							C						
471	X	10	70FD-2	RELAY ROOM VENT EXHAUST FANS INLET FIRE	AD	300EL	10	NA	SEISMIC	DAMPER REQUIRED TO REMAIN OPEN TO ENSURE PROPER VENTILATION SYSTEM OPERATION.	OPEN	OPEN	N

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
				DAMPER			C						
472	X	10	70FD-4	RELAY ROOM VENT EXHAUST FIRE DAMPER	RR	284'8E L	9.5 C	NA	SEISMIC	DAMPER REQUIRED TO REMAIN OPEN TO ENSURE PROPER VENTILATION SYSTEM OPERATION.	OPEN	OPEN	N
473	X	10	70FD-5	RELAY ROOM VENT EXHAUST FIRE DAMPER	RR	284'8E L	9.5 C	NA	SEISMIC	DAMPER REQUIRED TO REMAIN OPEN TO ENSURE PROPER VENTILATION SYSTEM OPERATION.	OPEN	OPEN	N
474	X	10	70FD-6	RELAY ROOM VENT SUPPLY FIRE DAMPER	RR	284'8E L	10.5 C	NA	SEISMIC	DAMPER REQUIRED TO REMAIN OPEN TO ENSURE PROPER VENTILATION SYSTEM OPERATION.	OPEN	OPEN	N
475	X	10	70FD-7	RELAY ROOM VENT EXHAUST FIRE DAMPER	RR	284'8E L	10.5 C	NA	SEISMIC	DAMPER REQUIRED TO REMAIN OPEN TO ENSURE PROPER VENTILATION SYSTEM OPERATION.	OPEN	OPEN	N
476	A	9	70FN-13A	RELAY ROOM VENT EXHAUST FAN A	AD	300EL	9.5 Z	NA	RELAY SEISMIC	ASSUME PEDB ID 70MOD-102A(OP) INCLUDES POSITION SWITCH. DEVICES IN CO2 PANELS ARE ASSOCIATED WITH SYSTEM 76. DRAWING 1.81-45 REV E.	ON	ON	Y
477	B	9	70FN-13B	RELAY ROOM VENT EXHAUST FAN B	AD	300EL	9.5 Z	NA	RELAY SEISMIC	ASSUME PEDB ID 70MOD-102B(OP) INCLUDES POSITION SWITCH. DEVICES IN CO2 PANELS ARE ASSOCIATED WITH SYSTEM 76. DRAWING 1.81-45 REV E.	ON	ON	Y
478	A	9	70FN-4A	CONTROL ROOM VENT EXHAUST FAN A	AD	310'6E L	9.5 V	NA	RELAY SEISMIC	ASSUME PEDB ID 70MOD-108A(OP) INCLUDES POSITION SWITCH.	ON	ON	Y
479	B	9	70FN-4B	CONTROL ROOM VENT EXHAUST FAN B	AD	310'6E L	9.5 V	NA	RELAY SEISMIC	ASSUME PEDB ID 70MOD-108B(OP) INCLUDES POSITION SWITCH.	ON	ON	Y

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480	A	10	70MOD-101A	RELAY ROOM VENT AHU-12A OUTLET ISOL DAMPER	AD	300EL	9.5	NA	RELAY	DAMPER INTERLOCKED WITH AHU-12A.	OPEN	OPEN	Y
							Z		SEISMIC	DEVICES IN CO2 PANELS ARE ASSOCIATED WITH SYSTEM 76. DRAWING 1.81-45 REV E.			
481	B	10	70MOD-101B	RELAY ROOM VENT AHU-12B OUTLET ISOL DAMPER	AD	300EL	9.5	NA	RELAY	DAMPER INTERLOCKED WITH AHU-12B.	OPEN	OPEN	Y
							X		SEISMIC	DEVICES IN CO2 PANELS ARE ASSOCIATED WITH SYSTEM 76. DRAWING 1.81-45 REV E.			
482	A	10	70MOD-102A	RELAY ROOM VENT EXHAUST FAN 13A OUTLET ISOL DAMPER	AD	310'6E L	9.5	NA	RELAY	ASSUME PEDB ID 70MOD-102A(OP) INCLUDES POSITION SWITCH.	OPEN	OPEN	Y
							X		SEISMIC	DAMPER INTERLOCKED WITH FAN-13A. DEVICES IN CO2 PANELS ARE ASSOCIATED WITH SYSTEM 76. DRAWING 1.81-45 REV E.			
483	B	10	70MOD-102B	RELAY ROOM VENT EXHAUST FAN 13B OUTLET ISOL DAMPER	AD	310'6E L	10	NA	RELAY	ASSUME PEDB ID 70MOD-102B(OP) INCLUDES POSITION SWITCH.	OPEN	OPEN	Y
							Z		SEISMIC	DAMPER INTERLOCKED WITH FAN-13B. DEVICES IN CO2 PANELS ARE ASSOCIATED WITH SYSTEM 76. DRAWING 1.81-45 REV E.			
484	A	10	70MOD-104A	RELAY ROOM VENT RECIRC ISOL DAMPER A	AD	310'6E L	9.5	NA	RELAY	ASSUME PEDB ID 70MOD-104A(OP) INCLUDES POSITION SWITCH.	OPEN/CLOSED	OPEN	Y
							X		SEISMIC	DRAWING LP-70-53 REV 001. POSITION SWITCH NOT INCLUDED FOR RELAY EVALUATION AS CONTACTS PROVIDE FOR ANNUNCIATION ONLY (NON-ESSENTIAL RELAY). DAMPER NORMALLY IN AUTO MODE; CREDIT TAKEN FOR RECIRC MODE OF OPERATION POST-SSE SINCE FRESH AIR AND EXHAUST PATHS MAY NOT			

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										BE AVAILABLE. CREDIT TAKEN FOR MANUAL SYSTEM OPERATION FROM CONTROL ROOM.			
485	B	10	70MOD-104B	RELAY ROOM VENT RECIRC ISOL DAMPER B	AD	310'6E L	9.5	NA	RELAY	ASSUME PEDB ID 70MOD-104B(OP) INCLUDES POSITION SWITCH.	OPEN/CLOSED	OPEN	Y
							X		SEISMIC	DRAWING LP-70-53 REV 001. POSITION SWITCH NOT INCLUDED FOR RELAY EVALUATION AS CONTACTS PROVIDE FOR ANNUNCIATION ONLY (NON-ESSENTIAL RELAY). DAMPER NORMALLY IN AUTO MODE; CREDIT TAKEN FOR RECIRC MODE OF OPERATION POST-SSE SINCE FRESH AIR AND EXHAUST PATHS MAY NOT BE AVAILABLE. CREDIT TAKEN FOR MANUAL SYSTEM OPERATION FROM CONTROL ROOM.			
486	A	10	70MOD-106A	CONTROL ROOM VENT AHU-3A OUTLET ISOL DAMPER	AD	300EL	9.5	NA	RELAY	DAMPER INTERLOCKED WITH AHU-3A.	OPEN	OPEN	Y
							Z		SEISMIC				
487	B	10	70MOD-106B	CONTROL ROOM VENT AHU-3B OUTLET ISOL DAMPER	AD	300EL	9.5	NA	RELAY	DAMPER INTERLOCKED WITH AHU-3B.	OPEN	OPEN	Y
							Z		SEISMIC				
488	A	10	70MOD-108A	CONTROL ROOM VENT EXHAUST FAN 4A OUTLET ISOL DAMPER	AD	310'6E L	9.5	NA	RELAY	ASSUME PEDB ID 70MOD-108B(OP) INCLUDES POSITION SWITCH.	OPEN	OPEN	Y
							V		SEISMIC				
489	B	10	70MOD-108B	CONTROL ROOM VENT EXHAUST FAN 4B OUTLET ISOL DAMPER	AD	310'6E L	9.5	NA	RELAY	ASSUME PEDB ID 70MOD-108B(OP) INCLUDES POSITION SWITCH.	OPEN	OPEN	Y
							V		SEISMIC	DAMPER INTERLOCKED WITH FAN-4B.			
490	A	10	70MOD-110A	CONTROL ROOM VENT RECIRC ISOL DAMPER A	AD	310'6E L	9.5	NA	RELAY	DAMPER NORMALLY OPERATES IN AUTO. CREDIT TAKEN FOR SYSTEM RECIRC MODE SINCE FRESH AIR AND EXHAUST PATHS MAY NOT BE AVAILABLE POST-SSE. MANUAL SYSTEM OPERATION CAPABILITY EXIST IN CONTROL ROOM.	OPEN/CLOSED	OPEN	Y

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							V		SEISMIC				
491	B	10	70MOD-110B	CONTROL ROOM VENT RECIRC ISOL DAMPER B	AD	310'6E L	9.5	NA	RELAY	DAMPER NORMALLY OPERATES IN AUTO; CREDIT TAKEN FOR SYSTEM RECIRC MODE SINCE FRESH AIR AND EXHAUST PATHS MAY NOT BE AVAILABLE POST-SSE. MANUAL SYSTEM OPERATION CAPABILITY EXIST IN CONTROL ROOM.	OPEN/CLOSED	OPEN	Y
							V		SEISMIC				
492	A	7	70PCV-100A1	CR/RR CHILLER CONDENSER A SWS PRESS CONTROL VALVE 1	AD	300EL	11	NA	SEISMIC	ASSUME VALVE IS SELF REGULATING.	OPEN/CLOSED	OPEN/CLOSED	N
							S						
493	A	7	70PCV-100A2	CR/RR CHILLER CONDENSER B SWS PRESS CONTROL VALVE 2	AD	300EL	11	NA	SEISMIC	ASSUME VALVE IS SELF-REGULATING.	OPEN/CLOSED	OPEN/CLOSED	N
							S						
494	B	7	70PCV-100B1	CR/RR CHILLER CONDENSER A SWS PRESS CONTROL VALVE 1	AD	300EL	10	NA	SEISMIC	ASSUME VALVE IS SELF-REGULATING	OPEN/CLOSED	OPEN/CLOSED	N
							V						
495	B	7	70PCV-100B2	CR/RR CHILLER CONDENSER B SWS PRESS CONTROL VALVE 2	AD	300EL	10	NA	SEISMIC	ASSUME VALVE IS SELF-REGULATING.	OPEN/CLOSED	OPEN/CLOSED	N
							V						
496	A	7	70RV-101A	CR/RR CHILLER A CONDENSER SERVICE WATER RELIEF VALVE	AD	300EL	11	NA	SEISMIC		CLOSED	CLOSED	N
							S						
497	B	7	70RV-101B	CR/RR CHILLER B CONDENSER SERVICE WATER RELIEF VALVE	AD	300EL	10	NA	SEISMIC		CLOSED	CLOSED	N
							V						
498	A	11	70RWC-2A(CND)	CONTROL ROOM CHILLER A	AD	300EL	10.5	NA	SEISMIC	ESW BACKUP TO AIR HANDLER IF CWS IS UNAVAILABLE.	ON	ON	Y

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				CONDENSER			S						
499	B	11	70RWC-2B(CND)	CONTROL ROOM CHILLER B CONDENSER	AD	300EL	10.5	NA	SEISMIC	ESW BACKUP TO AIR HANDLER IF CWS IS UNAVAILABLE.	ON	ON	Y
500	A	7	70TCV-123A	CR/RR CHILLER ROOM AHU-19A CHILLED WATER OUTLET TEMP CONTROL VALVE	AD	300EL	9.5	NA	RELAY	ASSUMED VALVE FAILS OPEN ON LOSS OF AIR;RECEIVES SIGNAL TO OPEN/CLOSE FROM RTD-123.	OPEN/CL OSED	OPEN	N
							S		SEISMIC				
501	B	7	70TCV-123B	CR/RR CHILLER ROOM AHU-19B CHILLED WATER OUTLET TEMP CONTROL VALVE	AD	300EL	9.5	NA	RELAY	ASSUMED VALVE FAILS OPEN ON LOSS OF AIR; RECEIVES SIGNAL TO OPEN/CLOSE FROM RTD-123.	OPEN/CL OSED	OPEN	N
							S		SEISMIC				
502	A	3	71-10502	INCOMING FEED FROM EDGA SUPPLY BREAKER	EG	272EL	24	71H05	RELAY		OPEN	CLOSED	Y
							A1		RULE OF BOX				
503	A	3	71-10504	DIESEL GEN A&C TIE BREAKER	EG	272EL	24	71H05	RELAY		OPEN	CLOSED	Y
							A1		RULE OF BOX				
504	A	3	71-10512	INCOMING FEED FROM EDGC SUPPLY BREAKER	EG	272EL	24	71H05	RELAY		OPEN	CLOSED	Y
							A1		RULE OF BOX				
505	A	3	71-10514	BUS 10300 TO 10500 TIE BREAKER	EG	272EL	24	71H05	RELAY		CLOSED	OPEN	Y
							A1		RULE OF BOX				
506	A	3	71-10560	AUX POWER TO UNIT SUBSTATION	EG	272EL	26	71H05	RELAY		CLOSED	CLOSED	N

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				L15 & L25 SUPPLY BREAKER									
							A1		RULE OF BOX				
507	B	3	71-10602	INCOMING FEED FROM EDGB SUPPLY BREAKER	EG	272EL	26	71H06	RELAY		OPEN	CLOSED	Y
							A1		RULE OF BOX				
508	B	3	71-10604	DIESEL GEN B&D TIE BREAKER	EG	272EL	26	71H06	RELAY		OPEN	CLOSED	Y
							A1		RULE OF BOX				
509	B	3	71-10612	INCOMING FEED FROM EDGD SUPPLY BREAKER	EG	272EL	26	71H06	RELAY		OPEN	CLOSED	Y
							A1		RULE OF BOX				
510	B	3	71-10614	BUS 10400 TO 10600 TIE BREAKER	EG	272EL	26	71H06	RELAY		CLOSED	OPEN	Y
							A1		RULE OF BOX				
511	B	3	71-10660	AUX POWER TO UNIT SUBSTATION L16 & L26 SUPPLY BREAKER	EG	272EL	26	71H06	RELAY		CLOSED	CLOSED	N
							A1		RULE OF BOX				
512	A	2	71-11502	600V MAIN SUPPLY TO L15 (BREAKER)	RB	300EL	2	71L15	RELAY	THIS BREAKER FEEDS A MOTOR CONTROL CENTER AND IS LOCALLY OPERATED WITH NO REMOTE CONTROL CAPABILITY. IT IS ASSUMED THAT THERE ARE NO RELAYS ASSOCIATED WITH THIS BREAKER AND THAT ANY SWITCHES/PUSHBUTTONS ARE MECHANICALLY RUGGED.	CLOSED	CLOSED	N
							R		RULE OF BOX				
513	B	2	71-11602	600V MAIN SUPPLY TO L16	RB	300EL	6	71L16	RELAY	THIS BREAKER FEEDS A MOTOR CONTROL CENTER AND IS LOCALLY OPERATED WITH NO REMOTE CONTROL CAPABILITY. IT IS ASSUMED THAT	CLOSED	CLOSED	N

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
										THERE ARE NO RELAYS ASSOCIATED WITH THIS BREAKER AND THAT ANY SWITCHES/PUSHBUTTONS ARE MECHANICALLY RUGGED.			
							R		RULE OF BOX				
514	A	2	71-12502	600V MAIN SUPPLY TO L25 (BREAKER)	EB	272EL	18.5	71L25	RELAY	THIS BREAKER FEEDS A MOTOR CONTROL CENTER AND IS LOCALLY OPERATED WITH NO REMOTE CONTROL CAPABILITY. IT IS ASSUMED THAT THERE ARE NO RELAYS ASSOCIATED WITH THIS BREAKER AND THAT ANY SWITCHES/PUSHBUTTONS ARE MECHANICALLY RUGGED.	CLOSED	CLOSED	N
							A		RULE OF BOX				
515	B	2	71-12602	600V MAIN SUPPLY TO L26(BREAKER)	EB	272EL	18.5	71L26	RELAY	THIS BREAKER FEEDS A MOTOR CONTROL CENTER AND IS LOCALLY OPERATED WITH NO REMOTE CONTROL CAPABILITY. IT IS ASSUMED THAT THERE ARE NO RELAYS ASSOCIATED WITH THIS BREAKER AND THAT ANY SWITCHES/PUSHBUTTONS ARE MECHANICALLY RUGGED.	CLOSED	CLOSED	N
							B		RULE OF BOX				
516	A	14	71ACA2	DISTRIBUTION PANEL 71ACA2 EMERGENCY CONTROL & INST POWER A	RR	284'8E L	11	NA	RELAY	NO RELAYS.	ON	ON	Y
							C		SEISMIC				
517	A	14	71ACA4	DISTRIBUTION PANEL 71ACA4 EMERGENCY CONTROL & INST POWER A	EG	272EL	24	NA	RELAY	NO RELAYS.	ON	ON	Y
							A		SEISMIC				
518	B	14	71ACB2	DISTRIBUTION PANEL 71ACB2 EMERG CONTROL & INST POWER B	RR	284'8	12	NA	RELAY	NO RELAYS.	ON	ON	Y
							E		SEISMIC				
519	B	14	71ACB4	DISTRIBUTION PANEL 71ACB4 EMERGENCY	EG	272EL	25	NA	RELAY	NO RELAYS.	ON	ON	Y

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
				CONTROL & INST POWER B									
							A		SEISMIC				
520	X	14	71ACUPS	DISTRIBUTION PANEL 71ACUPS UNINTERUPTABLE BUS	RR	284'8E L	11	71ACUPS	RELAY	NO RELAYS.	ENERGIZED	ENERGIZED	Y
							F		SEISMIC				
521	X	14	71ACUPS-1	DISTRIBUTION PANEL 71ACUPS-1 UNINTERUPTABLE BUS	RR	284'8E L	11	71ACUPS-1	RELAY	NO RELAYS.	ENERGIZED	ENERGIZED	Y
							F		SEISMIC				
522	A	15	71BAT-3A	LPCI INVERTER BATTERY	RB	344'6E L	5.5	NA	SEISMIC		ON	ON	Y
							P						
523	B	15	71BAT-3B	LPCI INVERTER BATTERY	RB	344'6E L	2	NA	SEISMIC		ON	ON	Y
							W						
524	A	16	71BC-1A	125 VDC STATION BATTERY CHARGER	BR	272EL	12.5	NA	RELAY	NO RELAYS. ONE UNDERVOLTAGE RELAY PROVIDING NON-ESSENTIAL ANNUNCIATION IS SHOWN ON FE-1AH REV 016, HOWEVER, THIS RELAY HAS NO PEDB ID.	ON	ON	Y
							E		SEISMIC				
525	B	16	71BC-1B	125 VDC STATION BATTERY CHARGER	BR	272EL	12.5	NA	RELAY	NO RELAYS. ONE UNDERVOLTAGE RELAY PROVIDING NON-ESSENTIAL ANNUNCIATION IS SHOWN ON FE-1AH REV 016, HOWEVER, THIS RELAY HAS NO PEDB ID.	ON	ON	Y
							F		SEISMIC				
526	A	14	71BCB-2A	BATTERY A CONTROL BOARD	BR	272EL	13	NA	RELAY	NO RELAYS. NO PROTECTIVE OR FAST TRANSFER RELAY SCHEMES ASSOCIATED WITH THIS BUS AT THIS LEVEL.	ON	ON	Y
							C		SEISMIC				
527	B	14	71BCB-2B	BATTERY B CONTROL BOARD	BR	272EL	13	NA	RELAY	NO RELAYS. NO PROTECTIVE OR FAST TRANSFER RELAY SCHEMES ASSOCIATED WITH THIS BUS AT THIS LEVEL.	ON	ON	Y
							G		SEISMIC				
528	A	1	71BMCC-1	RB WEST	RB	242'8E	1	NA	RELAY	NO RELAYS.	ON	ON	Y

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
				CRESCENT DC MOTOR CONTROL CENTER		L							
							R		SEISMIC				
529	B	1	71BMCC-2	RB EAST CRESCENT DC MOTOR CONTROL CENTER	RB	242'8E L	1	NA	RELAY	NO RELAYS.	ON	ON	Y
							D		SEISMIC				
530	A	1	71BMCC-3	RB WEST CRESCENT DC MOTOR CONTROL CENTER	RB	242'8E L	1	NA	RELAY	NO RELAYS.	ON	ON	Y
							R		SEISMIC				
531	B	1	71BMCC-4	RB EAST CRESCENT DC MOTOR CONTROL CENTER	RB	242EL	1	NA	RELAY	NO RELAYS.	ON	ON	Y
							D		SEISMIC				
532	B	1	71BMCC-6	RB DC MOTOR CONTROL CENTER	RB	272EL	8	NA	RELAY	NO RELAYS.	ON	ON	Y
							Y		SEISMIC				
533	A	14	71DC-A2	DISTRIBUTION PANEL 71DC-A2 DC CONTROL POWER A	RR	284'8E L	10	NA	RELAY	NO RELAYS.	JN	ON	Y
							F		SEISMIC				
534	A	14	71DC-A4	DISTRIBUTION PANEL 71DC-A4 DC CONTROL POWER A	EG	272EL	25	NA	RELAY	NO RELAYS.	ON	ON	Y
							A		SEISMIC				
535	A	14	71DC-A5	DISTRIBUTION PANEL 71DC-A5 DC CONTROL POWER A	RR	284'8E L	10	NA	RELAY	NO RELAYS.	ON	ON	Y
							G		SEISMIC				
536	B	14	71DC-B2	DISTRIBUTION PANEL 71DC-B2	RR	284'8E L	9	NA	RELAY	NO RELAYS.	ON	ON	Y

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
				DC CONTROL POWER B			F		SEISMIC				
537	B	14	71DC-B4	DISTRIBUTION PANEL 71DC-B4 DC CONTROL POWER B	EG	272EL	27	NA	RELAY	NO RELAYS.	ON	ON	Y
							A		SEISMIC				
538	A	3	71DSC-11561	L15 UNIT SUBSTATION TRANSF T-13 HIGH SIDE DISC SW	RB	300EL	2	71L15	RELAY	NO RELAYS.	CLOSED	CLOSED	N
							R		SEISMIC				
539	B	3	71DSC-11661	L16 UNIT SUBSTATION TRANSF T-14 HIGH SIDE DISC SW	RB	300EL	6	71L16	RELAY	NO RELAYS.	CLOSED	CLOSED	N
							P		SEISMIC				
540	A	3	71DSC-12561	L25 UNIT SUBSTATION TRANSF T-15 HIGH SIDE DISC SWITCH	EB	272EL	18.5	71L25	RELAY	NO RELAYS.	CLOSED	CLOSED	N
							B		SEISMIC				
541	B	3	71DSC-12661	L26 UNIT SUBSTATION TRANSF T-16 HIGH SIDE DISC SWITCH	EB	272EL	18.5	71L26	RELAY	NO RELAYS.	CLOSED	CLOSED	N
							B		SEISMIC				
542	A	14	71ESSA1	SAFEGUARD CONTROL & INST POWER A DISTRIBUTION PANEL	RR	284'8E L	11, C	NA	RELAY	NO RELAYS.	ON	ON	Y
									SEISMIC				
543	B	14	71ESSB1	SAFEGUARD CONTROL & INST	RR	284'8E L	12	NA	RELAY	NO RELAYS.	ON	ON	Y

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				POWER B DISTRIBUTION PANEL									
							E		SEISMIC				
544	A	3	71H05	4160V SWITCHGEAR DISTRIBUTION (BUS 10500)	EG	272EL	24	NA	RELAY	SEE BREAKERS 71-10514 AND 71-10560.	ON	ON	Y
							A1		SEISMIC	EXTENDED UNDERVOLTAGE AND PROGRAMMED RESTART CIRCUITS CONSERVATIVELY CLASSIFIED UNDER THIS COMPONENT.			
545	B	3	71H06	4160V SWITCHGEAR DISTRIBUTION (BUS 10600)	EG	272EL	27	NA	RELAY	SEE BREAKERS 71-10614 AND 71-10660.	ON	ON	Y
							A1		SEISMIC	EXTENDED UNDERVOLTAGE AND PROGRAMMED RESTART CIRCUITS CONSERVATIVELY CLASSIFIED UNDER THIS COMPONENT.			
546	A	16	71INV-3A	LPCI MOV INDEP POWER SUPPLY A INVERTER	RB	344'6E L	5.5	NA	RELAY	ASSUMING NORMAL SYSTEM LINEUP.	ON	ON	Y
							P		SEISMIC				
547	B	16	71INV-3B	LPCI MOV INDEP POWER SUPPLY B INVERTER	RB	344'6E L	2	NA	RELAY	ASSUMING NORMAL SYSTEM LINEUP.	ON	ON	Y
							W		SEISMIC				
548	A	2	71L15	600V SWITCHGEAR DISTRIBUTION (BUS 11500)	RB	300EL	2	NA	RELAY	ALL LOAD CENTER FEEDER BREAKERS TO MOTOR CONTROL CENTERS ARE LOCALLY OPERATED WITH NO REMOTE CONTROL CAPABILITY. IT IS ASSUMED THAT THERE ARE NO RELAYS ASSOCIATED WITH THESE BREAKERS AND THAT AND SWITCHES/PUSHBUTTONS ARE MECHANICALLY RUGGED.	ON	ON	Y
							R		SEISMIC	SEE BREAKER 71-11502.			
549	B	2	71L16	600V SWITCHGEAR DISTRIBUTION (BUS 11600)	RB	300EL	6	NA	RELAY	ALL LOAD CENTER FEEDER BREAKERS TO MOTOR CONTROL CENTERS ARE LOCALLY OPERATED WITH NO REMOTE CONTROL CAPABILITY. IT IS ASSUMED THAT THERE ARE NO RELAYS	ON	ON	Y

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
										ASSOCIATED WITH THESE BREAKERS AND THAT ANY SWITCHES/PUSHBUTTONS ARE MECHANICALLY RUGGED.			
							P		SEISMIC	SEE BREAKER 71-11602.			
550	A	2	71L25	600V SWITCHGEAR DISTRIBUTION (BUS 12500)	EB	272EL	18.5	NA	RELAY	ALL LOAD CENTER FEEDER BREAKERS FOR MOTOR CONTROL CENTERS ARE LOCALLY OPERATED WITH NO REMOTE CONTROL CAPABILITY. IT IS ASSUMED THAT THERE ARE NO RELAYS ASSOCIATED WITH THESE BREAKERS AND THAT ANY SWITCHES/PUSHBUTTONS ARE MECHANICALLY RUGGED.	ON	ON	Y
							A1		SEISMIC	SEE BREAKER 71-12502.			
551	B	2	71L26	600V SWITCHGEAR DISTRIBUTION (BUS 12600)	EB	272EL	18.5	NA	RELAY	ALL LOAD CENTER FEEDER BREAKERS TO MOTOR CONTROL CENTERS ARE LOCALLY OPERATED WITH NO REMOTE CONTROL CAPABILITY. IT IS ASSUMED THAT THERE ARE NO RELAYS ASSOCAITED WITH THESE BREAKERS AND THAT ANY SWITCHES/PUSHBUTTONS ARE MECHANICALLY RUGGED.	ON	ON	Y
							B		SEISMIC	SEE BREAKER 71-12602.			
552	A	1	71MCC-151	600V MOTOR CONTROL CENTER (BUS 115100)	RB	272EL	1	NA	RELAY	NO RELAYS.	ON	ON	Y
							T		SEISMIC				
553	A	1	71MCC-152	600V MOTOR CONTROL CENTER (BUS 115200)	RB	272EL	8	NA	RELAY	NO RELAYS.	ON	ON	Y
							P		SEISMIC				
554	A	1	71MCC-153	600V MOTOR CONTROL CENTER (BUS 115300)	RB	242'8E L	.5	NA	RELAY	NO RELAYS.	ON	ON	Y
							A		SEISMIC				
555	A	1	71MCC-155	600V MOTOR CONTROL CENTER (BUS 115500)	RB	242'8E L	.5	NA	RELAY		ON	ON	Y
							A		SEISMIC				
556	A	1	71MCC-156	600V MOTOR	RB	344'6E	3.5	NA	RELAY	NO RELAYS.	ON	ON	Y

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				CONTROL CENTER(BUS 115600)		L							
							T		SEISMIC				
557	B	1	71MCC-161	600V MOTOR CONTROL CENTER (BUS 116100)	RB	272EL	1.5	NA	RELAY	NO RELAYS.	ON	ON	Y
							W		SEISMIC				
558	B	1	71MCC-162	600V MOTOR CONTROL CENTER (BUS 116200)	RB	272EL	7	NA	RELAY	NO RELAYS.	ON	ON	Y
							D		SEISMIC				
559	B	1	71MCC-163	600V MOTOR CONTROL CENTER (BUS 116300)	RB	242'8E L	1.5	NA	RELAY	NO RELAYS.	ON	ON	Y
							D		SEISMIC				
560	B	1	71MCC-165	600V MOTOR CONTROL CENTER (BUS 116500)	RB	242'8E L	1.5	NA	RELAY		ON	ON	Y
							D		SEISMIC				
561	B	1	71MCC-166	600V MOTOR CONTROL CENTER(BUS 115600)	RB	344'6E L	2	NA	RELAY	NO RELAYS.	ON	ON	Y
							D		SEISMIC				
562	A	1	71MCC-251	600V MOTOR CONTROL CENTER (BUS 125100)	EB	272EL	18	NA	RELAY	NO RELAYS.	ON	ON	Y
							A		SEISMIC				
563	A	1	71MCC-252	600V MOTOR CONTROL CENTER(BUS 125200)	EB	272EL	18	NA	RELAY	NO RELAYS.	ON	ON	Y
							A		SEISMIC				
564	A	1	71MCC-253	600V MOTOR CONTROL CENTER (BUS 125300)	AD	300EL	10	NA	RELAY	NO RELAYS.	ON	ON	Y
							C		SEISMIC				

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565	A	1	71MCC-254	600V MOTOR CONTROL CENTER (BUS 125400)	EG	272EL	23	NA	RELAY	NO RELAYS.	ON	ON	Y
							A1		SEISMIC				
566	B	1	71MCC-261	600V MOTOR CONTROL CENTER (BUS 126100)	EB	272EL	18	NA	RELAY	NO RELAYS.	ON	ON	Y
							B		SEISMIC				
567	B	1	71MCC-262	600V MOTOR CONTROL CENTER(BUS 126200)	EB	272EL	18	NA	RELAY	NO RELAYS.	ON	ON	Y
							B		SEISMIC				
568	B	1	71MCC-263	600V MOTOR CONTROL CENTER (BUS 126300)	AD	300EL	9	NA	RELAY	NO RELAYS.	ON	ON	Y
							C		SEISMIC				
569	B	1	71MCC-264	600V MOTOR CONTROL CENTER (BUS 126400)	EG	272EL	25.5	NA	RELAY	NO RELAYS.	ON	ON	Y
							A1		SEISMIC				
570	A	4	71PT-71ACA2	EMERGENCY DISTRIBUTION 15KVA TRANSFORMER 71MCC-253-OD3	CS	272EL	11	NA	SEISMIC		ON	ON	Y
							C						
571	A	4	71PT-71ACA4	EMERGENCY DISTRIBUTION 7.5KVA TRANSFORMER 71MCC-254-A3A	EG	272EL	24	NA	SEISMIC		ON	ON	Y
							A						
572	B	4	71PT-71ACB2	EMERGENCY DISTRIBUTION 15KVA TRANSFORMER 71MCC-263-OE3	CS	272EL	12	NA	SEISMIC		ON	ON	Y
							E						

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
573	B	4	71PT-71ACB4	EMERGENCY DISTRIBUTION 7.5KVA TRANSFORMER 71MCC-264-A3A	EG	272EL	26 A	NA	SEISMIC		ON	ON	Y
574	X	4	71PT-71ACUPS	UNINTERRUPTIBLE BUS 37.5KVA TRANSFORMER 71MCC-252-OD2	EB	272EL	14 A	NA	SEISMIC		ON	ON	Y
575	A	4	71PT-71ESSA1	SAFEGUARD BUS A DISTRIBUTION 15KVA TRANSFORMER 71MCC-252-OC2	CS	272EL	11 C	NA	SEISMIC		ON	ON	Y
576	B	4	71PT-71ESSB1	SAFEGUARD BUS B DISTRIBUTION 15KVA TRANSFORMER 71MCC-252-OB3	CS	272EL	12 E	NA	SEISMIC		ON	ON	Y
577	A	15	71SB-1	125 VOLT STATION BATTERY A	BR	272EL	12 E	NA	SEISMIC		ON	ON	Y
578	B	15	71SB-2	125 VOLT STATION BATTERY B	BR	272EL	12 F	NA	SEISMIC		ON	ON	Y
579	A	4	71T-13	600V UNIT SUBSTATION L15 TRANSFORMER	RB	300EL	2 R	71L15	RELAY SEISMIC	NO RELAYS.	ON	ON	Y
580	B	4	71T-14	600V UNIT SUBSTATION L16 TRANSFORMER	RB	300EL	6 P	71L16	RELAY SEISMIC	NO RELAYS.	ON	ON	Y

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581	A	4	71T-15	SWITCHGEAR L25 100KVA TRANSFORMER 71-10560	EB	272EL	19	71L25	RELAY	NO RELAYS.	ON	ON	Y
							AB		SEISMIC				
582	B	4	71T-16	SWITCHGEAR L26 100KVA TRANSFORMER 71-10660	EB	272EL	18.5	71L26	RELAY	NO RELAYS.	ON	ON	Y
							AB		SEISMIC				
583	X	20	71UPP	UNINTERRUPTABLE BUS MG SET 71UPS-1 CONTROL PANEL	EB	272EL	14	71UPP	SEISMIC	REFER TO COMPONENT 71UPS-1 FOR RELAY EVALUATION.	ON	ON	Y
							B						
584	X	13	71UPS-1	UNINTERRUPTABLE BUS MG SET	EB	272EL	14	71UPS-1	RELAY	ID CREATED BY EPM.	ON	ON	Y
							B		SEISMIC	71UPS-1 IS THE MOTOR GENERATOR SET. THIS COMPONENT IS ASSUMED TO BE A SKID INCLUDING THE FOLLOWING "RULE OF BOX" COMPONENTS: 71UPS-1(GEN), 71UPS-1(PMG), 71UPS-1(ACM), AND 71UPS-1(DCM).			
585	A	10	72AHU-30A	BATTERY ROOM A AIR HANDLING UNIT	BR	282EL	12	NA	RELAY	SYSTEMS COMMENT: CHATTER UNACCEPTABLE SINCE THE INTRODUCTION OF COLD AIR INTO THE BATTERY ROOMS COULD RESULT IN QUICK DEPLETION OF BATTERY CAPACITY. CREDIT MAY BE ABLE TO BE TAKEN FOR OPERATOR ACTION PER OP-59A TO ENSURE PROPER BR VENTILATION SYSTEM OPERATION FOLLOWING SSE.	ON	OFF	Y
							E		SEISMIC				
586	B	10	72AHU-30B	BATTERY ROOM B AIR HANDLING UNIT	BR	282EL	12	NA	RELAY	SYSTEMS COMMENT: CHATTER UNACCEPTABLE SINCE THE INTRODUCTION OF COLD AIR INTO THE BATTERY ROOMS COULD RESULT IN QUICK DEPLETION OF BATTERY CAPACITY. CREDIT MAY BE ABLE TO BE TAKEN FOR OPERATOR ACTION PER OP-59A TO ENSURE PROPER BR VENTILATION SYSTEM OPERATION FOLLOWING SSE.	ON	OFF	Y
							G		SEISMIC				
587	A	10	72FD-13	BATTERY ROOM A VENT EXHAUST	BR	282EL	13	NA	SEISMIC	CLOSURE OF THIS DEVICE DURING AN SSE WILL RESULT IN BLOCKAGE OF TRAIN "A" BR	OPEN	OPEN	N

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				FANS A & C SUCT FIRE DAMPER			E			VENTILATION FLOW PATH.			
588	B	10	72FD-14	BATTERY ROOM B VENT EXHAUST FANS B & D SUCT FIRE DAMPER	BR	282EL	13 F	NA	SEISMIC	CLOSURE OF THIS DEVICE DURING AN SSE WILL RESULT IN BLOCKAGE OF TRAIN "A" BR VENTILATION FLOW PATH.	OPEN	OPEN	N
589	A	10	72FD-3	BATTERY ROOM A VENT EXHAUST FANS A & C DISCH FIRE DAMPER	BR	282EL	13 E	NA	SEISMIC	CLOSURE OF THIS DEVICE DURING AN SSE WILL RESULT IN BLOCKAGE OF TRAIN "A" BR VENTILATION FLOW PATH.	OPEN	OPEN	N
590	A	10	72FD-4	BATTERY ROOM A RECIRC FAN A EXHAUST FIRE DAMPER	BR	272EL	12.5 E	NA	SEISMIC	CLOSURE OF THIS DEVICE DURING AN SSE WILL RESULT IN BLOCKAGE OF TRAIN "A" BR VENTILATION FLOW PATH.	OPEN	OPEN	N
591	X	10	72FD-5	BATTERY ROOM VENT AHU-30B SUPPLY FIRE DAMPER	BR	272EL	12 G	NA	SEISMIC	CLOSURE OF THIS DEVICE DURING AN SSE WILL RESULT IN BLOCKAGE OF TRAIN "A" BR VENTILATION FLOW PATH.	OPEN	OPEN	N
592	A	10	72FD-6	BATTERY ROOM A AHU-30A INLET FIRE DAMPER	BR	272EL	12.5 E	NA	SEISMIC	CLOSURE OF THIS DEVICE DURING AN SSE WILL RESULT IN BLOCKAGE OF TRAIN "A" BR VENTILATION FLOW PATH.	OPEN	OPEN	N
593	A	9	72FN-31A	BATTERY ROOM A RECIRC FAN	BR	282EL	12 E	NA	RELAY SEISMIC	CREDIT TAKEN FOR OPERATOR ACTIONS PER OP-59A TO START UP AND MONITOR BR VENTILATION SYSTEM OPERATION.	ON	ON	Y
594	B	9	72FN-31B	BATTERY ROOM B RECIRC FAN	BR	282EL	12 F	NA	RELAY SEISMIC	CREDIT TAKEN FOR OPERATOR ACTIONS PER OP-59A TO START UP AND MONITOR BR VENTILATION SYSTEM OPERATION.	ON	ON	Y
595	A	9	72FN-46A	BATTERY ROOM A EXHAUST FAN	BR	282EL	12	NA	RELAY	1 OF 2 (A OR C) FANS NORMALLY RUNNING WITH OTHER IN AUTO; CREDIT TAKEN FOR OPERATOR ACTION PER OP-59A TO ENSURE PROPER BR	ON	ON	Y

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										VENTILATION SYSTEM OPERATION FOLLOWING SSE.			
							E		SEISMIC				
596	B	9	72FN-46B	BATTERY ROOM B EXHAUST FAN	BR	282EL	12	NA	RELAY	1 OF 2 (B OR D) FANS NORMALLY RUNNING WITH OTHER IN AUTO; CREDIT TAKEN FOR OPERATOR ACTION PER OP-59A TO ENSURE PROPER BR VENTILATION SYSTEM OPERATION FOLLOWING SSE.	ON	ON	Y
							F		SEISMIC				
597	A	9	72FN-46C	BATTERY ROOM A EXHAUST FAN	BR	282EL	12	NA	RELAY	1 OF 2 (A OR C) FANS NORMALLY RUNNING WITH OTHER IN AUTO; CREDIT TAKEN FOR OPERATOR ACTION PER OP-59A TO ENSURE PROPER BR VENTILATION SYSTEM OPERATION FOLLOWING SSE.	ON	ON	Y
							E		SEISMIC				
598	B	9	72FN-46D	BATTERY ROOM D EXHAUST FAN	BR	282EL	12	NA	RELAY	1 OF 2 (B OR D) FANS NORMALLY RUNNING WITH OTHER IN AUTO; CREDIT TAKEN FOR OPERATOR ACTION PER OP-59A TO ENSURE PROPER BR VENTILATION SYSTEM OPERATION FOLLOWING SSE.	ON	ON	Y
							F		SEISMIC				
599	A	10	72MOD-100A	BATTERY ROOM A AHU-30A FRESH AIR SUPPLY ISOL DAMPER	BR	282EL	12	72AHU-30A	RELAY	DAMPER OPERATES IN CONJUNCTION WITH AHU-30A.	OPEN/CL OSED	CLOSED	Y
							E		RULE OF BOX				
600	B	10	72MOD-100B	BATTERY ROOM B AHU-30B FRESH AIR SUPPLY ISOL DAMPER	BR	282EL	12	72AHU-30B	RELAY	DAMPER OPERATES IN CONJUNCTION WITH AHU-30B.	OPEN/CL OSED	CLOSED	Y
							F		RULE OF BOX				
601	A	10	72MOD-101A	BATTERY ROOM A AHU-30A RECIRC ISOL DAMPER	BR	282EL	12	72AHU-30A	RELAY	DAMPER OPERATES IN CONJUNCTION WITH AHU-30A.	OPEN/CL OSED	OPEN	Y
							E		RULE OF BOX				
602	B	10	72MOD-101B	BATTERY ROOM B AHU-30B RECIRC	BR	282EL	12	72AHU-30B	RELAY	DAMPER OPERATES IN CONJUNCTION WITH AHU-30B.	OPEN/CL OSED	OPEN	Y

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
				ISOL DAMPER									
							F		RULE OF BOX				
603	A	10	72MOD-102A	BATTCRY ROOM A RECIRC FAN A DISCH ISOL DAMPER	BR	282EL	12	NA	RELAY	DAMPER OPERATES IN CONJUNCTION WITH FN-31A.	OPEN/CL OSED	OPEN	Y
							E		SEISMIC				
604	B	10	72MOD-102B	BATTERY ROOM B RECIRC FAN B DISCH ISOL DAMPER	BR	282EL	12	NA	RELAY	DAMPER OPERATES IN CONJUNCTION WITH FN-31B.	OPEN/CL OSED	OPEN	Y
							F		SEISMIC				
605	A	10	72MOD-103A	BATTERY ROOM A EXHAUST FAN A DISCH ISOL DAMPER	BR	282EL	12	72FN-46A	RELAY	DAMPER OPERATES IN CONJUNCTION WITH FN-46A.	OPEN/CL OSED	OPEN	Y
							E		RULE OF BOX				
606	B	10	72MOD-103B	BATTERY ROOM B EXHAUST FAN B DISCH ISOL DAMPER	BR	282EL	12	72FN-46B	RELAY	DAMPER OPERATES IN CONJUNCTION WITH FN-46B.	OPEN/CL OSED	OPEN	Y
							F		RULE OF BOX				
607	A	10	72MOD-103C	BATTERY ROOM A EXHAUST FAN C DISCH ISOL DAMPER	BR	282EL	12	72FN-46C	RELAY	DAMPER OPERATES IN CONJUNCTION WITH FN-46C.	OPEN/CL OSED	OPEN	Y
							E		RULE OF BOX				
608	B	10	72MOD-103D	BATTERY ROOM B EXHAUST FAN D DISCH ISOL DAMPER	BR	282EL	12	72FN-46D	RELAY	DAMPER OPERATES IN CONJUNCTION WITH FN-46D.	OPEN/CL OSED	OPEN	Y
							F		RULE OF BOX				
609	A	10	72MOD-104A	BATTERY ROOM A VENT RECIRC FAN A EXHAUST	BR	282EL	12	NA	RELAY	DAMPER OPERATES IN CONJUNCTION WITH FN-46C.	OPEN/CL OSED	OPEN	Y

Seq#	Safety Train	Equip. Class	Main..... Equipment... Designation	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
				DAMPER			E		SEISMIC				
610	B	10	72MOD-104B	BATTERY ROOM B VENT RECIRC FAN B EXHAUST DAMPER	BR	282EL	12	NA	RELAY	DAMPER OPERATES IN CONJUNCTION WITH FN-31B.	OPEN/CLOSED	OPEN	Y
							F		SEISMIC				
611	B	10	73FD-1A	ESW/RHRSW PUMP ROOM A FIRE DAMPER	SP	255EL	24.5	NA	SEISMIC	JAF MOD. MI-92-331 AND MI-91-198 HAVE REMOVED THE ELECTRO-THERMAL LINK (ETL) FROM THIS DAMPER. THE DAMPER HAS NO ELECTRICAL INTERFACE. DAMPER CLOSURE IS NOW ACCOMPLISHED VIA FUSIBLE LINK.	OPEN	OPEN	N
							BA						
612	B	10	73FD-1B	ESW/RHRSW PUMP ROOM B FIRE DAMPER	SP	255EL	25.5	NA	SEISMIC	JAF MOD. MI-92-331 AND MI-91-198 HAVE REMOVED THE ELECTRO-THERMAL LINK (ETL) FROM THIS DAMPER. THE DAMPER HAS NO ELECTRICAL INTERFACE. DAMPER CLOSURE IS NOW ACCOMPLISHED VIA FUSIBLE LINK.	OPEN	OPEN	N
							BA						
613	A	10	73FD-1C	ESW/RHRSW PUMP ROOM B FIRE DAMPER	SP	255EL	26	NA	SEISMIC	JAF MOD. MI-92-331 AND MI-91-198 HAVE REMOVED THE ELECTRO-THERMAL LINK (ETL) FROM THIS DAMPER. THE DAMPER HAS NO ELECTRICAL INTERFACE. DAMPER CLOSURE IS NOW ACCOMPLISHED VIA FUSIBLE LINK.	OPEN	OPEN	N
							BA						
614	A	10	73FD-1D	WEST DIESEL FIRE PUMP ROOM FIRE DAMPER	SP	255EL	26.5	NA	SEISMIC	JAF MOD. MI-92-331 AND MI-91-198 HAVE REMOVED THE ELECTRO-THERMAL LINK (ETL) FROM THIS DAMPER. THE DAMPER HAS NO ELECTRICAL INTERFACE. DAMPER CLOSURE IS NOW ACCOMPLISHED VIA FUSIBLE LINK.	OPEN	OPEN	N
							BA						
615	A	9	73FN-3A	ESW/RHRSW PUMP ROOM EXHAUST FAN A	SW	255EL	26	NA	RELAY	SYSTEMS COMMENT: FAN NORMALLY OPERATES IN AUTO; ASSUME CHATTER ACCEPTABLE IF CONTROL ROOM SWITCHES ARE AVAILABLE TO RESTART FANS AFTER SSE.	ON	ON	Y
							A		SEISMIC				
616	B	9	73FN-3B	ESW/RHRSW PUMP ROOM EXHAUST FAN B	SW	255EL	25	NA	RELAY	SYSTEMS COMMENT: FAN NORMALLY OPERATED IN AUTO; ASSUME CHATTER ACCEPTABLE IS CONTROL ROOM SWITCHES ARE AVAILABLE TO RESTART FANS AFTER SSE.	ON	ON	Y

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
				ISOL DAMPER									
							F		RULE OF BOX				
603	A	10	72MOD-102A	BATTERY ROOM A RECIRC FAN A DISCH ISOL DAMPER	BR	282EL	12	NA	RELAY	DAMPER OPERATES IN CONJUNCTION WITH FN-31A.	OPEN/CL OSED	OPEN	Y
							E		SEISMIC				
604	B	10	72MOD-102B	BATTERY ROOM B RECIRC FAN B DISCH ISOL DAMPER	BR	282EL	12	NA	RELAY	DAMPER OPERATES IN CONJUNCTION WITH FN-31B.	OPEN/CL OSED	OPEN	Y
							F		SEISMIC				
605	A	10	72MOD-103A	BATTERY ROOM A EXHAUST FAN A DISCH ISOL DAMPER	BR	282EL	12	72FN-46A	RELAY	DAMPER OPERATES IN CONJUNCTION WITH FN-46A.	OPEN/CL OSED	OPEN	Y
							E		RULE OF BOX				
606	B	10	72MOD-103B	BATTERY ROOM B EXHAUST FAN B DISCH ISOL DAMPER	BR	282EL	12	72FN-46B	RELAY	DAMPER OPERATES IN CONJUNCTION WITH FN-46B.	OPEN/CL OSED	OPEN	Y
							F		RULE OF BOX				
607	A	10	72MOD-103C	BATTERY ROOM A EXHAUST FAN C DISCH ISOL DAMPER	BR	282EL	12	72FN-46C	RELAY	DAMPER OPERATES IN CONJUNCTION WITH FN-46C.	OPEN/CL OSED	OPEN	Y
							E		RULE OF BOX				
608	B	10	72MOD-103D	BATTERY ROOM B EXHAUST FAN D DISCH ISOL DAMPER	BR	282EL	12	72FN-46D	RELAY	DAMPER OPERATES IN CONJUNCTION WITH FN-46D.	OPEN/CL OSED	OPEN	Y
							F		RULE OF BOX				
609	A	10	72MOD-104A	BATTERY ROOM A VENT RECIRC FAN A EXHAUST	BR	282EL	12	NA	RELAY	DAMPER OPERATES IN CONJUNCTION WITH FN-46C.	OPEN/CL OSED	OPEN	Y

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				DAMPER			E		SEISMIC				
610	B	10	72MOD-104B	BATTERY ROOM B VENT RECIRC FAN B EXHAUST DAMPER	BR	282EL	12	NA	RELAY	DAMPER OPERATES IN CONJUNCTION WITH FN-31B.	OPEN/CLOSED	OPEN	Y
							F		SEISMIC				
611	B	10	73FD-1A	ESW/RHRSW PUMP ROOM A FIRE DAMPER	SP	255EL	24.5	NA	SEISMIC	JAF MOD. MI-92-331 AND MI-91-198 HAVE REMOVED THE ELECTRO-THERMAL LINK (ETL) FROM THIS DAMPER. THE DAMPER HAS NO ELECTRICAL INTERFACE. DAMPER CLOSURE IS NOW ACCOMPLISHED VIA FUSIBLE LINK.	OPEN	OPEN	N
							BA						
612	B	10	73FD-1B	ESW/RHRSW PUMP ROOM B FIRE DAMPER	SP	255EL	25.5	NA	SEISMIC	JAF MOD. MI-92-331 AND MI-91-198 HAVE REMOVED THE ELECTRO-THERMAL LINK (ETL) FROM THIS DAMPER. THE DAMPER HAS NO ELECTRICAL INTERFACE. DAMPER CLOSURE IS NOW ACCOMPLISHED VIA FUSIBLE LINK.	OPEN	OPEN	N
							BA						
613	A	10	73FD-1C	ESW/RHRSW PUMP ROOM B FIRE DAMPER	SP	255EL	26	NA	SEISMIC	JAF MOD. MI-92-331 AND MI-91-198 HAVE REMOVED THE ELECTRO-THERMAL LINK (ETL) FROM THIS DAMPER. THE DAMPER HAS NO ELECTRICAL INTERFACE. DAMPER CLOSURE IS NOW ACCOMPLISHED VIA FUSIBLE LINK.	OPEN	OPEN	N
							BA						
614	A	10	73FD-1D	WEST DIESEL FIRE PUMP ROOM FIRE DAMPER	SP	255EL	26.5	NA	SEISMIC	JAF MOD. MI-92-331 AND MI-91-198 HAVE REMOVED THE ELECTRO-THERMAL LINK (ETL) FROM THIS DAMPER. THE DAMPER HAS NO ELECTRICAL INTERFACE. DAMPER CLOSURE IS NOW ACCOMPLISHED VIA FUSIBLE LINK.	OPEN	OPEN	N
							BA						
615	A	9	73FN-3A	ESW/RHRSW PUMP ROOM EXHAUST FAN A	SW	255EL	26	NA	RELAY	SYSTEMS COMMENT: FAN NORMALLY OPERATES IN AUTO; ASSUME CHATTER ACCEPTABLE IF CONTROL ROOM SWITCHES ARE AVAILABLE TO RESTART FANS AFTER SSE.	ON	ON	Y
							A		SEISMIC				
616	B	9	73FN-3B	ESW/RHRSW PUMP ROOM EXHAUST FAN B	SW	255EL	25	NA	RELAY	SYSTEMS COMMENT: FAN NORMALLY OPERATED IN AUTO; ASSUME CHATTER ACCEPTABLE IS CONTROL ROOM SWITCHES ARE AVAILABLE TO RESTART FANS AFTER SSE.	ON	ON	Y

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
							A		SEISMIC				
617	A	10	92CD-1	EDG A SWITCHGEAR AREA VENT CO2 ISOL DAMPER	EG	272EL	24.5	NA	RELAY		OPEN	OPEN	N
							A1		SEISMIC				
618	B	10	92CD-2	EDG B SWITCHGEAR AREA VENT CO2 ISOL DAMPER	EG	272EL	24.5	NA	RELAY		OPEN	OPEN	N
							A1		SEISMIC				
619	A	10	92CD-3	EDG C SWITCHGEAR AREA VENT CO2 ISOL DAMPER	EG	272EL	24.5	NA	RELAY		OPEN	OPEN	N
							A1		SEISMIC				
620	B	10	92CD-4	EDG D SWITCHGEAR AREA VENT CO2 ISOL DAMPER	EG	272EL	24.5	NA	RELAY		OPEN	OPEN	N
							A1		SEISMIC				
621	A	10	92FD-1	EMERG DIESEL GEN VENT SUPPLY FANS A & C FRESH AIR SUCT FIRE DAMPER	EG	272EL	23	NA	SEISMIC	DAMPER MUST REMAIN OPEN TO ENSURE PROPER DG ROOM VENTILATION SYSTEM OPERATION.	OPEN	OPEN	N
							A1						
622	B	10	92FD-10	EMERG DIESEL GEN VENT SUPPLY FANS B & D FRESH AIR SUCT FIRE DAMPER	EG	272EL	28	NA	SEISMIC	DAMPER MUST REMIAN OPEN TO ENSURE PROPER DG ROOM VENTILATION SYSTEM OPERATION.	OPEN	OPEN	N
							A1						
623	A	10	92FD-2	EMERG DIESEL GEN VENT SUPPLY FAN A RECIRC SUCT FIRE DAMPER	EG	272EL	23.5	NA	SEISMIC	DAMPER MUST REMAIN OPEN TO ENSURE PROPER DG ROOM VENTILATION SYSTEM OPERATION.	OPEN	OPEN	N
							A1						

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
624	A	10	92FD-3	EMERG DIESEL GEN VENT SUPPLY FAN A DISCH FIRE DAMPER	EG	272EL	24.5 A1	NA	SEISMIC	DAMPER MUST REMAIN OPEN TO ENSURE PROPER DG ROOM VENTILATION SYSTEM OPERATION.	OPEN	OPEN	N
625	A	10	92FD-4	EMERG DIESEL GEN VENT SUPPLY FAN C RECIRC SUCT FIRE DAMPER	EG	272EL	24.5 A1	NA	SEISMIC	DAMPER MUST REMAIN OPEN TO ENSURE PROPER DG ROOM VENTILATION SYSTEM OPERATION.	OPEN	OPEN	N
626	A	10	92FD-5	EMERG DIESEL GEN VENT SUPPLY FAN C DISCH FIRE DAMPER	EG	272EL	25.5 A1	NA	SEISMIC	DAMPER MUST REMAIN OPEN TO ENSURE PROPER DG ROOM VENTILATION SYSTEM OPERATION.	OPEN	OPEN	N
627	B	10	92FD-6	EMERG DIESEL GEN VENT SUPPLY FAN B DISCH FIRE DAMPER	EG	272EL	25.5 A1	NA	SEISMIC	DAMPER MUST REMAIN OPEN TO ENSURE PROPER DG ROOM VENTILATION SYSTEM OPERATION.	OPEN	OPEN	N
628	B	10	92FD-7	EMERG DIESEL GEN VENT SUPPLY FAN B RECIRC SUCT FIRE DAMPER	EG	272EL	26.5 A1	NA	SEISMIC	DAMPER MUST REMAIN OPEN TO ENSURE PROPER DG ROOM VENTILATION SYSTEM OPERATION.	OPEN	OPEN	N
629	B	10	92FD-8	EMERG DIESEL GEN VENT SUPPLY FAN D DISCH FIRE DAMPER	EG	272EL	27 A1	NA	SEISMIC	DAMPER MUST REMAIN OPEN TO ENSURE PROPER DG ROOM VENTILATION SYSTEM OPERATION.	OPEN	OPEN	N
630	B	10	92FD-9	EMERG DIESEL GEN VENT SUPPLY FAN D RECIRC SUCT FIRE DAMPER	EG	272EL	27.5 A1	NA	SEISMIC	DAMPER MUST REMAIN OPEN TO ENSURE PROPER DG ROOM VENTILATION SYSTEM OPERATION.	OPEN	OPEN	N
631	A	9	92FN-1A	EMERG DIESEL GEN A VENT	EG	272EL	24	NA	RELAY	SYSTEM IN AUTO WITH MANUAL START CAPABILITY AT PANEL 92HV-9A. ASSUME LOCAL	OFF	ON	Y

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				SUPPLY FAN						VERIFICATION OF SYSTEM OPERATION POST-SSE. NO CREDIT TAKEN FOR MCR TEMPERATURE INDICATION ON 09-75 SINCE QA CAT II/III.			
							A1		SEISMIC				
632	B	9	92FN-1B	EMERG DIESEL GEN B VENT SUPPLY FAN	EG	272EL	26	NA	RELAY	SYSTEM IN AUTO WITH MANUAL START CAPABILITY AT PANEL 92HV-9B. ASSUME LOCAL VERIFICATION OF SYSTEM OPERATION POST-SSE. NO CREDIT TAKEN FOR MCR TEMPERATURE INDICATION ON 09-75 SINCE QA CAT II/III.	OFF	ON	Y
							A1		SEISMIC				
633	A	9	92FN-1C	EMERG DIESEL GEN C VENT SUPPLY FAN	EG	272EL	25	NA	RELAY	SYSTEM IN AUTO WITH MANUAL START CAPABILITY AT 92HV-9A. ASSUME LOCAL VERICATION OF SYSTEM OPERATION POST-SSE. NO CREDIT TAKEN FOR MCR TEMPERATURE INDICATION ON 09-75 SINCE IT IS QA CAT II/III.	OFF	ON	Y
							A1		SEISMIC				
634	B	9	92FN-1D	EMERG DIESEL GEN D VENT SUPPLY FAN	EG	272EL	27	NA	RELAY	SYSTEM IN AUTO WITH MANUAL START CAPABILITY AT 92HV-9B. ASSUME LOCAL VERIFICATION OF SYSTEM OPERATION POST-SSE. NO CREDIT TAKEN FOR MCR TEMPERATURE INDICATION AT 09-75 SINCE IT IS QA CAT II/III.	OFF	ON	Y
							A1		SEISMIC				
635	A	20	92HV-9A	EDG VENT A & C HEATING/VENT LOCAL CONTROL PANEL	EG	272EL	23	92HV-9A	SEISMIC	92FN-1A INCLUDES POWER AND RELAY EVALUATION. 92HV-9A IS REQUIRED FOR LOCALLY STARTING THE DG AC SYSTEM. SEE REMARK FOR 92FN-1A.	N/A	N/A	N
							A1						
636	B	20	92HV-9B	EDG VENT B & D HEATING/VENT LOCAL CONTROL PANEL	EG	272EL	25.5	92HV-9B	SEISMIC	92FN-1B INCLUDES POWER AND RELAY EVALUATION. 92HV-9B IS REQUIRED FOR LOCALLY STARTING THE DG AC SYSTEM. SEE REMARK FOR 92FN-1A.	N/A	N/A	N
							A1						
637	A	10	92MOD-143A	EMERG DIESEL GEN A VENT EXHAUST ISOL DAMPER	EG	272EL	24	NA	RELAY	ALL ASSOCIATED RELAYS APPEAR IN THE SCHEME FOR 92FN-1A.	CLOSED	OPEN	Y
							A4		SEISMIC	DAMPER INTERLOCKED WITH FAN-1A AND RTD-101A.			

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										NO RELAYS IN INSTRUMENT LOOP.			
638	B	10	92MOD-143B	EMERG DIESEL GEN B VENT EXHAUST ISOL DAMPER	EG	272EL	26.5	NA	RELAY	ALL ASSOCIATED RELAYS APPEAR IN THE SCHEME FOR 92FN-1B.	CLOSED	OPEN	Y
							A4		SEISMIC	DAMPER INTERLOCKED WITH FAN-1B AND RTD-101B. NO RELAYS IN INSTRUMENT LOOP.			
639	A	10	92MOD-143C	EMERG DIESEL GEN C VENT EXHAUST ISOL DAMPER	EG	272EL	25	NA	RELAY	ALL ASSOCIATED RELAYS APPEAR IN THE SCHEME FOR 92FN-1C.	CLOSED	OPEN	Y
							A4		SEISMIC	DAMPER INTERLOCKED WITH FAN-1C AND RTD-101C. NO RELAYS IN INSTRUMENT LOOP.			
640	B	10	92MOD-143D	EMERG DIESEL GEN D VENT EXHAUST ISOL DAMPER	EG	272EL	27	NA	RELAY	ALL ASSOCIATED RELAYS APPEAR IN THE SCHEME FOR 92FN-1D.	CLOSED	OPEN	Y
							A4		SEISMIC	DAMPER INTERLOCKED WITH FAN-1D AND RTD-101D. NO RELAYS IN INSTRUMENT LOOP.			
641	A	10	92MOD-148A	EMERG DIESEL GEN VENT SUPPLY FAN A RECIRC SUCT ISOL DAMPER	EG	272EL	24	NA	RELAY	DAMPER INTERLOCKED WITH FAN-1A AND RTD-101A.	CLOSED	OPEN	N
							A1		SEISMIC	NO RELAYS IN INSTRUMENT LOOP. ALL ASSOCIATED RELAYS APPEAR IN THE SCHEME FOR 92FN-1A.			
642	B	10	92MOD-148B	EMERG DIESEL GEN VENT SUPPLY FAN B RECIRC SUCT ISOL DAMPER	EG	272EL	26.5	NA	RELAY	ALL ASSOCIATED RELAYS APPEAR IN THE SCHEME FOR 92FN-1B.	CLOSED	OPEN	N
							A1		SEISMIC	DAMPER INTERLOCKED WITH FAN-1B AND RTD-101B.			

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										NO RELAYS IN INSTRUMENT LOOP.			
643	A	10	92MOD-148C	EMERG DIESEL GEN VENT SUPPLY FAN C RECIRC SUCT ISOL DAMPER	EG	272EL	24.5	NA	RELAY	ALL ASSOCIATED RELAYS APPEAR IN THE SCHEME FOR 92FN-1C.	CLOSED	OPEN	N
							A1		SEISMIC	DAMPER INTERLOCKED WITH FAN-1C AND RTD-101C. NO RELAYS IN INSTRUMENT LOOP.			
644	B	10	92MOD-148D	EMERG DIESEL GEN VENT SUPPLY FAN D RECIRC SUCT ISOL DAMPER	EG	272EL	27.5	NA	RELAY	ALL ASSOCIATED RELAYS APPEAR IN THE SCHEME FOR 92FN-1D.	CLOSED	OPEN	N
							A1		SEISMIC	DAMPER INTERLOCKED WITH FAN-1D AND RTD-101D. NO RELAYS IN INSTRUMENT LOOP			
645	A	10	92MOD-149A	EMERG DIESEL GEN VENT SUPPLY FAN A FRESH AIR SUCT ISOL DAMPER	EG	272EL	24	NA	RELAY	ALL ASSOCIATED RELAYS APPEAR IN THE SCHEME FOR 92FN-1A.	CLOSED	OPEN	Y
							A1		SEISMIC	DAMPER INTERLOCKED WITH FAN-1A AND RTD-101A. NO RELAYS IN INSTRUMENT LOOP.			
646	B	10	92MOD-149B	EMERG DIESEL GEN VENT SUPPLY FAN B FRESH AIR SUCT ISOL DAMPER	EG	272EL	26.5	NA	RELAY	ALL ASSOCIATED RELAYS APPEAR IN THE SCHEME FOR 92FN-1B.	CLOSED	OPEN	Y
							A1		SEISMIC	DAMPER INTERLOCKED WITH FAN-1B AND RTD-101B. NO RELAYS IN INSTRUMENT LOOP.			
647	A	10	92MOD-149C	EMERG DIESEL GEN VENT SUPPLY FAN C FRESH AIR SUCT ISOL DAMPER	EG	272EL	24.5	NA	RELAY	ALL ASSOCIATED RELAYS APPEAR IN THE SCHEME FOR 92FN-1C.	CLOSED	OPEN	Y

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							A1		SEISMIC	DAMPER INTERLOCKED WITH FAN-1C AND RTD-101C. NO RELAYS IN INSTRUMENT LOOP.			
648	B	10	92MOD-149D	EMERG DIESEL GEN VENT SUPPLY FAN D FRESH AIR SUCT ISOL DAMPER	EG	272EL	27.5	NA	RELAY	ALL ASSOCIATED RELAYS APPEAR IN THE SCHEME FOR 92FN-1D.	CLOSED	OPEN	Y
							A1		SEISMIC	DAMPER INTERLOCKED WITH FAN-1D AND RTD-101D. NO RELAYS IN INSTRUMENT LOOP.			
649	A	10	92MOD-150A	EMERG DIESEL GEN VENT SUPPLY FANS A & C FRESH AIR WEST SUPPLY ISOL DAMPER	EG	272EL	23	NA	RELAY	DAMPER INTERLOCKED WITH FAN-1A.	CLOSED	OPEN	Y
							A2		SEISMIC				
650	B	10	92MOD-150B	EMERG DIESEL GEN VENT SUPPLY FANS B & D FRESH AIR WEST SUPPLY ISOL DAMPER	EG	272EL	28	NA	RELAY	DAMPER INTERLOCKED WITH FAN-1B.	CLOSED	OPEN	Y
							A2		SEISMIC				
651	A	10	92MOD-150C	EMERG DIESEL GEN VENT SUPPLY FANS A & C FRESH AIR EAST SUPPLY ISOL DAMPER	EG	272EL	23	NA	RELAY	DAMPER INTERLOCKED WITH FAN-1C.	CLOSED	OPEN	Y
							A2		SEISMIC				
652	B	10	92MOD-150D	EMERG DIESEL GEN VENT SUPPLY FANS B & D FRESH AIR EAST SUPPLY ISOL DAMPER	EG	272EL	28	NA	RELAY	DAMPER INTERLOCKED WITH FAN-1D.	CLOSED	OPEN	Y
							A2		SEISMIC				

Seq#	Safety Train	Equip. Class	Main..... Equipment... Designation	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
653	A	19	92RTD-101A	EMERG DIESEL GEN A ROOM SOUTH SIDE RESIST TEMP DETECTOR	EG	272EL	23	NA	RELAY	ALL ASSOCIATED RELAYS APPEAR IN THE SCHEME FOR 92FN-1A.	ON	ON	Y
							A2		SEISMIC	NO RELAYS IN INSTRUMENT LOOP. RTD CONTROLS MODULATING DAMPERS IN EDG-A ROOM VENT SYSTEM. MAINTAINS ROOM AT GREATER THAN 80 DEGREES FARENHIET.			
654	B	19	92RTD-101B	EMERG DIESEL GEN B ROOM SOUTH SIDE RESIST TEMP DETECTOR	EG	272EL	27	NA	RELAY	ALL ASSOCIATED RELAYS APPEAR IN THE SCHEME FOR 92FN-1B.	ON	ON	Y
							A2		SEISMIC	NO RELAYS IN INSTRUMENT LOOP. RTD CONTROLS MODULATING DAMPERS FOR EDG-B ROOM VENT SYSTEM.			
655	A	19	92RTD-101C	EMERG DIESEL GEN C ROOM NORTH SIDE RESIST TEMP DETECTOR	EG	272EL	25	NA	RELAY	ALL ASSOCIATED RELAYS APPEAR IN THE SCHEME FOR 92FN-1C.	ON	ON	Y
							A4		SEISMIC	NO RELAYS IN INSTRUMENT LOOP. RTD CONTROLS MODULATING DAMPERS IN EDG-C ROOM VENT SYSTEM.			
656	B	19	92RTD-101D	EMERG DIESEL GEN D ROOM NORTH SIDE RESIST TEMP DETECTOR	EG	276'6E L	24.5	NA	RELAY	ALL ASSOCIATED RELAYS APPEAR IN THE SCHEME FOR 92FN-1D.	ON	ON	Y
							A4		SEISMIC	NO RELAYS IN INSTRUMENT LOOP. RTD CONTROLS MODULATING DAMPERS IN EDG-D ROOM VENT SYSTEM.			
657	A	21	93AR-A1	EMERGENCY DIESEL GENERATOR A AIR START RECEIVER A1	EG	272EL	24	NA	SEISMIC	SEISMIC EVALUATION OF EACH AIR RECEIVER INCLUDES THE RELIEF VALVE ATTACHED TO THE TOP OF THE TANK.	N/A	N/A	N

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
							A2						
658	A	21	93AR-A10	EMERGENCY DIESEL GENERATOR A AIR START RECEIVER A10	EG	272EL	24	NA	SEISMIC		N/A	N/A	N
							A4						
659	A	21	93AR-A2	EMERGENCY DIESEL GENERATOR A AIR START RECEIVER A2	EG	272EL	24	NA	SEISMIC		N/A	N/A	N
							A2						
660	A	21	93AR-A3	EMERGENCY DIESEL GENERATOR A AIR START RECEIVER A3	EG	272EL	24	NA	SEISMIC		N/A	N/A	N
							A3						
661	A	21	93AR-A4	EMERGENCY DIESEL GENERATOR A AIR START RECEIVER A4	EG	272EL	24	NA	SEISMIC		N/A	N/A	N
							A3						
662	A	21	93AR-A5	EMERGENCY DIESEL GENERATOR A AIR START RECEIVER A5	EG	272EL	24	NA	SEISMIC		N/A	N/A	N
							A3						
663	A	21	93AR-A6	EMERGENCY DIESEL GENERATOR A AIR START RECEIVER A6	EG	272EL	24	NA	SEISMIC		N/A	N/A	N
							A3						
664	A	21	93AR-A7	EMERGENCY DIESEL GENERATOR A AIR	EG	272EL	24	NA	SEISMIC		N/A	N/A	N

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
				START RECEIVER A7			A3						
665	A	21	93AR-A8	EMERGENCY DIESEL GENERATOR A AIR START RECEIVER A8	EG	272EL	24 A3	NA	SEISMIC		N/A	N/A	N
666	A	21	93AR-A9	EMERGENCY DIESEL GENERATOR A AIR START RECEIVER A9	EG	272EL	24 A4	NA	SEISMIC		N/A	N/A	N
667	B	21	93AR-B1	EMERGENCY DIESEL GENERATOR B AIR START RECEIVER B1	EG	272EL	26.5 A2	NA	SEISMIC	SEE REMARK FOR 93AR-A1.	N/A	N/A	N
668	B	21	93AR-B10	EMERGENCY DIESEL GENERATOR B AIR START RECEIVER B10	EG	272EL	26.5 A4	NA	SEISMIC		N/A	N/A	N
669	B	21	93AR-B2	EMERGENCY DIESEL GENERATOR B AIR START RECEIVER B2	EG	272EL	26.5 A2	NA	SEISMIC		N/A	N/A	N
670	B	21	93AR-B3	EMERGENCY DIESEL GENERATOR B AIR START RECEIVER B3	EG	272EL	26.5 A3	NA	SEISMIC		N/A	N/A	N
671	B	21	93AR-B4	EMERGENCY	EG	272EL	26.5	NA	SEISMIC		N/A	N/A	N

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
				DIESEL GENERATOR B AIR START RECEIVER B4			A3						
672	B	21	93AR-B5	EMERGENCY DIESEL GENERATOR B AIR START RECEIVER B5	EG	272EL	26.5 A3	NA	SEISMIC		N/A	N/A	N
673	B	21	93AR-B6	EMERGENCY DIESEL GENERATOR B AIR START RECEIVER B6	EG	272EL	26.5 A3	NA	SEISMIC		N/A	N/A	N
674	B	21	93AR-B7	EMERGENCY DIESEL GENERATOR B AIR START RECEIVER B7	EG	272EL	26.5 A3	NA	SEISMIC		N/A	N/A	N
675	B	21	93AR-B8	EMERGENCY DIESEL GENERATOR B AIR START RECEIVER B8	EG	272EL	26.5 A3	NA	SEISMIC		N/A	N/A	N
676	B	21	93AR-B9	EMERGENCY DIESEL GENERATOR B AIR START RECEIVER B9	EG	272EL	26.5 A4	NA	SEISMIC		N/A	N/A	N
677	A	21	93AR-C1	EMERGENCY DIESEL GENERATOR C AIR START RECEIVER C1	EG	272EL	24.5 A2	NA	SEISMIC	SEE REMARK FOR 93AR-A1.	N/A	N/A	N

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
678	A	21	93AR-C10	EMERGENCY DIESEL GENERATOR C AIR START RECEIVER C10	EG	272EL	24.5 A4	NA	SEISMIC		N/A	N/A	N
679	A	21	93AR-C2	EMERGENCY DIESEL GENERATOR C AIR START RECEIVER C2	EG	272EL	24.5 A2	NA	SEISMIC		N/A	N/A	N
680	A	21	93AR-C3	EMERGENCY DIESEL GENERATGR C AIR START RECEIVER C3	EG	272EL	24.5 A3	NA	SEISMIC		N/A	N/A	N
681	A	21	93AR-C4	EMERGENCY DIESEL GENERATOR C AIR START RECEIVER C4	EG	272EL	24.5 A3	NA	SEISMIC		N/A	N/A	N
682	A	21	93AR-C5	EMERGENCY DIESEL GENERATOR C AIR START RECEIVER C5	EG	272EL	24.5 A3	NA	SEISMIC		N/A	N/A	N
683	A	21	93AR-C6	EMERGENCY DIESEL GENERATOR C AIR START RECEIVER C6	EG	272EL	24.5 A3	NA	SEISMIC		N/A	N/A	N
684	A	21	93AR-C7	EMERGENCY DIESEL GENERATOR C AIR START RECEIVER C7	EG	272EL	24.5	NA	SEISMIC		N/A	N/A	N

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
							A3						
685	A	21	93AR-C8	EMERGENCY DIESEL GENERATOR C AIR START RECEIVER C8	EG	272EL	24.5	NA	SEISMIC		N/A	N/A	N
							A3						
686	A	21	93AR-C9	EMERGENCY DIESEL GENERATOR C AIR START RECEIVER C9	EG	272EL	24.5	NA	SEISMIC		N/A	N/A	N
							A4						
687	B	21	93AR-D1	EMERGENCY DIESEL GENERATOR D AIR START RECEIVER D1	EG	272EL	26.5	NA	SEISMIC	SEE REMARK FOR 93AR-A1.	N/A	N/A	N
							A2						
688	B	21	93AR-D10	EMERGENCY DIESEL GENERATOR D AIR START RECEIVER D10	EG	272EL	26.5	NA	SEISMIC		N/A	N/A	N
							A4						
689	B	21	93AR-D2	EMERGENCY DIESEL GENERATOR D AIR START RECEIVER D2	EG	272EL	26.5	NA	SEISMIC		N/A	N/A	N
							A2						
690	B	21	93AR-D3	EMERGENCY DIESEL GENERATOR D AIR START RECEIVER D3	EG	272EL	26.5	NA	SEISMIC		N/A	N/A	N
							A3						
691	B	21	93AR-D4	EMERGENCY DIESEL GENERATOR D AIR	EG	272EL	26.5	NA	SEISMIC		N/A	N/A	N

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
				START RECEIVER D4			A3						
692	B	21	93AR-D5	EMERGENCY DIESEL GENERATOR D AIR START RECEIVER D5	EG	272EL	26.5 A3	NA	SEISMIC		N/A	N/A	N
693	B	21	93AR-D6	EMERGENCY DIESEL GENERATOR D AIR START RECEIVER D6	EG	272EL	26.5 A3	NA	SEISMIC		N/A	N/A	N
694	B	21	93AR-D7	EMERGENCY DIESEL GENERATOR D AIR START RECEIVER D7	EG	272EL	26.5 A3	NA	SEISMIC		N/A	N/A	N
695	B	21	93AR-D8	EMERGENCY DIESEL GENERATOR D AIR START RECEIVER D8	EG	272EL	26.5 A4	NA	SEISMIC		N/A	N/A	N
696	B	21	93AR-D9	EMERGENCY DIESEL GENERATOR D AIR START RECEIVER D9	EG	272EL	26.5 A4	NA	SEISMIC		N/A	N/A	N
697	X	20	93AURP-01	EDG A & C AUX UNDERVOLTAGE RELAY PANEL	EG	272EL	24.5 A	NA	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
698	X	20	93AURP-02	EDG B & D AUX UNDERVOLTAGE RELAY PANEL	EG	272EL	24.5	NA	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
							A						
699	A	20	93ECP-A	EDG A ENGINE CONTROL PANEL	EG	272EL	24	NA	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
							A3						
700	B	20	93ECP-B	EDG B ENGINE CONTROL PANEL	EG	272EL	26	NA	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
							A3						
701	A	20	93ECP-C	EDG C ENGINE CONTROL PANEL	EG	272EL	25	NA	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
							A3						
702	B	20	93ECP-D	EDG D ENGINE CONTROL PANEL	EG	272EL	27	NA	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
							A1						
703	A	20	93ECSP-A	EDG A ENGINE CONTROL SUB PANEL	EG	272EL	24	93ECSP-A	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
							A3						
704	B	20	93ECSP-B	EDG B ENGINE CONTROL SUB PANEL	EG	272EL	26	93ECSP-B	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
							A3						
705	A	20	93ECSP-C	EDG C ENGINE CONTROL SUB PANEL	EG	272EL	25	93ECSP-C	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
							A3						
706	B	20	93ECSP-D	EDG D ENGINE CONTROL SUB PANEL	EG	272EL	27	93ECSP-D	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
							A3						
707	A	17	93EDG-A	EMERGENCY DIESEL GENERATOR A	EG	272EL	24	NA	RELAY	INCLUDES THE DIESEL ENGINE AND THE FOLLOWING SKID-MOUNTED COMPONENTS: EDP-5A (BELT-DRIVEN F.O. PUMP), EDP-6A/7A (JACKET COOLING WATER PUMPS), E-1A (AFTERCOOLER), AIR-START SOLENOIDS AND MOTORS.	OFF	ON	Y
							A2		SEISMIC				
708	B	17	93EDG-B	EMERGENCY DIESEL	EG	272EL	26.5	NA	RELAY	INCLUDES THE DIESEL ENGINE AND THE FOLLOWING SKID-MOUNTED COMPONENTS: EDP-5B	OFF	ON	Y

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				GENERATOR B						(BELT-DRIVEN F.O. PUMP), EDP-6B/7B (JACKET COOLING WATER PUMPS), E-1B (AFTERCOOLER), AIR-START SOLENOIDS AND MOTORS.			
							A2		SEISMIC				
709	A	17	93EDG-C	EMERGENCY DIESEL GENERATOR C	EG	272EL	25	NA	RELAY	INCLUDES THE DIESEL ENGINE AND THE FOLLOWING SKID-MOUNTED COMPONENTS: EDP-5C (BELT-DRIVEN F.O. PUMP), EDP-6C/7C (JACKET COOLING WATER PUMPS), E-1C (AFTERCOOLER), AIR-START SOLENOIDS AND MOTORS.	OFF	ON	Y
							A2		SEISMIC				
710	B	17	93EDG-D	EMERGENCY DIESEL GENERATOR D	EG	272EL	25	NA	RELAY	INCLUDES THE DIESEL ENGINE AND THE FOLLOWING SKID-MOUNTED COMPONENTS: EDP-5D (BELT-DRIVEN F.O. PUMP), EDP-6D/7D (JACKET COOLING WATER PUMPS), E-1D (AFTERCOOLER), AIR START SOLENOIDS AND MOTORS.	OFF	ON	Y
							A2		SEISMIC				
711	A	20	93EGP-A	EDG A GENERATOR CONTROL PANEL	EG	272EL	24	93EGP-A	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
							A1						
712	B	20	93EGP-B	EDG B GENERATOR CONTROL PANEL	EG	272EL	26	93EGP-B	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
							A1						
713	A	20	93EGP-C	EDG C GENERATOR CONTROL PANEL	EG	272EL	25	93EGP-C	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
							A1						
714	B	20	93EGP-D	EDG D GENERATOR CONTROL PANEL	EG	272EL	27	93EGP-D	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
							A1						
715	A	20	93FPAC	EDG A & C FORCED PARALLELING PANEL	EG	272EL	24.5	93FPAC	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
							A						
716	B	20	93FPBD	EDG B & D FORCED PARALLELING PANEL	EG	272EL	26.5	93FPBD	SEISMIC	LISTED FOR SEISMIC WALKDOWN ONLY.	N/A	N/A	N
							A						

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717	A	18	93LI-102A	EDG A FUEL OIL DAY TANK 7A LEVEL INDIC	EG	272EL	23.5	93ECP-A	RELAY	FUEL OIL DAY TANK LEVEL INDICATION IS PROVIDED AT THE ASSOCIATED ENGINE CONTROL PANEL AND IS SHOWN ON ESK-6VA IN CIRCUIT NO. 1EDGA17.	ON	ON	Y
							A4		RULE OF BOX	NOT REQUIRED FOR RRC SINCE SLC SYSTEM PERFORMS FUNCTION PRIOR TO DAY TANK DEPLETION. THERE ARE NO RELAYS ASSOCIATED WITH FUEL OIL DAY TANK LEVEL INDICATION.			
718	B	18	93LI-102B	EDG B FUEL OIL DAY TANK 7B LEVEL INDIC	EG	272EL	26	93ECP-B	RELAY	FUEL OIL DAY TANK LEVEL INDICATION IS PROVIDED AT THE ASSOCIATED ENGINE CONTROL PANEL AND IS SHOWN ON ESK-6VA IN CIRCUIT NO. 1EDGB17.	ON	ON	Y
							A4		RULE OF BOX	NOT REQUIRED FOR RRC SINCE SLC SYSTEM PERFORMS FUNCTION PRIOR TO DAY TANK DEPLETION. THERE ARE NO RELAYS ASSOCIATED WITH FUEL OIL DAY TANK LEVEL INDICATION.			
719	A	18	93LI-102C	EDG C FUEL OIL DAY TANK 7C LEVEL INDIC	EG	272EL	24.5	93ECP-C	RELAY	FUEL OIL DAY TANK LEVEL INDICATION IS PROVIDED AT THE ASSOCIATED ENGINE CONTROL PANEL AND IS SHOWN ON ESK-6VA IN CIRCUIT NO. 1EDGC17.	ON	ON	Y
							A4		RULE OF BOX	NOT REQUIRED FOR RRC SINCE SLC SYSTEM PERFORMS FUNCTION PRIOR TO DAY TANK DEPLETION. THERE ARE NO RELAYS ASSOCIATED WITH FUEL OIL DAY TANK LEVEL INDICATION.			
720	B	18	93LI-102D	EDG D FUEL OIL DAY TANK 7D LEVEL INDIC	EG	272EL	27	93ECP-D	RELAY	FUEL OIL DAY TANK LEVEL INDICATION IS PROVIDED AT THE ASSOCIATED ENGINE CONTROL PANEL AND IS SHOWN ON ESK-6VA IN CIRCUIT NO. 1EDGD17.	ON	ON	Y
							A4		RULE OF BOX	NOT REQUIRED FOR RRC SINCE SLC SYSTEM PERFORMS FUNCTION PRIOR TO DAY TANK DEPLETION. THERE ARE NO RELAYS ASSOCIATED WITH FUEL OIL DAY TANK LEVEL INDICATION.			

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
721	A	21	93LOE-1A	EMERGENCY DIESEL GENERATOR A LUBE OIL COOLER	EG	272EL	24 A3	93EDG-A	RULE OF BOX		N/A	N/A	N
722	B	21	93LOE-1B	EMERGENCY DIESEL GENERATOR B LUBE OIL COOLER	EG	272EL	26 A3	93EDG-B	RULE OF BOX		N/A	N/A	N
723	A	21	93LOE-1C	EMERGENCY DIESEL GENERATOR C LUBE OIL COOLER	EG	272EL	25 A3	93EDG-C	RULE OF BOX		N/A	N/A	N
724	B	21	93LOE-1D	EMERGENCY DIESEL GENERATOR D LUBE OIL COOLER	EG	272EL	27 A3	93EDG-D	RULE OF BOX		N/A	N/A	N
725	A	18	93LT-102A	EDG A FUEL OIL DAY TANK 7A LEVEL XMITTER	EG	272EL	24 A4	93TK-7A	RELAY RULE OF BOX	FUEL OIL DAY TANK LEVEL INDICATION IS PROVIDED AT THE ASSOCIATED ENGINE CONTROL PANEL AND IS SHOWN ON ESK-6VA IN CIRCUIT NO. 1EDGA17. NOT REQUIRED FOR RRC SINCE SLC SYSTEM WILL HAVE ALREADY PERFORMED IT'S FUNCTION PRIOR TO DAY TANK DEPLETION. THERE ARE NO RELAYS ASSOCIATED WITH FUEL OIL DAY TANK INDICATION.	ON	ON	Y
726	B	18	93LT-102B	EDG B FUEL OIL DAY TANK 7B LEVEL XMITTER	EG	272EL	26.5 A4	93TK-7B	RELAY RULE OF BOX	FUEL OIL DAY TANK LEVEL INDICATION IS PROVIDED AT THE ASSOCIATED ENGINE CONTROL PANEL AND IS SHOWN ON ESK-6VA IN CIRCUIT NO. 1EDGB17. NOT REQUIRED FOR RRC SINCE SLC SYSTEM WILL HAVE ALREADY PERFORMED IT'S FUNCTION PRIOR TO DAY TANK DEPLETION. THERE ARE NO RELAYS ASSOCIATED WITH FUEL OIL DAY TANK LEVEL INDICATION.	ON	ON	Y

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
727	A	18	93LT-102C	EDG C FUEL OIL DAY TANK 7C LEVEL XMITTER	EG	272EL	25	93TK-7C	RELAY	FUEL OIL DAY TANK LEVEL INDICATION IS PROVIDED AT THE ASSOCIATED ENGINE CONTROL PANEL AND IS SHOWN ON ESK-6VA IN CIRCUIT NO. 1EDGC17.	ON	ON	Y
							A4		RULE OF BOX	NOT REQUIRED FOR RRC SINCE SLC SYSTEM WILL HAVE ALREADY PERFORMED IT'S FUNCTION PRIOR TO DAY TANK DEPLETION. THERE ARE NO RELAYS ASSOCIATED WITH FUEL OIL DAY TANK LEVEL INDICATION.			
728	B	18	93LT-102D	EDG D FUEL OIL DAY TANK 7D LEVEL XMITTER	EG	272EL	27	93TK-7D	RELAY	FUEL OIL DAY TANK LEVEL INDICATION IS PROVIDED AT THE ASSOCIATED ENGINE CONTROL PANEL AND IS SHOWN ON ESK-6VA IN CIRCUIT NO. 1EDGD17.	ON	ON	Y
							A4		RULE OF BOX	NOT REQUIRED FOR RRC SINCE SLC SYSTEM WILL HAVE ALREADY PERFORMED IT'S FUNCTION PRIOR TO DAY TANK DEPLETION. THERE ARE NO RELAYS ASSOCIATED WITH FUEL OIL DAY TANK LEVEL INDICATION.			
729	A	6	93P-2A	EMERGENCY DIESEL GENERATOR A CIRCULATING LUBE OIL PUMP	EG	272EL	24	93EDG-A	RELAY		OFF	ON	Y
							A3		RULE OF BOX				
730	B	6	93P-2B	EMERGENCY DIESEL GENERATOR B CIRCULATING LUBE OIL PUMP	EG	272EL	26	93EDG-B	RELAY		OFF	ON	Y
							A3		RULE OF BOX				
731	A	6	93P-2C	EMERGENCY DIESEL GENERATOR C CIRCULATING LUBE OIL PUMP	EG	272EL	25	93EDG-C	RELAY		OFF	ON	Y
							A3		RULE OF BOX				

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
732	B	6	93P-2D	EMERGENCY DIESEL GENERATOR D CIRCULATING LUBE OIL PUMP	EG	272EL	27.5	93EDG-D	RELAY		OFF	ON	Y
							A3		RULE OF BOX				
733	A	6	93P-3A	EMERGENCY DIESEL GENERATOR A TURBOCHARGER LUBE OIL PUMP	EG	272EL	24	93EDG-A	RELAY		OFF	ON	Y
							A3		RULE OF BOX				
734	B	6	93P-3B	EMERGENCY DIESEL GENERATOR B TURBOCHARGER LUBE OIL PUMP	EG	272EL	26	93EDG-B	RELAY		OFF	ON	Y
							A4		RULE OF BOX				
735	A	6	93P-3C	EMERGENCY DIESEL GENERATOR C TURBOCHARGER LUBE OIL PUMP	EG	272EL	24	93EDG-C	RELAY		OFF	ON	Y
							A3		RULE OF BOX				
736	B	6	93P-3D	EMERGENCY DIESEL GENERATOR D TURBOCHARGER LUBE OIL PUMP	EG	272EL	26	93EDG-D	RELAY		OFF	ON	Y
							A4		RULE OF BOX				
737	A	5	93P-4A	EMERGENCY DIESEL GENERATOR A FUEL OIL PUMP	EG	272EL	24	93EDG-A	RELAY	THE RELAYS ASSOCIATED WITH THE CONTROL OF THIS PUMP ARE IDENTIFIED AND EVALUATED UNDER THE ASSOCIATED DIESEL GENERATOR.	OFF	ON	Y
							A4		RULE OF BOX				

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
738	B	5	93P-4B	EMERGENCY DIESEL GENERATOR B FUEL OIL PUMP	EG	272EL	26.5	93EDG-B	RELAY	THE RELAYS ASSOCIATED WITH THE CONTROL OF THIS PUMP ARE IDENTIFIED AND EVALUATED UNDER THE ASSOCIATED DIESEL GENERATOR.	OFF	ON	Y
							A4		RULE OF BOX				
739	A	5	93P-4C	EMERGENCY DIESEL GENERATOR C FUEL OIL PUMP	EG	272EL	25	93EDG-C	RELAY		OFF	ON	Y
							A4		RULE OF BOX				
740	B	5	93P-4D	EMERGENCY DIESEL GENERATOR D FUEL OIL PUMP	EG	272EL	27.5	93EDG-D	RELAY	THE RELAYS ASSOCIATED WITH THE CONTROL OF THIS PUMP ARE IDENTIFIED AND EVALUATED UNDER THE ASSOCIATED DIESEL GENERATOR.	OFF	ON	Y
							A4		RULE OF BOX				
741	A	5	93P1-A1	EMERGENCY DIESEL GENERATOR A FUEL OIL TRANSFER PUMP A1	EG	272EL	24	NA	RELAY	RRC NOT INCLUDED SINCE SLC SYSTEM WILL HAVE PERFORMED IT'S FUNCTION PRIOR TO DAY TANK DEPLETION.	OFF	ON	Y
							A4		SEISMIC				
742	A	5	93P1-A2	EMERGENCY DIESEL GENERATOR A FUEL OIL TRANSFER PUMP A2	EG	272EL	24	NA	RELAY	RRC NOT INCLUDED SINCE SLC SYSTEM WILL HAVE PERFORMED IT'S FUNCTION PRIOR TO DAY TANK DEPLETION.	OFF	ON	Y
							A4		SEISMIC				
743	B	5	93P1-B1	EMERGENCY DIESEL GENERATOR B FUEL OIL TRANSFER PUMP B1	EG	272EL	26.5	NA	RELAY	RRC NOT INCLUDED SINCE SLC SYSTEM WILL HAVE PERFORMED IT'S FUNCTION PRIOR TO DAY TANK DEPLETION.	OFF	ON	Y
							A4		SEISMIC				
744	B	5	93P1-B2	EMERGENCY DIESEL	EG	272EL	26.5	NA	RELAY	RRC NOT INCLUDED SINCE SLC SYSTEM WILL HAVE PERFORMED IT'S FUNCTION PRIOR TO DAY	OFF	ON	Y

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
				GENERATOR B FUEL OIL TRANSFER PUMP B2						TANK DEPLETION.			
							A4		SEISMIC				
745	A	5	93P1-C1	EMERGENCY DIESEL GENERATOR C FUEL OIL TRANSFER PUMP C1	EG	272EL	24.5	NA	RELAY	RRC NOT INCLUDED SINCE SLC SYSTEM WILL HAVE PERFORMED IT'S FUNCTION PRIOR TO DAY TANK DEPLETION.	OFF	ON	Y
							A4		SEISMIC				
746	A	5	93P1-C2	EMERGENCY DIESEL GENERATOR C FUEL OIL TRANSFER PUMP C2	EG	272EL	24.5	NA	RELAY	RRC NOT INCLUDED SINCE SLC SYSTEM WILL HAVE PERFORMED IT'S FUNCTION PRIOR TO DAY TANK DEPLETION.	OFF	ON	Y
							A4		SEISMIC				
747	B	5	93P1-D1	EMERGENCY DIESEL GENERATOR D FUEL OIL TRANSFER PUMP D1	EG	272EL	26.5	NA	RELAY	RRC NOT INCLUDED SINCE SLC SYSTEM WILL HAVE PERFORMED IT'S FUNCTION PRIOR TO DAY TANK DEPLETION.	OFF	ON	Y
							A4		SEISMIC				
748	B	5	93P1-D2	EMERGENCY DIESEL GENERATOR D FUEL OIL TRANSFER PUMP D2	EG	272EL	26.5	NA	RELAY	RRC NOT INCLUDED SINCE SLC SYSTEM WILL HAVE PERFORMED IT'S FUNCTION PRIOR TO DAY TANK DEPLETION.	OFF	ON	Y
							A4		SEISMIC				
749	A	7	93RV-100A1	EDG A AIR START RECEIVER A1 RELIEF VALVE	EG	272EL	24 A2	93AR-A1	RULE OF BOX	RV IS ATTACHED TO TOP OF TANK AND RULE OF BOX IS CREDITED FOR SEISMIC EVALUATION. REFER TO 93AR-XX. TYPICAL FOR 10 AIR RECEIVER RELIEF VALVES FOR EDG-A.	CLOSED	CLOSED	N
750	B	7	93RV-100B1	EDG B AIR START RECEIVER B1	EG	272EL	26.5	93AR-B1	RULE OF BOX	RV IS ATTACHED TO TOP OF TANK AND RULE OF BOX IS CREDITED FOR SEISMIC EVALUATION.	CLOSED	CLOSED	N

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
				RELIEF VALVE			A3			REFER TO 93AR-XX. TYPICAL OF 10 AIR RECEIVER RELIEF VALVES FOR EDG-B.			
751	A	7	93RV-100C1	EDG C AIR START RECEIVER C1 RELIEF VALVE	EG	272EL	24.5 A2	93AR-C1	RULE OF BOX	RV IS ATTACHED TO TOP OF TANK AND RULE OF BOX IS CREDITED FOR SEISMIC EVALUATION. REFER TO 93AR-XX. TYPICAL OF 10 AIR RECEIVER RELIEF VALVES FOR EDG-C.	CLOSED	CLOSED	N
752	B	7	93RV-100D1	EDG D AIR START RECEIVER D1 RELIEF VALVE	EG	272EL	26.5 A2	93AR-D1	RULE OF BOX	RV IS ATTACHED TO TOP OF TANK AND RULE OF BOX IS CREDITED FOR SEISMIC EVALUATION. REFER TO 93AR-XX. TYPICAL OF 10 AIR RECEIVER RELIEF VALVES FOR EDG-D.	CLOSED	CLOSED	N
753	A	8B	93SOV-1A	EDG A AIR START RIGHT BANK SOLENOID VALVE	EG	272EL	23.5 A3	NA RULE OF BOX	RELAY	THE RELAYS ASSOCIATED WITH THE CONTROL OF THIS SOLENOID OPERATED VALVE ARE IDENTIFIED AND EVALUATED UNDER THE ASSOCIATED DIESEL GENERATOR.	CLOSED	OPEN	Y
754	B	8B	93SOV-1B	EDG B AIR START RIGHT BANK SOLENOID VALVE	EG	272EL	23.5 A3	NA RULE OF BOX	RELAY	THE RELAYS ASSOCIATED WITH THE CONTROL OF THIS SOLENOID OPERATED VALVE ARE IDENTIFIED AND EVALUATED UNDER THE ASSOCIATED DIESEL GENERATOR.	CLOSED	OPEN	Y
755	A	8B	93SOV-1C	EDG C AIR START RIGHT BANK SOLENOID VALVE	EG	272EL	25 A2	NA RULE OF BOX	RELAY	THE RELAYS ASSOCIATED WITH THE CONTROL OF THIS SOLENOID OPERATED VALVE ARE IDENTIFIED AND EVALUATED UNDER THE ASSOCIATED DIESEL GENERATOR.	CLOSED	OPEN	Y
756	B	8B	93SOV-1D	EDG D AIR START RIGHT BANK SOLENOID VALVE	EG	272EL	28 A3	NA RULE OF BOX	RELAY	THE RELAYS ASSOCIATED WITH THE CONTROL OF THIS SOLENOID OPERATED VALVE ARE IDENTIFIED AND EVALUATED UNDER THE ASSOCIATED DIESEL GENERATOR.	CLOSED	OPEN	Y

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
757	A	8B	93SOV-2A	EDG A AIR START LEFT BANK SOLENOID VALVE	EG	272EL	24	NA	RELAY	THE RELAYS ASSOCIATED WITH THE CONTROL OF THIS SOLENOID OPERATED VALVE ARE IDENTIFIED AND EVALUATED UNDER THE ASSOCIATED DIESEL GENERATOR.	CLOSED	OPEN	Y
							A3		RULE OF BOX				
758	B	8B	93SOV-2B	EDG B AIR START LEFT BANK SOLENOID VALVE	EG	272EL	23.5	NA	RELAY	THE RELAYS ASSOCIATED WITH THE CONTROL OF THIS SOLENOID OPERATED VALVE ARE IDENTIFIED AND EVALUATED UNDER THE ASSOCIATED DIESEL GENERATOR.	CLOSED	OPEN	Y
							A3		RULE OF BOX				
759	A	8B	93SOV-2C	EDG C AIR START LEFT BANK SOLENOID VALVE	EG	272EL	24.5	NA	RELAY	THE RELAYS ASSOCIATED WITH THE CONTROL OF THIS SOLENOID OPERATED VALVE ARE IDENTIFIED AND EVALUATED UNDER THE ASSOCIATED DIESEL GENERATOR.	CLOSED	OPEN	Y
							A2		RULE OF BOX				
760	B	8B	93SOV-2D	EDG D AIR START LEFT BANK SOLENOID VALVE	EG	272EL	27	NA	RELAY	THE RELAYS ASSOCIATED WITH THE CONTROL OF THIS SOLENOID OPERATED VALVE ARE IDENTIFIED AND EVALUATED UNDER THE ASSOCIATED DIESEL GENERATOR.	CLOSED	OPEN	Y
							A3		RULE OF BOX				
761	A	21	93TK-1A	EMERGENCY DIESEL GENERATOR A JACKET WATER EXPANSION TANK	EG	272EL	24	93EDG-A	RULE OF BOX		N/A	N/A	N
							A4						
762	B	21	93TK-1B	EMERGENCY DIESEL GENERATOR B JACKET WATER EXPANSION TANK	EG	272EL	26	93EDG-B	RULE OF BOX		N/A	N/A	N
							A4						
763	A	21	93TK-1C	EMERGENCY DIESEL GENERATOR C JACKET WATER EXPANSION TANK	EG	272EL	25	93EDG-C	RULE OF BOX		N/A	N/A	N

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
							A4						
764	B	21	93TK-1D	EMERGENCY DIESEL GENERATOR D JACKET WATER EXPANSION TANK	EG	272EL	27	93EDG-D	RULE OF BOX		N/A	N/A	N
							A4						
765	A	21	93TK-6A	EMERGENCY DIESEL GENERATOR A FUEL OIL STORAGE TANK	EG	272EL	24	NA	SEISMIC	NOT REQUIRED FOR RRC FUNCTION SINCE SLC SYSTEM WILL HAVE PERFORMED SAFETY FUNCTION PRIOR TO DAY TANK DEPLETION.	N/A	N/A	N
							A4						
766	B	21	93TK-6B	EMERGENCY DIESEL GENERATOR B FUEL OIL STORAGE TANK	EG	272EL	26.5	NA	SEISMIC	NOT REQUIRED FOR RRC FUNCTION SINCE SLC SYSTEM WILL HAVE PERFORMED SAFETY FUNCTION PRIOR TO DAY TANK DEPLETION.	N/A	N/A	N
							A4						
767	A	21	93TK-6C	EMERGENCY DIESEL GENERATOR C FUEL OIL STORAGE TANK	EG	272EL	24.5	NA	SEISMIC	NOT REQUIRED FOR RRC FUNCTION SINCE SLC SYSTEM WILL HAVE PERFORMED SAFETY FUNCTION PRIOR TO DAY TANK DEPLETION.	N/A	N/A	N
							A4						
768	B	21	93TK-6D	EMERGENCY DIESEL GENERATOR D FUEL OIL STORAGE TANK	EG	272EL	27	NA	SEISMIC	NOT REQUIRED FOR RRC FUNCTION SINCE SLC SYSTEM WILL HAVE PERFORMED SAFETY FUNCTION PRIOR TO DAY TANK DEPLETION.	N/A	N/A	N
							A4						
769	A	21	93TK-7A	EMERGENCY DIESEL GENERATOR A FUEL OIL DAY TANK	EG	272EL	24	NA	SEISMIC		N/A	N/A	N
							A4						
770	B	21	93TK-7B	EMERGENCY DIESEL GENERATOR B	EG	272EL	26.5	NA	SEISMIC		N/A	N/A	N

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..
				FUEL OIL DAY TANK			A4						
771	A	21	93TK-7C	EMERGENCY DIESEL GENERATOR C FUEL OIL DAY TANK	EG	272EL	25 A4	NA	SEISMIC		N/A	N/A	N
772	B	21	93TK-7D	EMERGENCY DIESEL GENERATOR D FUEL OIL DAY TANK	EG	272EL	27 A4	NA	SEISMIC		N/A	N/A	N
773	A	21	93WE-1A	EMERGENCY DIESEL GENERATOR A JACKER WATER HEAT EXCHANGER	EG	272EL	24 A4	93EDG-A	RULE OF BOX		N/A	N/A	N
774	B	21	93WE-1B	EMERGENCY DIESEL GENERATOR B JACKET WATER HEAT EXCHANGER	EG	272EL	26.5 A4	93EDG-B	RULE OF BOX		N/A	N/A	N
775	A	21	93WE-1C	EMERGENCY DIESEL GENERATOR C JACKET WATER HEAT EXCHANGER	EG	272EL	25 A4	93EDG-C	RULE OF BOX		N/A	N/A	N
776	B	21	93WE-1D	EMERGENCY DIESEL GENERATOR D JACKET WATER HEAT EXCHANGER	EG	272EL	27 A4	93EDG-D	RULE OF BOX		N/A	N/A	N

Seq#.	Safety Train.	Equip. Class.	Main..... Equipment... Designation.	Description....	Bldg..	Elev..	Loc...	Rack..... Panel..... Assy.....	Eval... Type...	Remarks.....	Normal. Postion	Required Postion.	Power Req..

776 records listed.

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
02RV-71A	ADS MAIN STEAM LINE A SAFETY/RELIEF VALVE	I	X	7	PC	295'11 EL	5
02RV-71B	ADS MAIN STEAM LINE A SAFETY/RELIEF VALVE	I	X	7	PC	295'11 EL	R 5
02RV-71C	ADS MAIN STEAM LINE B SAFETY/RELIEF VALVE	I	X	7	PC	295'11 EL	R 5
02RV-71D	ADS MAIN STEAM LINE B SAFETY/RELIEF VALVE	I	X	7	PC	295'11 EL	R 4.5
02RV-71E	ADS MAIN STEAM LINE C SAFETY/RELIEF VALVE	I	X	7	PC	295'11 EL	R 5
02RV-71F	ADS MAIN STEAM LINE C SAFETY/RELIEF VALVE	I	X	7	PC	295'11 EL	W 5
02RV-71G	ADS MAIN STEAM LINE C SAFETY/RELIEF VALVE	I	X	7	PC	295'11 EL	W 4.5
02RV-71H	ADS MAIN STEAM LINE D SAFETY/RELIEF VALVE	I	X	7	PC	295'11 EL	W 5
02RV-71J	ADS MAIN STEAM LINE D SAFETY/RELIEF VALVE	I	X	7	PC	295'11 EL	W 5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
02RV-71K	ADS MAIN STEAM LINE A SAFETY/RELIEF VALVE	I	X	7	PC	295'11 EL	W 5.5
02RV-71L	ADS MAIN STEAM LINE D SAFETY/RELIEF VALVE	I	X	7	PC	295'11 EL	R 5.5
03AOV-126(HCU-02-19)	HCU INLET SCRAM AIR OPER VALVE	I	X	7	RB	272EL	W 5
03AOV-127(HCU-02-19)	HCU OUTLET SCRAM AIR OPER VALVE	I	X	7	RB	272EL	Y 5
03AOV-32	CRD B SDIV TANK B INNER VENT ISOL VALVE	I	X	7	RB	272EL	Y 3
03AOV-33	CRD B SDIV TANK B INNER DRAIN ISOL VALVE	I	X	7	RB	272EL	D 3
03AOV-34	CRD B SDIV TANK B OUTER VENT ISOL VALVE	I	X	7	RB	272EL	D 3
03AOV-35	CRD B SDIV TANK B OUTER DRAIN ISOL VALVE	I	X	7	RB	272EL	D 3
03AOV-36	CRD A SDIV TANK A INNER VENT ISOL VALVE	I	X	7	RB	272EL	D 2
03AOV-37	CRD A SDIV TANK A INNER DRAIN ISOL VALVE	I	X	7	RB	272EL	P 2
03AOV-38	CRD A SDIV TANK A OUTER VENT	I	X	7	RB	272EL	P 2

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	ISOL VALVE						
03AOV-39	CRD A SDIV TANK A OUTER DRAIN ISOL VALVE	I	X	7	RB	272EL	P 2
03SOV-117(HCU-02-19)	HCU-02-19 SCRAM PILOT AIR SOLENOID OPER VALVE	I	X	8B	RB	272EL	P 5
03SOV-118(HCU-02-19)	HCU-02-19 SCRAM PILOT AIR SOLENOID OPER VALVE	I	X	8B	RB	272EL	Y 5
03SOV-140A	HYDRAULIC CONTROL UNITS BACKUP SCRAM PILOT SOLENOID VLV EQ	I	X	8B	RB	272EL	Y 3.5
03SOV-140B	HYDRAULIC CONTROL UNITS BACKUP SCRAM PILOT SOLENOID VLV EQ	I	X	8B	RB	272EL	A 3.5
03SOV-31A	SDIV A AOV INSTRUMENT AIR SUPPLY SOLENOID VALVE EQ	I	X	8B	RB	272EL	A 3.5
03SOV-31B	SDIV B AOV INSTRUMENT AIR SUPPLY SOLENOID VALVE B EQ	I	X	8B	RB	272EL	A 3.5
03TK-125(HCU-02-19)	WATER ACCUMULATOR	I	X	0	RB	272EL	A 5
03TK-128(HCU-02-19)	NITROGEN ACCUMULATOR	I	X	0	RB	272EL	Y 5
							Y

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
03TK-1A	CRD A SDIV SCRAM DISCH INSTRUMENT AIR VOLUME TANK	I	X	21	RB	272EL	2 P
03TK-1B	CRD B SDIV SCRAM DISCH INSTRUMENT AIR VOLUME TANK	I	X	21	RB	272EL	3 D
09-21	NUCLEAR STEAM TEMP RECORD PANEL	I	X	20	CR	300EL	9.5 C
09-3	NUCLEAR STATION MAIN CONTROL BOARD	I	X	20	CR	300EL	10 F
09-32	CHANNEL "A" RHR/RCIC RELAY PANEL	I	A	20	RR	284'8E L	9.5 F
09-33	CHANNEL "B" RHR/RCIC RELAY PANEL	I	B	20	RR	284'8E L	9 F
09-39	HPCI RELAY PANEL	I	X	20	RR	284'8E L	9 G
09-45	AUTO BLOWDOWN RELAY CABINET	I	X	20	RR	284'8E L	9.5 FG
09-46	CORE SPRAY CHANNEL "A" RELAY CABINET	I	A	20	RR	284'8E L	9.5 FG
09-47	CORE SPRAY CHANNEL "B" RELAY CABINET	I	B	20	RR	284'8E L	9 FG
09-5	REACTOR CONTROL MAIN CONTROL BOARD	I	X	20	CR	300EL	10.5 E

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
09-6	BALANCE OF PLANT (MECH) MAIN CONTROL BOARD	I	X	20	CR	300EL	10 E
09-95	EMERGENCY CORE COOLING SYSTEM DIV 1 A/C TRIP CABINET	I	X	20	RR	284'8EL	10.5 G
09-96	EMERGENCY CORE COOLING SYSTEM DIV 2 B/D TRIP CABINET	I	X	20	RR	284'8EL	10.5 F
09AR-5A	(RED) A AUXILIARY RELAY CABINET	I	A	20	RR	284'8EL	10.5 E
09AR-5B	(BLUE) B AUXILIARY RELAY CABINET	I	B	20	RR	284'8EL	10.5 E
10AOV-68A	RHR A LPCI TESTABLE CHECK VALVE	I	A	7	PC	284EL	5 R
10AOV-68B	RHR B LPCI TESTASLE CHECK VALVE	I	B	7	PC	284EL	4.5 W
10DPIS-125A	RHR LOOP A DIFF PRESS INDIC SWITCH EQ	I	A	18	RB	242'8EL	4 A
10DPIS-125B	RHR B DISCH HDR FLOW DIFF PRESS INDIC SWITCH	I	B	18	RB	242'8EL	3 D
10E-2A	RESIDUAL HEAT REMOVAL SYSTEM HEAT EXCHANGER A	I	A	21	RB	272EL	2.5 A

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
10E-2B	RESIDUAL HEAT REMOVAL SYSTEM HEAT EXCHANGER B	I	B	21	RB	272EL	2.5
10FT-109B	RHR B DISCH HDR FLOW XMITTER	I	B	18	RB	227'6E L	D 1
10MOV-15A	RHR PUMP A SUCT SHUTDOWN COOLING ISOL VALVE	I	A	8A	RB	227'6E L	W 2
10MOV-15B	RHR PUMP B SUCT SHUTDOWN COOLING ISOL VALVE	I	B	8A	RB	227'6E L	A 2
10MOV-15C	RHR PUMP C SUCT SHUTDOWN COOLING ISOL VALVE	I	A	8A	RB	227'6E L	D 3.5
10MOV-15D	RHR PUMP D SUCT SHUTDOWN COOLING ISOL VALVE	I	B	8A	RB	227'6E L	A 3
10MOV-16A	RHR A MIN FLOW ISOL VALVE	I	A	8A	RB	242'8E L	D 2
10MOV-16B	RHR B MIN FLOW ISOL VALVE	I	B	8A	RB	242'8E L	A 3
10MOV-17	RHR SHUTDOWN COOLING OUTBD ISOL VALVE	I	B	8A	RB	272EL	D 3
10MOV-18	RHR SHUTDOWN COOLING INBD ISOL VALVE	I	A	8A	PC	272EL	R 3
10MOV-25A	RHR A LPCI INBD INJ VALVE	I	A	8A	RB	286'6E L	T 3

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
10MOV-25B	RHR B LPCI INBD INJ VALVE	I	B	8A	RB	286'6E L	R 2
10MOV-27A	RHR A LPCI OUTBD INJ VALVE	I	A	8A	RB	286'6E L	T 3
10MOV-27B	RHR B LPCI OUTBD INJ VALVE	I	B	8A	RB	286'6E L	R 2
10MOV-34A	RHR A TORUS COOLING SUPPLY VALVE	I	A	8A	RB	254EL	T 3
10MOV-34B	RHR B TORUS COOLING SUPPLY VALVE	I	B	8A	RB	242'8E L	A 3
10MOV-39A	RHR A TORUS COOLING ISOL VALVE	I	A	8A	RB	242'8E L	D 3
10MOV-39B	RHR B TORUS COOLING ISOL VALVE	I	B	8A	RB	254EL	A 3
10MOV-66A	RHR HEAT EXCH A BYPASS VALVE	I	A	8A	RB	242'8E L	D 2
10MOV-66B	RHR HEAT EXCH B BYPASS VALVE	I	B	8A	RB	242'8E L	P 2
10MOV-89A	RHR HEAT EXCH A SERV WATER OUTLET ISOL VALVE	I	A	8A	RB	272EL	D 2
10MOV-89B	RHR HEAT EXCH B SERV WATER OUTLET ISOL VALVE	I	B	8A	RB	272EL	A 2.5
10P-1A	RHR SERVICE WATER PUMP A	I	A	6	SP	255EL	D 26

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
10P-1B	RHR SERVICE WATER PUMP B	I	B	6	SP	255EL	B 25
10P-1C	RHR SERVICE WATER PUMP C	I	A	6	SP	255EL	B 26.5
10P-1D	RHR SERVICE WATER PUMP D	I	B	6	SP	255EL	B 25
10P-3A	RESIDUAL HEAT REMOVAL PUMP A	I	A	6	RB	227'6E L	B 3
10P-3B	RESIDUAL HEAT REMOVAL PUMP B	I	B	6	RB	227'6E L	A 3
10P-3C	RESIDUAL HEAT REMOVAL PUMP C	I	A	6	RB	227'6E L	D 3
10P-3D	RESIDUAL HEAT REMOVAL PUMP D	I	B	6	RB	227'6E L	A 3
10RV-41A	RHR PUMP A SHUTDOWN COOLING SUCT RELIEF VALVE	I	A	7	RB	227'6E L	D 2
10RV-41B	RHR PUMP B SHUTDOWN COOLING SUCT RELIEF VALVE	I	B	7	RB	227'6E L	A 2
10RV-41C	RHR PUMP C SHUTDOWN COOLING SUCT RELIEF VALVE	I	A	7	RB	227'6E L	D 2
10RV-41D	RHR PUMP D SHUTDOWN COOLING SUCT RELIEF VALVE	I	B	7	RB	227'6E L	A 2
10RV-43A	RHR HEAT EXCHANGER A	I	A	7	RB	272EL	D 2.5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	TUBE SIDE RELIEF VALVE						
10RV-43B	RHR HEAT EXCHANGER B TUBE SIDE RELIEF VALVE	I	B	7	RB	272EL	A 2.5
10RV-46A	RHR HEAT EXCHANGE A SHELL SIDE RELIEF VALVE	I	A	7	RB	272EL	D 2.5
10RV-46B	RHR HEAT EXCHANGER B SHELL SIDE RELIEF VALVE	I	B	7	RB	272EL	A 2.5
10SOV-101A	RHRSW PUMP A MOTOR COOLING WATER RETURN SOLENOID VALVE	I	A	8B	SP	255EL	D 26
10SOV-101B	RHRSW PUMP B MOTOR COOLING WATER RETURN SOLENOID VALVE	I	B	8B	SP	255EL	B 25
10SOV-101C	RHRSW PUMP C MOTOR COOLING WATER RETURN SOLENOID VALVE	I	A	8B	SP	255EL	B 26.5
10SOV-101D	RHRSW PUMP D MOTOR COOLING WATER RETURN SOLENOID VALVE	I	B	8B	SP	255EL	B 25
10SOV-68A	RHR A TESTABLE CHECK AIR SUPPLY ISOL SOLENOID VALVE	II/III	A	8B	PC	272EL	B 5
10SOV-68B	RHR B TESTABLE	II/III	B	8B	PC	272EL	R 4.5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	CHECK AIR SUPPLY ISOL SOLENOID VALVE						
10SV-35A	RHR LOOP A SAFETY VALVE	I	A	7	RB	242'8E L	W 1
10SV-35B	RHR LOOP B SAFETY VALVE	I	B	7	RB	242'8E L	R 1
10SV-44	REACTOR HEAD SPRAY LINE SAFETY VALVE	I	B	7	RB	272EL	W 3
10SV-74A	RHR HEAT EXCHANGER A STEAM INLET SAFETY VALVE	I	A	7	RB	294EL	W 2
10SV-74B	RHR HEAT EXCHANGER B STEAM INLET SAFETY VALVE	I	B	7	RB	272EL	A 2
11EV-14A	SLC A DOUBLE SQUIB ACTIVATED SHEAR EXPLOSIVE VALVE	I	X	0	RB	326'9E L	D 6
11EV-14B	SLC B DOUBLE SQUIB ACTIVATED SHEAR EXPLOSIVE VALVE	I	X	0	RB	326'9E L	R 6
11P-2A	STANDBY LIQUID CONTROL A PUMP	I	A	5	RB	326'9E L	R 6
11P-2B	STANDBY LIQUID CONTROL B PUMP	I	B	5	RB	326'9E L	P 6
11SV-39A	SLC PUMP 2A DISCH SAFETY VALVE	I	A	7	RB	326'9E L	P 6
							P

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
11SV-39B	SLC PUMP 2B DISCH SAFETY VALVE	I	B	7	RB	326'9E L	6 P
11TK-1	STANDBY LIQUID CONTROL TANK	I	X	21	RB	326'9E L	6 P
12MOV-15	RWCU SUPPLY INBD ISOL VALVE	I	A	8A	PC	292EL	4 T
12MOV-18	RWCU SUPPLY OUTBD ISOL VALVE	I	B	8A	RB	314'6E L	3 R
13MOV-15	RCIC STEAM SUPPLY INBD ISOL VALVE	I	B	8A	PC	291EL	4 R
13MOV-16	RCIC TURBINE STEAM SUPPLY OUTBD ISOL VALVE	I	A	8A	RB	274EL	3 R
15PS-122A	RBCLC PUMPS DISCH HDR PRESS SWITCH	I	X	18	RB	300EL	4 A
15PS-122B	RBCLC PUMPS DISCH HDR PRESS SWITCH	I	X	18	RB	300EL	4.5 A
15PS-122C	RBCLC PUMPS DISCH HDR PRESS SWITCH	I	X	18	RB	300EL	4 A
15PS-122D	RBCLC PUMPS DISCH HDR PRESS SWITCH	I	X	18	RB	300EL	4.5 A
16-1RTD-131A	TORUS BULK TEMP MONITOR O AZIMUTH BAY L X-232 RESIST TEMP DETECTOR	I	A	19	SU	227'6E L	4

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	EQ						
16-1RTD-131B	TORUS BULK TEMP MONITOR 0 AZIMUTH BAY L X-232 RESIST TEMP DETECTOR EQ	I	B	19	SU	227'6E L	P 4
16-1RTD-132A	TORUS BULK TEMP MONITOR 22.5 AZIMUTH BAY K X-233 RESIST TEMP DETECTOR EQ	I	A	19	SU	227'6E L	P 5
16-1RTD-132B	TORUS BULK TEMP MONITOR 22.5 AZIMUTH BAY K X-233 RESIST TEMP DETECTOR EQ	I	B	19	SU	227'6E L	P 5
16-1RTD-133A	TORUS BULK TEMP MONITOR 45 AZIMUTH BAY J X-234 RESIST TEMP DETECTOR EQ	I	A	19	SU	227'6E L	P 6
16-1RTD-133B	TORUS BULK TEMP MONITOR 45 AZIMUTH BAY J X-234 RESIST TEMP DETECTOR EQ	I	B	19	SU	227'6E L	R 6
16-1RTD-134A	TORUS BULK TEMP MONITOR 67.5 AZIMUTH BAY I X-235 RESIST THERMAL DETECTOR EQ	I	A	19	SU	277'6E L	R 6
							R

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
16-1RTD-134B	TORUS BULK TEMP MONITOR 67.5 AZIMUTH BAY I X-235 RESIST TEMP DETECTOR EQ	I	B	19	SU	277'6E L	6
16-1RTD-135A	TORUS BULK TEMP MONITOR 90 AZIMUTH BAY H X-236 RESIST TEMP DETECTOR EQ	I	A	19	SU	227'6E L	R 6
16-1RTD-135B	TORUS BULK TEMP MONITOR 90 AZIMUTH BAY H X-236 RESIST TEMP DETECTOR EQ	I	B	19	SU	227'6E L	T 6
16-1RTD-136A	TORUS BULK TEMP MONITOR 112.5 AZIMUTH BAY G X-237 RESIST TEMP DETECTOR EQ	I	A	19	SU	227'6E L	T 6
16-1RTD-136B	TORUS BULK TEMP MONITOR 112.5 AZIMUTH BAY G X-237 RESIST TEMP DETECTOR EQ	I	B	19	SU	227'6E L	W 6
16-1RTD-137A	TORUS BULK TEMP MONITOR 135 AZIMUTH BAY F X-238 RESIST TEMP DETECTOR EQ	I	A	19	SU	227'6E L	W 6
16-1RTD-137B	TORUS BULK TEMP MONITOR 135	I	B	19	SU	227'6E L	W 6

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	AZIMUTH BAY F X-238 RESIST TEMP DETECTOR EQ						
16-1RTD-138A	TORUS BULK TEMP MONITOR 157.5 AZIMUTH BAY E X-239 RESIST TEMP DETECTOR EQ	I	A	19	SU	227'6E L	W 5
16-1RTD-138B	TORUS BULK TEMP MONITOR 157.5 AZIMUTH BAY E X-239 RESIST TEMP DETECTOR EQ	I	B	19	SU	227'6E L	Y 5
16-1RTD-139A	TORUS BULK TEMP MONITOR 180 AZIMUTH BAY D X-240 RESIST TEMP DETECTOR EQ	I	A	19	SU	227'6E L	Y 5
16-1RTD-139B	TORUS BULK TEMP MONITOR 180 AZIMUTH BAY D X-240 RESIST TEMP DETECTOR EQ	I	B	19	SU	227'6E L	Y 5
16-1RTD-140A	TORUS BULK TEMP MONITOR 202.5 AZIMUTH BAY C X-241 RESIST TEMP DETECTOR EQ	I	A	19	SU	227'6E L	Y 4
16-1RTD-140B	TORUS BULK TEMP MONITOR 202.5 AZIMUTH BAY C X-241 RESIST	I	B	19	SU	227'6E L	Y 4

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	TEMP DETECTOR EQ						
16-1RTD-141A	TORUS BULK TEMP MONITOR 22.5 AZIMUTH BAY B X-242 RESIST TEMP DETECTOR EQ	I	A	19	SU	227'6E L	Y 3
16-1RTD-141B	TORUS BULK TEMP MONITOR 22.5 AZIMUTH BAY B X-242 RESIST TEMP DETECTOR EQ	I	B	19	SU	227'6E L	W 3
16-1RTD-142A	TORUS BULK TEMP MONITOR 247.5 AZIMUTH BAY A X-243 RESIST TEMP DETECTOR EQ	I	A	19	SU	227'6E L	W 3
16-1RTD-142B	TORUS BULK TEMP MONITOR 247.5 AZIMUTH BAY A X-243 RESIST TEMP DETECTOR EQ	I	B	19	SU	227'6E L	W 3
16-1RTD-143A	TORUS BULK TEMP MONITOR 270 AZIMUTH BAY P X-244 RESIST TEMP DETECTOR EQ	I	A	19	SU	227'6E L	W 3
16-1RTD-143B	TORUS BULK TEMP MONITOR 270 AZIMUTH BAY P X-244 RESIST TEMP DETECTOR EQ	I	B	19	SU	227'6E L	T 3

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

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16-1RTD-144A	TORUS BULK TEMP MONITOR 292.5 AZIMUTH BAY O X-245 RESIST TEMP DETECTOR EQ	I	A	19	SU	227'6E L	T 3
16-1RTD-144B	TORUS BULK TEMP MONITOR 292.5 AZIMUTH BAY X-245 RESI TEMP DETECTOR EQ	I	B	19	SU	227'6E L	R 3
16-1RTD-145A	TORUS BULK TEMP MONITOR 315 AZIMUTH BAY N X-246 RESIST TEMP DETECTOR EQ	I	A	19	SU	227'6E L	R 3
16-1RTD-145B	TORUS BULK TEMP MONITOR 315 AZIMUTH BAY N X-246 RESIST TEMP DETECTOR EQ	I	B	19	SU	227'6E L	R 3
16-1RTD-146A	TORUS BULK TEMP MONITOR 337.5 AZIMUTH BAY M X-247 RESIST TEMP DETECTOR EQ	I	A	19	SU	227'6E L	R 4
16-1RTD-146B	TORUS BULK TEMP MONITOR 337.5 AZIMUTH BAY M X-247 RESIST TEMP DETECTOR EQ	I	B	19	SU	227'6E L	P 4
23AOV-42	HPCI TURBINE	I	A	7	RB	227'6E	P 1

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	STEAM SUPPLY UPSTR DRAIN ISOL VALVE					L	
23HOV-1	HPCI TURBINE STOP VALVE	I	B	7	RB	227'6E L	T 1
23LT-202A	SUPPRESSION POOL HPCI LOGIC LEVEL XMITTER EQ	I	A	18	RB	227'6E L	T 4.5
23LT-202B	SUPPRESSION POOL HPCI LOGIC LEVEL XMITTER EQ	I	B	18	RB	227'6E L	A 4.5
23MOV-14	HPCI TURBINE STEAM SUPPLY ISOL VALVE	I	B	8A	RB	227'6E L	D 1
23MOV-15	HPCI STEAM SUPPLY INBD ISOL VALVE	I	A	8A	PC	269'9E L	T 4
23MOV-16	HPCI TURBINE STEAM SUPPLY OUTBD ISOL VALVE	I	B	8A	RB	273'4E L	W 2
23MOV-17	HPCI BOOSTER PUMP P-1B SUCT FROM 33TK-1A & B ISOL VALVE	I	B	8A	RB	242'8E L	W 3
23MOV-19	HPCI PUMP DISCH TO REACTOR INBD ISOL VALVE	I	B	8A	SU	262EL	A 7
23MOV-21	HPCI FULL FLOW TEST RETURN TO CST 33TK-1A & B UPSTR ISOL VALVE	I	B	8A	RB	262'5E L	W 5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
23MOV-24	HPCI FULL FLOW TEST RETURN TO CST 33TK-1A & B DNSTR ISOL VALVE	II/III	B	8A	RB	262'5E L	T 3
23MOV-25	HPCI MAIN PUMP P-1M MIN FLOW ISOL VALVE	I	B	8A	SU	257'1E L	P 4
23MOV-57	HPCI BOOSTER PUMP P-1B SUCT FROM SUPPRESSION POOL DNSTR ISOL VALVE	I	B	8A	RB	227'6E L	D 1
23MOV-58	HPCI BOOSTER PUMP P-1B SUCT FROM SUPPRESSION POOL UPSTR ISOL VALVE	I	B	8A	SU	232'1E L	R 1, T
23MOV-60	HPCI TURBINE STEAM SUPPLY OUTBD ISOL VALVE 23MOV-16 BYPASS VALVE	I	B	8A	RB	272EL	3
23P-150	HPCI TURBINE AUX LUBE OIL PUMP	I	B	5	RB	227'6E L	W 1
23P-1M	HPCI MAIN PUMP	I	B	5	RB	227'6E L	T 1
23RV-106	HPCI AUX OIL PUMP P-150 DISCH RELIEF VALVE	I	B	7	RB	227'6E L	T 1
23RV-107	HPCI MAIN LUBE OIL PUMP P-1MO	I	B	7	RB	227'6E L	T 1

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	DISCH RELIEF VALVE						
23SV-34	HPCI BOOSTER PUMP P-1B SUCT SAFETY VALVE	I	B	7	RB	227'6E L	T 1
23SV-66	HPCI BOOSTER PUMP P-1B RECIRC SAFETY VALVE	I	B	7	RB	227'6E L	R 1
23TU-2	HPCI PUMP DRIVE TURBINE	I	B	5	RB	227'6E L	R 1
25-01	CH "A" CORE SPRAY SYSTEM RACK	I	A	18	RB	242'8E L	T 4
25-05	REACTOR PROTECTION AND NSSS SYSTEM RACK	I	A	18	RB	300EL	A 3.5
25-06	REACTOR PROTECTION AND NSSS SYSTEM RACK	I	B	18	RB	300EL	R 5.5
25-50	HPCI INST RACK	I	A	18	RB	242'8E L	YW 1
25-59	RHR CHANNEL "A" INST RACK	I	A	18	RB	242'8E L	R 4
25-60	CORE SPRAY CHANNEL "B" INST RACK	I	B	18	RB	242EL	A 4
25-62	RHR CHANNEL "B" INST RACK	I	B	18	RB	242EL	D 3
27AOV-126A	AMBIENT VAPORIZER A	I	A	7	CB	271'8E L	D .5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	INLET VALVE						
27AOV-126B	AMBIENT VAPORIZER B INLET VALVE	I	B	7	CB	271'8E L	RP .5
27AOV-127A	STEAM VAPORIZER NV-8 LIQUID NITROGEN SUPPLY VALVE	I	A	7	CB	271'8E L	TW .5
27AOV-127B	STEAM VAPORIZER NV-8 LIQUID NITROGEN SUPPLY VALVE	I	B	7	CB	271'8E L	RP .5
27AOV-128A	CAD TRAIN A NITROGEN MAKE-UP SUPPLY VALVE	I	A	7	CB	271'8E L	TW .5
27AOV-129A	DRYWELL PCV AND INSTR CAD TRAIN A BACKUP VALVE	I	A	7	CB	271'8E L	RP .5
27AOV-131A	CAD TRAIN A NITROGEN MAKE-UP ISOL VALVE	I	A	7	SU	262EL	RP 2, T
27AOV-131B	CAD TRAIN B NITROGEN MAKE-UP ISOL VALVE	I	B	7	SU	262EL	2, T
27AOV-132A	CAD TRAIN A TORUS NITROGEN MAKE-UP ISOL VALVE	I	A	7	SU	262EL	2, T
27AOV-132B	CAD TRAIN B TORUS NITROGEN MAKE-UP ISOL VALVE	I	B	7	SU	262EL	2, T
27CAD	CONTAINMENT AIR DILUTION PANEL	I	X	20	RR	284'8E L	9 E

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

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27E-1A	CAD A VALVE OPERATING NITROGEN AMBIENT HEAT EXCHANGER	I	A	21	CB	271'8E L	.5
27E-1B	CAD B VALVE OPERATING NITROGEN AMBIENT HEAT EXCHANGER	I	B	21	CB	271'8E L	RP .5
27EH-10A	CAD A AMBIENT VAPORIZER ELECTRIC HEATER	I	A	18	CB	271'8E L	TW .5
27EH-10B	CAD B AMBIENT VAPORIZER ELECTRIC HEATER	I	B	18	CB	271'8E L	RT .5
27MAP	MONITORING ANALYSIS PANEL	I	X	20	RR	284'8E L	RT 10
27NS-CA	CAD A NITROGEN SUPPLY INSTR CABINET	I	A	18	CB	271'8E L	E .5
27NS-CB	CAD B NITROGEN SUPPLY INSTR CABINET	I	B	18	CB	271'8E L	RP .5
27NV-9A	CAD TRAIN A AMBIENT VAPORIZER	I	A	21	CB	271'8E L	TW .5
27NV-9B	CAD TRAIN B AMBIENT VAPORIZER	I	B	21	CB	271'8E L	RT .5
27PCV-116A	27FCV-103A SIGNAL CONVERTER NITROGEN SUPPLY PRESS REGULATOR	I	X	19	RB	272EL	RT 2

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
27PCV-116B	27FCV-103B SIGNAL CONVERTER NITROGEN SUPPLY PRESS REGULATOR	I	X	18	RB	272EL	T 2
27PCV-122A	PRESS BUILDING COIL A INLET PRESS CONTROL VALVE	I	A	7	CB	271'8E L	T .5
27PCV-122B	PRESS BUILDING COIL B INLET PRESS CONTROL VALVE	I	B	7	CB	271'8E L	RP .5
27PCV-134A	CAD TRAIN A VALVE OPERATING NITROGEN PRESS CONTROL VALVE	I	A	7	CB	271'8E L	TW .5
27PCV-134B	CAD TRAIN B VALVE OPERATING NITROGEN PRESS CONTROL VALVE	I	B	7	CB	271'8E L	RP .5
27PCV-140	DRYWELL PCV AND INSTR NITROGEN BACKUP SUPPLY PRESS CONTROL VALVE	I	X	7	CB	272EL	TW 1
27PT-115A2	DRYWELL DIV I WIDE RANGE PRESS XMITTER EQ	I	A	18	RB	344'6E L	PR 6
27PT-115B2	DRYWELL DIV II WIDE RANGE PRESS XMITTER EQ	I	B	18	RB	344'6E L	W 6
27RV-101A	LIQUID NITROGEN	I	A	7	CB	271'8E	W .5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	TANK A RELIEF VALVE					L	
27RV-101B	LIQUID NITROGEN TANK B RELIEF VALVE	I	B	7	CB	271'8E L	RP .5
27SV-114A	CAD TRAIN A VALVE OPERATING SUPPLY SAFETY VALVE	I	A	7	CB	271'8E L	TW .5
27SV-114B	CAD TRAIN B VALVE OPERATING SUPPLY SAFETY VALVE	I	B	7	CB	271'8E L	RP .5
27SV-115A	AMBIENT VAPORIZER A OUTLET SAFETY VALVE	I	A	7	CB	271'8E L	TW .5
27SV-115B	AMBIENT VAPORIZER B OUTLET SAFETY VALVE	I	B	7	CB	271'8E L	RP .5
27SV-118A	LIQUID NITROGEN TANK A OUTLET SAFETY VALVE	I	A	7	CB	271'8E L	TW .5
27SV-118B	LIQUID NITROGEN TANK B OUTLET SAFETY VALVE	I	B	7	CB	271'8E L	RP .5
27SV-119A	PRESS BUILDING COIL A INLET SAFETY VALVE	I	A	7	CB	271'8E L	TW .5
27SV-119B	PRESS BUILDING COIL B INLET SAFETY VALVE	I	B	7	CB	271'8E L	RP .5
27SV-121	DRYWELL PCV AND	II/III	X	7	CB	271'8E	TW .5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	INSTR NORMAL SUPPLY 27PCV-120 BYPASS SAFETY VALVE					L	
27SV-122	STEAM VAPORIZER NV-8 CAD TRAINS A & B INLET CROSS-TIE SAFETY VALVE	II/III	X	7	CB	271'8E L	TW .5
27SV-201A	DRYWELL PCV AND INSTR NORMAL SUPPLY SAFETY VALVE	I	X	7	CB	271'8E L	TW .5
27SV-201B	DRYWELL PCV AND INSTR NORMAL SUPPLY SAFETY VALVE	I	X	7	CB	271'8E L	TW .5
27SV-202	DRYWELL PCV AND INSTR BACKUP SUPPLY SAFETY VALVE	I	X	7	CB	272EL	TW 1
27TK-7A	CAD A LIQUID NITROGEN TANK	I	A	21	CB	271'8E L	RT .5
27TK-7B	CAD B LIQUID NITROGEN TANK	I	B	21	CB	271'8E L	RP .5
29AC-1A	MST D OUTBD MSIV AIR ACCUMULATOR	M	X	21	ST	276'8E L	TW 6.5
29AC-1B	MST A INBD MSIV N2/AIR ACCUMULATOR	I	X	21	PC	276'10 EL	T 5.5
29AC-1C	MST D INBD MSIV N2/AIR ACCUMULATOR	I	X	21	PC	276'10 EL	T 5.5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
29AC-1D	MST B OUTBD MSIV AIR ACCUMULATOR	M	X	21	ST	276'8E L	T 6.5
29AC-1E	MST C OUTBD MSIV AIR ACCUMULATOR	M	X	21	ST	276'8E L	T 6.5
29AC-1F	MST B INBD MSIV N2/AIR ACCUMULATOR	I	X	21	PC	276'10 EL	T 5.5
29AC-1G	MST A OUTBD MSIV AIR ACCUMULATOR	M	X	21	ST	276'8E L	T 6.5
29AC-1H	MST C INBD MSIV N2/AIR ACCUMULATOR	I	X	21	PC	276'10 EL	T 5.5
29AOV-80A	MST A INBD MAIN STEAM ISOL VALVE	I	X	7	PC	276'10 EL	T 5.5
29AOV-80B	MST B INBD MAIN STEAM ISOL VALVE	I	X	7	PC	276'10 EL	T 5.5
29AOV-80C	MST C INBD MAIN STEAM ISOL VALVE	I	X	7	PC	276'10 EL	T 5.5
29AOV-80D	MST D INBD MAIN STEAM ISOL VALVE	I	X	7	PC	276'10 EL	T 5.5
29AOV-86A	MST A OUTBD MAIN STEAM ISOL VALVE	I	X	7	ST	276'8E L	T 6.5
29AOV-86B	MST B OUTBD MAIN STEAM ISOL VALVE	I	X	7	ST	280EL	T 6.5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
29AOV-86C	MST C OUTBD MAIN STEAM ISOL VALVE	I	X	7	ST	280EL	T 6.5
29AOV-86D	MST D OUTBD MAIN STEAM ISOL VALVE	I	X	7	ST	280EL	T 6.5
33LT-101	CONDENSATE STORAGE TANKS LEVEL XMITTER	II/III	X	18	YD	257EL	T NA
33TK-12A	CONDENSATE STORAGE TANK A	II/III	X	21	YD	NA	NA NA
33TK-12B	CONDENSATE STORAGE TANK B	II/III	X	21	YD	NA	NA NA
39ACC-256A	IAS 02RV-71A AIR ACCUMULATOR	I	X	21	PC	290'4E L	NA 5
39ACC-256B	IAS 02RV-71B AIR ACCUMULATOR	I	X	21	PC	290'4E L	R 5
39ACC-256C	IAS 02RV-71C AIR ACCUMULATOR	I	X	21	PC	290'4E L	R 5
39ACC-256D	IAS 02RV-71D AIR ACCUMULATOR	I	X	21	PC	290'4E L	R 4.5
39ACC-256E	IAS 02RV-71E/F AIR ACCUMULATOR	I	X	21	PC	290'4E L	R 5
39ACC-256G	IAS 02RV-71G AIR ACCUMULATOR	I	X	21	PC	290'4E L	W 5
39ACC-256H	IAS 02RV-71H AIR ACCUMULATOR	I	X	21	PC	290'4E L	W 5
39ACC-256J	IAS 02RV-71J AIR ACCUMULATOR	I	X	21	PC	290'4E L	W 5
39ACC-256K	IAS 02RV-71K	I	X	21	PC	290'4E	W 5.5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	AIR ACCUMULATOR					L	R
39ACC-256L	IAS 02RV-71L AIR ACCUMULATOR	I	X	21	PC	290'4E L	5.5 W
46MOV-101A	EMERGENCY SERVICE WATER LOOP A SUPPLY HEADER ISOL VALVE	I	A	8A	SP	255EL	26 B
46MOV-101B	EMERGENCY SERVICE WATER LOOP B SUPPLY HEADER ISOL VALVE	I	B	8A	SP	255EL	25 B
46MOV-102A	EMERGENCY SERVICE WATER PUMP A TEST VALVE	I	A	8A	SP	255EL	26 B
46MOV-102B	EMERGENCY SERVICE WATER PUMP B TEST VALVE	I	B	8A	SP	255EL	25 B
46P-2A	EMERGENCY SERVICE WATER PUMP A	I	A	6	SP	255EL	26 B
46P-2B	EMERGENCY SERVICE WATER PUMP B	I	B	6	SP	255EL	25 B
66PCV-101	RB UNIT COOLERS SWS RETURN HEADER PRESS CONTROL VALVE	I	X	7	RB	272EL	7.5 Y
66TCV-107E	EAST CRESCENT AREA UC-22E SWS INLET TEMP CONTROL VALVE	I	A	7	RB	242'8E L	3

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
66TCV-107F	WEST CRESCENT AREA UC-22F SWS INLET TEMP CONTROL VALVE	I	B	7	RB	242'8E L	A 3
66UC-22A	WEST CRESCENT AREA UNIT COOLER 22A	I	A	10	RB	242'8E L	D 1
66UC-22B	EAST CRESCENT AREA UNIT COOLER 22B	I	B	10	RB	242'8E L	R 4
66UC-22C	WEST CRESCENT AREA UNIT COOLER 22C	I	A	10	RB	242'8E L	D 2.5
66UC-22D	EAST CRESCENT AREA UNIT COOLER 22D	I	B	10	RB	242'8E L	A 3.5
66UC-22E	WEST CRESCENT AREA UNIT COOLER 22E	I	A	10	RB	242'8E L	D 3
66UC-22F	EAST CRESCENT AREA UNIT COOLER 22F	I	B	10	RB	242'8E L	A 3
66UC-22G	WEST CRESCENT AREA UNIT COOLER 22G	I	A	10	RB	242'8E L	D 3.5
66UC-22H	EAST CRESCENT AREA UNIT COOLER 22H	I	B	10	RB	242'8E L	A 2.5
66UC-22J	WEST CRESCENT AREA UNIT COOLER 22J	I	A	10	RB	242'8E L	D 4
66UC-22K	HPCI ROOM UNIT COOLER 22K	I	B	10	RB	242'8E L	A 1

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
67E-11	WEST CABLE TUNNEL VENT SUPPLY COOLING COIL	I	X	10	EB	286EL	T 18.5
67E-14	EAST CABLE TUNNEL VENT SUPPLY COOLING COIL	I	X	10	EB	286EL	A 18.5
67PCV-101	ELECTRIC BAY UC-16A & B SERVICE WATER RETURN PRESS CONTROL VALVE	I	X	7	EB	286EL	A 19
67UC-16A	WEST ELECTRIC BAY UNIT COOLER	I	A	10	EB	286EL	B 17
67UC-16B	EAST ELECTRIC BAY UNIT COOLER	I	B	10	EB	286EL	A1 17
70AHU-12A	RELAY ROOM VENT AIR HANDLING UNIT A	I	A	10	AD	300EL	B 9.5
70AHU-12B	RELAY ROOM VENT AIR HANDLING UNIT B	I	B	10	AD	300EL	Z 9.5
70AHU-19A	CHILLER ROOM VENT AIR HANDLING UNIT A	I	A	10	AD	300EL	X 9
70AHU-19B	CHILLER ROOM VENT AIR HANDLING UNIT B	I	B	10	AD	300EL	S 9
70AHU-3A	CONTROL ROOM VENT AIR HANDLING UNIT A	I	A	10	AD	300EL	S 9.5
70AHU-3B	CONTROL ROOM	I	B	10	AD	300EL	Z 9.5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	VENT AIR HANDLING UNIT B						
70FD-1	RELAY ROOM INLET VENT FIRE DAMPER	I	X	10	AD	300EL	X 10
70FD-10	SOUTH/NORTH CABLE ROOMS FIRE DAMPER	I	X	10	RR	284'8E L	C 9.5
70FD-2	RELAY ROOM VENT EXHAUST FANS INLET FIRE DAMPER	I	X	10	AD	300EL	C 10
70FD-4	RELAY ROOM VENT EXHAUST FIRE DAMPER	I	X	10	RR	284'8E L	C 9.5
70FD-5	RELAY ROOM VENT EXHAUST FIRE DAMPER	I	X	10	RR	284'8E L	C 9.5
70FD-6	RELAY ROOM VENT SUPPLY FIRE DAMPER	I	X	10	RR	284'8E L	C 10.5
70FD-7	RELAY ROOM VENT EXHAUST FIRE DAMPER	I	X	10	RR	284'8E L	C 10.5
70FN-13A	RELAY ROOM VENT EXHAUST FAN A	I	A	9	AD	300EL	C 9.5
70FN-13B	RELAY ROOM VENT EXHAUST FAN B	I	B	9	AD	300EL	Z 9.5
70FN-4A	CONTROL ROOM VENT EXHAUST FAN A	I	A	9	AD	310'6E L	Z 9.5
70FN-4B	CONTROL ROOM VENT EXHAUST	I	B	9	AD	310'6E L	V 9.5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	FAN B						
70MOD-101A	RELAY ROOM VENT AHU-12A OUTLET ISOL DAMPER	I	A	10	AD	300EL	V 9.5
70MOD-101B	RELAY ROOM VENT AHU-12B OUTLET ISOL DAMPER	I	B	10	AD	300EL	Z 9.5
70MOD-102A	RELAY ROOM VENT EXHAUST FAN 13A OUTLET ISOL DAMPER	I	A	10	AD	310'6E L	X 9.5
70MOD-102B	RELAY ROOM VENT EXHAUST FAN 13B OUTLET ISOL DAMPER	I	B	10	AD	310'6E L	X 10
70MOD-104A	RELAY ROOM VENT RECIRC ISOL DAMPER A	I	A	10	AD	310'6E L	Z 9.5
70MOD-104B	RELAY ROOM VENT RECIRC ISOL DAMPER B	I	B	10	AD	310'6E L	X 9.5
70MOD-106A	CONTROL ROOM VENT AHU-3A OUTLET ISOL DAMPER	I	A	10	AD	300EL	X 9.5
70MOD-106B	CONTROL ROOM VENT AHU-3B OUTLET ISOL DAMPER	I	B	10	AD	300EL	Z 9.5
70MOD-108A	CONTROL ROOM VENT EXHAUST FAN 4A OUTLET ISOL DAMPER	I	A	10	AD	310'6E L	Z 9.5
70MOD-108B	CONTROL ROOM	I	B	10	AD	310'6E	V 9.5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	VENT EXHAUST FAN 4B OUTLET ISOL DAMPER					L	
70MOD-110A	CONTROL ROOM VENT RECIRC ISOL DAMPER A	I	A	10	AD	310'6E L	V 9.5
70MOD-110B	CONTROL ROOM VENT RECIRC ISOL DAMPER B	I	B	10	AD	310'6E L	V 9.5
70PCV-100A1	CR/RR CHILLER CONDENSER A SWS PRESS CONTROL VALVE 1	I	A	7	AD	300EL	V 11
70PCV-100A2	CR/RR CHILLER CONDENSER B SWS PRESS CONTROL VALVE 2	I	A	7	AD	300EL	S 11
70PCV-100B1	CR/RR CHILLER CONDENSER A SWS PRESS CONTROL VALVE 1	I	B	7	AD	300EL	S 10
70PCV-100B2	CR/RR CHILLER CONDENSER B SWS PRESS CONTROL VALVE 2	I	B	7	AD	300EL	V 10
70RV-101A	CR/RR CHILLER A CONDENSER SERVICE WATER RELIEF VALVE	I	A	7	AD	300EL	V 11
70RV-101B	CR/RR CHILLER B CONDENSER SERVICE WATER RELIEF VALVE	I	B	7	AD	300EL	S 10
70RWC-2A(CND)	CONTROL ROOM CHILLER A	I	A	11	AD	300EL	V 10.5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	CONDENSER						
70RWC-2B(CND)	CONTROL ROOM CHILLER B CONDENSER	I	B	11	AD	300EL	S 10.5
70TCV-123A	CR/RR CHILLER ROOM AHU-19A CHILLED WATER OUTLET TEMP CONTROL VALVE	I	A	7	AD	300EL	S 9.5
70TCV-123B	CR/RR CHILLER ROOM AHU-19B CHILLED WATER OUTLET TEMP CONTROL VALVE	I	B	7	AD	300EL	S 9.5
71ACA2	DISTRIBUTION PANEL 71ACA2 EMERGENCY CONTROL & INST POWER A	I	A	14	RR	284'8E L	S 11
71ACA4	DISTRIBUTION PANEL 71ACA4 EMERGENCY CONTROL & INST POWER A	I	A	14	EG	272EL	C 24
71ACB2	DISTRIBUTION PANEL 71ACB2 EMERG CONTROL & INST POWER B	I	B	14	RR	284'8	A 12
71ACB4	DISTRIBUTION PANEL 71ACB4 EMERGENCY CONTROL & INST POWER B	I	B	14	EG	272EL	E 25
71ACUPS	DISTRIBUTION PANEL 71ACUPS UNINTERUPTABLE	II/III	X	14	RR	284'8E L	A 11

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	BUS						
71ACUPS-1	DISTRIBUTION PANEL 71ACUPS-1 UNINTERUPTABLE BUS	II/III	X	14	RR	284'8E L	F 11
71BAT-3A	LPCI INVERTER BATTERY	I	A	15	RB	344'6E L	F 5.5
71BAT-3B	LPCI INVERTER BATTERY	I	B	15	RB	344'6E L	P 2
71BC-1A	125 VDC STATION BATTERY CHARGER	I	A	16	BR	272EL	W 12.5
71BC-1B	125 VDC STATION BATTERY CHARGER	I	B	16	BR	272EL	E 12.5
71BCB-2A	BATTERY A CONTROL BOARD	I	A	14	BR	272EL	F 13
71BCB-2B	BATTERY B CONTROL BOARD	I	B	14	BR	272EL	C 13
71BMCC-1	RB WEST CRESCENT DC MOTOR CONTROL CENTER	I	A	1	RB	242'8E L	G 1
71BMCC-2	RB EAST CRESCENT DC MOTOR CONTROL CENTER	I	B	1	RB	242'8E L	R 1
71BMCC-3	RB WEST CRESCENT DC MOTOR CONTROL CENTER	I	A	1	RB	242'8E L	D 1
71BMCC-4	RB EAST CRESCENT DC MOTOR CONTROL CENTER	I	B	1	RB	242EL	R 1

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
71BMCC-6	RB DC MOTOR CONTROL CENTER	I	B	1	RB	272EL	D 8
71DC-A2	DISTRIBUTION PANEL 71DC-A2 DC CONTROL POWER A	I	A	14	RR	284'8E L	Y 10
71DC-A4	DISTRIBUTION PANEL 71DC-A4 DC CONTROL POWER A	I	A	14	EG	272EL	F 25
71DC-A5	DISTRIBUTION PANEL 71DC-A5 DC CONTROL POWER A	I	A	14	RR	284'8E L	A 10
71DC-B2	DISTRIBUTION PANEL 71DC-B2 DC CONTROL POWER B	I	B	14	RR	284'8E L	G 9
71DC-B4	DISTRIBUTION PANEL 71DC-B4 DC CONTROL POWER B	I	B	14	EG	272EL	F 27
71DSC-11561	L15 UNIT SUBSTATION TRANSF T-13 HIGH SIDE DISC SW	I	A	3	RB	300EL	A 2
71DSC-11661	L16 UNIT SUBSTATION TRANSF T-14 HIGH SIDE DISC SW	I	B	3	RB	300EL	R 6
71DSC-12561	L25 UNIT SUBSTATION TRANSF T-15	I	A	3	EB	272EL	P 18.5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	HIGH SIDE DISC SWITCH						
71DSC-12661	L26 UNIT SUBSTATION TRANSF T-16 HIGH SIDE DISC SWITCH	I	B	3	EB	272EL	B 18.5
71ESSA1	SAFEGUARD CONTROL & INST POWER A DISTRIBUTION PANEL	I	A	14	RR	284'8E L	B 11, C
71ESSB1	SAFEGUARD CONTROL & INST POWER B DISTRIBUTION PANEL	I	B	14	RR	284'8E L	12
71H05	4160V SWITCHGEAR DISTRIBUTION (BUS 10500)	I	A	3	EG	272EL	E 24
71H06	4160V SWITCHGEAR DISTRIBUTION (BUS 10600)	I	B	3	EG	272EL	A1 27
71INV-3A	LPCI MOV INDEP POWER SUPPLY A INVERTER	I	A	16	RB	344'6E L	A1 5.5
71INV-3B	LPCI MOV INDEP POWER SUPPLY B INVERTER	I	B	16	RB	344'6E L	P 2
71L15	600V SWITCHGEAR DISTRIBUTION (BUS 11500)	I	A	2	RB	300EL	W 2
71L16	600V SWITCHGEAR DISTRIBUTION	I	B	2	RB	300EL	R 6

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	(BUS 11600)						
71L25	600V SWITCHGEAR DISTRIBUTION (BUS 12500)	I	A	2	EB	272EL	P 18.5
71L26	600V SWITCHGEAR DISTRIBUTION (BUS 12600)	I	B	2	EB	272EL	A1 18.5
71MCC-151	600V MOTOR CONTROL CENTER (BUS 115100)	I	A	1	RB	272EL	B 1
71MCC-152	600V MOTOR CONTROL CENTER (BUS 115200)	I	A	1	RB	272EL	T 8
71MCC-153	600V MOTOR CONTROL CENTER (BUS 115300)	I	A	1	RB	242'8E L	P .5
71MCC-155	600V MOTOR CONTROL CENTER (BUS 115500)	I	A	1	RB	242'8E L	A .5
71MCC-156	600V MOTOR CONTROL CENTER(BUS 115600)	I	A	1	RB	344'6E L	A 3.5
71MCC-161	600V MOTOR CONTROL CENTER (BUS 116100)	I	B	1	RB	272EL	T 1.5
71MCC-162	600V MOTOR CONTROL CENTER (BUS 116200)	I	B	1	RB	272EL	W 7
71MCC-163	600V MOTOR CONTROL CENTER (BUS 116300)	I	B	1	RB	242'8E L	D 1.5
71MCC-165	600V MOTOR	I	B	1	RB	242'8E	D 1.5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	CONTROL CENTER (BUS 116500)					L	
71MCC-166	600V MOTOR CONTROL CENTER(BUS 115600)	I	B	1	RB	344'6E L	D 2
71MCC-251	600V MOTOR CONTROL CENTER (BUS 125100)	I	A	1	EB	272EL	D 18
71MCC-252	600V MOTOR CONTROL CENTER(BUS 125200)	I	A	1	EB	272E.	A 18
71MCC-253	600V MOTOR CONTROL CENTER (BUS 125300)	I	A	1	AD	300EL	A 10
71MCC-254	600V MOTOR CONTROL CENTER (BUS 125400)	I	A	1	EG	272EL	C 23
71MCC-261	600V MOTOR CONTROL CENTER (BUS 126100)	I	B	1	EB	272EL	A1 18
71MCC-262	600V MOTOR CONTROL CENTER(BUS 126200)	I	B	1	EB	272EL	B 18
71MCC-263	600V MOTOR CONTROL CENTER (BUS 126300)	I	B	1	AD	300EL	B 9
71MCC-264	600V MOTOR CONTROL CENTER (BUS 126400)	I	B	1	EG	272EL	C 25.5
71PT-71ACA2	EMERGENCY DISTRIBUTION	I	A	4	CS	272EL	A1 11

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	15KVA TRANSFORMER 71MCC-253-0D3						
71PT-71ACA4	EMERGENCY DISTRIBUTION 7.5KVA TRANSFORMER 71MCC-254-A3A	I	A	4	EG	272EL	C 24
71PT-71ACB2	EMERGENCY DISTRIBUTION 15KVA TRANSFORMER 71MCC-263-0E3	I	B	4	CS	272EL	A 12
71PT-71ACB4	EMERGENCY DISTRIBUTION 7.5KVA TRANSFORMER 71MCC-264-A3A	I	B	4	EG	272EL	E 26
71PT-71ACUPS	UNINTERRUPTIBLE BUS 37.5KVA TRANSFORMER 71MCC-252-0D2	II/III	X	4	EB	272EL	A 14
71PT-71ESSA1	SAFEGUARD BUS A DISTRIBUTION 15KVA TRANSFORMER 71MCC-252-0C2	I	A	4	CS	272EL	A 11
71PT-71ESSB1	SAFEGUARD BUS B DISTRIBUTION 15KVA TRANSFORMER 71MCC-252-0B3	I	B	4	CS	272EL	C 12
71SB-1	125 VOLT STATION BATTERY A	I	A	15	BR	272EL	E 12
71SB-2	125 VOLT	I	B	15	BR	272EL	E 12

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	STATION BATTERY B						
71T-13	600V UNIT SUBSTATION L15 TRANSFORMER	I	A	4	RB	300EL	F 2
71T-14	600V UNIT SUBSTATION L16 TRANSFORMER	I	B	4	RB	300EL	R 6
71T-15	SWITCHGEAR L25 100KVA TRANSFORMER 71-10560	I	A	4	EB	272EL	P 19
71T-16	SWITCHGEAR L26 100KVA TRANSFORMER 71-10660	I	B	4	EB	272EL	AB 18.5
71UPP	UNINTERRUPTABLE BUS MG SET 71UPS-1 CONTROL PANEL	II/III	X	20	EB	272EL	AB 14
71UPS-1	UNINTERRUPTABLE BUS MG SET	II/III	X	13	EB	272EL	B 14
72AHU-30A	BATTERY ROOM A AIR HANDLING UNIT	I	A	10	BR	282EL	B 12
72AHU-30B	BATTERY ROOM B AIR HANDLING UNIT	I	B	10	BR	282EL	E 12
72FD-13	BATTERY ROOM A VENT EXHAUST FANS A & C SUCT FIRE DAMPER	I	A	10	BR	282EL	G 13
72FD-14	BATTERY ROOM B VENT EXHAUST	I	B	10	BR	282EL	E 13

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	FANS B & D SUCT FIRE DAMPER						
72FD-3	BATTERY ROOM A VENT EXHAUST FANS A & C DISCH FIRE DAMPER	I	A	10	BR	282EL	F 13
72FD-4	BATTERY ROOM A RECIRC FAN A EXHAUST FIRE DAMPER	I	A	10	BR	272EL	E 12.5
72FD-5	BATTERY ROOM VENT AHU-30B SUPPLY FIRE DAMPER	I	X	10	BR	272EL	E 12
72FD-6	BATTERY ROOM A AHU-30A INLET FIRE DAMPER	I	A	10	BR	272EL	G 12.5
72FN-31A	BATTERY ROOM A RECIRC FAN	I	A	9	BR	282EL	E 12
72FN-31B	BATTERY ROOM B RECIRC FAN	I	B	9	BR	282EL	E 12
72FN-46A	BATTERY ROOM A EXHAUST FAN	I	A	9	BR	282EL	F 12
72FN-46B	BATTERY ROOM B EXHAUST FAN	I	B	9	BR	282EL	E 12
72FN-46C	BATTERY ROOM A EXHAUST FAN	I	A	9	BR	282EL	F 12
72FN-46D	BATTERY ROOM D EXHAUST FAN	I	B	9	BR	282EL	E 12
72MOD-102A	BATTERY ROOM A RECIRC FAN A DISCH ISOL	I	A	10	BR	282EL	F 12

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	DAMPER						
72MOD-102B	BATTERY ROOM B RECIRC FAN B DISCH ISOL DAMPER	I	B	10	BR	282EL	E 12
72MOD-104A	BATTERY ROOM A VENT RECIRC FAN A EXHAUST DAMPER	I	A	10	BR	282EL	F 12
72MOD-104B	BATTERY ROOM B VENT RECIRC FAN B EXHAUST DAMPER	I	B	10	BR	282EL	E 12
73FD-1A	ESW/RHRSW PUMP ROOM A FIRE DAMPER	M	B	10	SP	255EL	F 24.5
73FD-1B	ESW/RHRSW PUMP ROOM B FIRE DAMPER	M	B	10	SP	255EL	BA 25.5
73FD-1C	ESW/RHRSW PUMP ROOM B FIRE DAMPER	M	A	10	SP	255EL	BA 26
73FD-1D	WEST DIESEL FIRE PUMP ROOM FIRE DAMPER	M	A	10	SP	255EL	BA 26.5
73FN-3A	ESW/RHRSW PUMP ROOM EXHAUST FAN A	I	A	9	SW	255EL	BA 26
73FN-3B	ESW/RHRSW PUMP ROOM EXHAUST FAN B	I	B	9	SW	255EL	A 25
92CD-1	EDG A SWITCHGEAR AREA VENT CO2 ISOL	I	A	10	EG	272EL	A 24.5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	DAMPER						
92CD-2	EDG B SWITCHGEAR AREA VENT CO2 ISOL DAMPER	I	B	10	EG	272EL	A1 24.5
92CD-3	EDG C SWITCHGEAR AREA VENT CO2 ISOL DAMPER	I	A	10	EG	272EL	A1 24.5
92CD-4	EDG D SWITCHGEAR AREA VENT CO2 ISOL DAMPER	I	B	10	EG	272EL	A1 24.5
92FD-1	EMERG DIESEL GEN VENT SUPPLY FANS A & C FRESH AIR SUCT FIRE DAMPER	I	A	10	EG	272EL	A1 23
92FD-10	EMERG DIESEL GEN VENT SUPPLY FANS B & D FRESH AIR SUCT FIRE DAMPER	I	B	10	EG	272EL	A1 28
92FD-2	EMERG DIESEL GEN VENT SUPPLY FAN A RECIRC SUCT FIRE DAMPER	I	A	10	EG	272EL	A1 23.5
92FD-3	EMERG DIESEL GEN VENT SUPPLY FAN A DISCH FIRE DAMPER	I	A	10	EG	272EL	A1 24.5
92FD-4	EMERG DIESEL GEN VENT SUPPLY FAN C RECIRC SUCT FIRE	I	A	10	EG	272EL	A1 24.5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	DAMPER						
92FD-5	EMERG DIESEL GEN VENT SUPPLY FAN C DISCH FIRE DAMPER	I	A	10	EG	272EL	A1 25.5
92FD-6	EMERG DIESEL GEN VENT SUPPLY FAN B DISCH FIRE DAMPER	I	B	10	EG	272EL	A1 25.5
92FD-7	EMERG DIESEL GEN VENT SUPPLY FAN B RECIRC SUCT FIRE DAMPER	I	B	10	EG	272EL	A1 26.5
92FD-8	EMERG DIESEL GEN VENT SUPPLY FAN D DISCH FIRE DAMPER	I	B	10	EG	272EL	A1 27
92FD-9	EMERG DIESEL GEN VENT SUPPLY FAN D RECIRC SUCT FIRE DAMPER	I	B	10	EG	272EL	A1 27.5
92FN-1A	EMERG DIESEL GEN A VENT SUPPLY FAN	I	A	9	EG	272EL	A1 24
92FN-1B	EMERG DIESEL GEN B VENT SUPPLY FAN	I	B	9	EG	272EL	A1 26
92FN-1C	EMERG DIESEL GEN C VENT SUPPLY FAN	I	A	9	EG	272EL	A1 25
92FN-1D	EMERG DIESEL GEN D VENT SUPPLY FAN	I	B	9	EG	272EL	A1 27

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
92HV-9A	EDG VENT A & C HEATING/VENT LOCAL CONTROL PANEL	I	A	20	EG	272EL	A1 23
92HV-9B	EDG VENT B & D HEATING/VENT LOCAL CONTROL PANEL	I	B	20	EG	272EL	A1 25.5
92MOD-143A	EMERG DIESEL GEN A VENT EXHAUST ISOL DAMPER	I	A	10	EG	272EL	A1 24
92MOD-143B	EMERG DIESEL GEN B VENT EXHAUST ISOL DAMPER	I	B	10	EG	272EL	A4 26.5
92MOD-143C	EMERG DIESEL GEN C VENT EXHAUST ISOL DAMPER	I	A	10	EG	272EL	A4 25
92MOD-143D	EMERG DIESEL GEN D VENT EXHAUST ISOL DAMPER	I	B	10	EG	272EL	A4 27
92MOD-148A	EMERG DIESEL GEN VENT SUPPLY FAN A RECIRC SUCT ISOL DAMPER	I	A	10	EG	272EL	A4 24
92MOD-148B	EMERG DIESEL GEN VENT SUPPLY FAN B RECIRC SUCT ISOL DAMPER	I	B	10	EG	272EL	A1 26.5
92MOD-148C	EMERG DIESEL	I	A	10	EG	272EL	A1 24.5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	GEN VENT SUPPLY FAN C RECIRC SUCT ISOL DAMPER						A1
92MOD-148D	EMERG DIESEL GEN VENT SUPPLY FAN D RECIRC SUCT ISOL DAMPER	I	B	10	EG	272EL	27.5
92MOD-149A	EMERG DIESEL GEN VENT SUPPLY FAN A FRESH AIR SUCT ISOL DAMPER	I	A	10	EG	272EL	A1 24
92MOD-149B	EMERG DIESEL GEN VENT SUPPLY FAN B FRESH AIR SUCT ISOL DAMPER	I	B	10	EG	272EL	A1 26.5
92MOD-149C	EMERG DIESEL GEN VENT SUPPLY FAN C FRESH AIR SUCT ISOL DAMPER	I	A	10	EG	272EL	A1 24.5
92MOD-149D	EMERG DIESEL GEN VENT SUPPLY FAN D FRESH AIR SUCT ISOL DAMPER	I	B	10	EG	272EL	A1 27.5
92MOD-150A	EMERG DIESEL GEN VENT SUPPLY FANS A & C FRESH AIR WEST SUPPLY ISOL DAMPER	I	A	10	EG	272EL	A1 23
92MOD-150B	EMERG DIESEL GEN VENT SUPPLY	I	B	10	EG	272EL	A2 28

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	FANS B & D FRESH AIR WEST SUPPLY ISOL DAMPER						
92MOD-150C	EMERG DIESEL GEN VENT SUPPLY FANS A & C FRESH AIR EAST SUPPLY ISOL DAMPER	I	A	10	EG	272EL	A2 23
92MOD-150D	EMERG DIESEL GEN VENT SUPPLY FANS B & D FRESH AIR EAST SUPPLY ISOL DAMPER	I	B	10	EG	272EL	A2 28
92RTD-101A	EMERG DIESEL GEN A ROOM SOUTH SIDE RESIST TEMP DETECTOR	I	A	19	EG	272EL	A2 23
92RTD-101B	EMERG DIESEL GEN B ROOM SOUTH SIDE RESIST TEMP DETECTOR	I	B	19	EG	272EL	A2 27
92RTD-101C	EMERG DIESEL GEN C ROOM NORTH SIDE RESIST TEMP DETECTOR	I	A	19	EG	272EL	A2 25
92RTD-101D	EMERG DIESEL GEN D ROOM NORTH SIDE RESIST TEMP DETECTOR	I	B	19	EG	276'6E L	A4 24.5
93AR-A1	EMERGENCY	I	A	21	EG	272EL	A4 24

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	DIESEL GENERATOR A AIR START RECEIVER A1						A2
93AR-A10	EMERGENCY DIESEL GENERATOR A AIR START RECEIVER A10	I	A	21	EG	272EL	24
							A4
93AR-A2	EMERGENCY DIESEL GENERATOR A AIR START RECEIVER A2	I	A	21	EG	272EL	24
							A2
93AR-A3	EMERGENCY DIESEL GENERATOR A AIR START RECEIVER A3	I	A	21	EG	272EL	24
							A3
93AR-A4	EMERGENCY DIESEL GENERATOR A AIR START RECEIVER A4	I	A	21	EG	272EL	24
							A3
93AR-A5	EMERGENCY DIESEL GENERATOR A AIR START RECEIVER A5	I	A	21	EG	272EL	24
							A3
93AR-A6	EMERGENCY DIESEL GENERATOR A AIR START RECEIVER A6	I	A	21	EG	272EL	24
							A3
93AR-A7	EMERGENCY DIESEL GENERATOR A AIR	I	A	21	EG	272EL	24

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	START RECEIVER A7						A3
93AR-A8	EMERGENCY DIESEL GENERATOR A AIR START RECEIVER A8	I	A	21	EG	272EL	24
93AR-A9	EMERGENCY DIESEL GENERATOR A AIR START RECEIVER A9	I	A	21	EG	272EL	A3 24
93AR-B1	EMERGENCY DIESEL GENERATOR B AIR START RECEIVER B1	I	B	21	EG	272EL	A4 26.5
93AR-B10	EMERGENCY DIESEL GENERATOR B AIR START RECEIVER B10	I	B	21	EG	272EL	A2 26.5
93AR-B2	EMERGENCY DIESEL GENERATOR B AIR START RECEIVER B2	I	B	21	EG	272EL	A4 26.5
93AR-B3	EMERGENCY DIESEL GENERATOR B AIR START RECEIVER B3	I	B	21	EG	272EL	A2 26.5
93AR-B4	EMERGENCY DIESEL GENERATOR B AIR START RECEIVER B4	I	B	21	EG	272EL	A3 26.5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
93AR-B5	EMERGENCY DIESEL GENERATOR B AIR START RECEIVER B5	I	B	21	EG	272EL	A3 26.5
93AR-B6	EMERGENCY DIESEL GENERATOR B AIR START RECEIVER B6	I	B	21	EG	272EL	A3 26.5
93AR-B7	EMERGENCY DIESEL GENERATOR B AIR START RECEIVER B7	I	B	21	EG	272EL	A3 26.5
93AR-B8	EMERGENCY DIESEL GENERATOR B AIR START RECEIVER B8	I	B	21	EG	272EL	A3 26.5
93AR-B9	EMERGENCY DIESEL GENERATOR B AIR START RECEIVER B9	I	B	21	EG	272EL	A3 26.5
93AR-C1	EMERGENCY DIESEL GENERATOR C AIR START RECEIVER C1	I	A	21	EG	272EL	A4 24.5
93AR-C10	EMERGENCY DIESEL GENERATOR C AIR START RECEIVER C10	I	A	21	EG	272EL	A2 24.5
93AR-C2	EMERGENCY	I	A	21	EG	272EL	A4 24.5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	DIESEL GENERATOR C AIR START RECEIVER C2						
93AR-C3	EMERGENCY DIESEL GENERATOR C AIR START RECEIVER C3	I	A	21	EG	272EL	A2 24.5
93AR-C4	EMERGENCY DIESEL GENERATOR C AIR START RECEIVER C4	I	A	21	EG	272EL	A3 24.5
93AR-C5	EMERGENCY DIESEL GENERATOR C AIR START RECEIVER C5	I	A	21	EG	272EL	A3 24.5
93AR-C6	EMERGENCY DIESEL GENERATOR C AIR START RECEIVER C6	I	A	21	EG	272EL	A3 24.5
93AR-C7	EMERGENCY DIESEL GENERATOR C AIR START RECEIVER C7	I	A	21	EG	272EL	A3 24.5
93AR-C8	EMERGENCY DIESEL GENERATOR C AIR START RECEIVER C8	I	A	21	EG	272EL	A3 24.5
93AR-C9	EMERGENCY DIESEL GENERATOR C AIR	I	A	21	EG	272EL	A3 24.5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	START RECEIVER C9						
93AR-D1	EMERGENCY DIESEL GENERATOR D AIR START RECEIVER D1	I	B	21	EG	272EL	A4 26.5
93AR-D10	EMERGENCY DIESEL GENERATOR D AIR START RECEIVER D10	I	B	21	EG	272EL	A2 26.5
93AR-D2	EMERGENCY DIESEL GENERATOR D AIR START RECEIVER D2	I	B	21	EG	272EL	A4 26.5
93AR-D3	EMERGENCY DIESEL GENERATOR D AIR START RECEIVER D3	I	B	21	EG	272EL	A2 26.5
93AR-D4	EMERGENCY DIESEL GENERATOR D AIR START RECEIVER D4	I	B	21	EG	272EL	A3 26.5
93AR-D5	EMERGENCY DIESEL GENERATOR D AIR START RECEIVER D5	I	B	21	EG	272EL	A3 26.5
93AR-D6	EMERGENCY DIESEL GENERATOR D AIR START RECEIVER D6	I	B	21	EG	272EL	A3 26.5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
93AR-D7	EMERGENCY DIESEL GENERATOR D AIR START RECEIVER D7	I	B	21	EG	272EL	A3 26.5
93AR-D8	EMERGENCY DIESEL GENERATOR D AIR START RECEIVER D8	I	B	21	EG	272EL	A3 26.5
93AR-D9	EMERGENCY DIESEL GENERATOR D AIR START RECEIVER D9	I	B	21	EG	272EL	A4 26.5
93AURP-01	EDG A & C AUX UNDERVOLTAGE RELAY PANEL	I	X	20	EG	272EL	A4 24.5
93AURP-02	EDG B & D AUX UNDERVOLTAGE RELAY PANEL	I	X	20	EG	272EL	A 24.5
93ECP-A	EDG A ENGINE CONTROL PANEL	I	A	20	EG	272EL	A 24
93ECP-B	EDG B ENGINE CONTROL PANEL	I	B	20	EG	272EL	A3 26
93ECP-C	EDG C ENGINE CONTROL PANEL	I	A	20	EG	272EL	A3 25
93ECP-D	EDG D ENGINE CONTROL PANEL	I	B	20	EG	272EL	A3 27
93ECSP-A	EDG A ENGINE CONTROL SUB PANEL	I	A	20	EG	272EL	A1 24
93ECSP-B	EDG B ENGINE	I	B	20	EG	272EL	A3 26

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	CONTROL SUB PANEL						
93ECSP-C	EDG C ENGINE CONTROL SUB PANEL	I	A	20	EG	272EL	A3 25
93ECSP-D	EDG D ENGINE CONTROL SUB PANEL	I	B	20	EG	272EL	A3 27
93EDG-A	EMERGENCY DIESEL GENERATOR A	I	A	17	EG	272EL	A3 24
93EDG-B	EMERGENCY DIESEL GENERATOR B	I	B	17	EG	272EL	A2 26.5
93EDG-C	EMERGENCY DIESEL GENERATOR C	I	A	17	EG	272EL	A2 25
93EDG-D	EMERGENCY DIESEL GENERATOR D	I	B	17	EG	272EL	A2 25
93EGP-A	EDG A GENERATOR CONTROL PANEL	I	A	20	EG	272EL	A2 24
93EGP-B	EDG B GENERATOR CONTROL PANEL	I	B	20	EG	272EL	A1 26
93EGP-C	EDG C GENERATOR CONTROL PANEL	I	A	20	EG	272EL	A1 25
93EGP-D	EDG D GENERATOR CONTROL PANEL	I	B	20	EG	272EL	A1 27
93FPAC	EDG A & C FORCED PARALLELING PANEL	I	A	20	EG	272EL	A1 24.5
							A

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
93FPBD	EDG B & D FORCED PARALLELING PANEL	I	B	20	EG	272EL	26.5 A
93P1-A1	EMERGENCY DIESEL GENERATOR A FUEL OIL TRANSFER PUMP A1	I	A	5	EG	272EL	24 A4
93P1-A2	EMERGENCY DIESEL GENERATOR A FUEL OIL TRANSFER PUMP A2	I	A	5	EG	272EL	24 A4
93P1-B1	EMERGENCY DIESEL GENERATOR B FUEL OIL TRANSFER PUMP B1	I	B	5	EG	272EL	26.5 A4
93P1-B2	EMERGENCY DIESEL GENERATOR B FUEL OIL TRANSFER PUMP B2	I	B	5	EG	272EL	26.5 A4
93P1-C1	EMERGENCY DIESEL GENERATOR C FUEL OIL TRANSFER PUMP C1	I	A	5	EG	272EL	24.5 A4
93P1-C2	EMERGENCY DIESEL GENERATOR C FUEL OIL	I	A	5	EG	272EL	24.5 A4

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	TRANSFER PUMP C2						
93P1-D1	EMERGENCY DIESEL GENERATOR D FUEL OIL TRANSFER PUMP D1	I	B	5	EG	272EL	A4 26.5
93P1-D2	EMERGENCY DIESEL GENERATOR D FUEL OIL TRANSFER PUMP D2	I	B	5	EG	272EL	A4 26.5
93TK-6A	EMERGENCY DIESEL GENERATOR A FUEL OIL STORAGE TANK	I	A	21	EG	272EL	A4 24
93TK-6B	EMERGENCY DIESEL GENERATOR B FUEL OIL STORAGE TANK	I	B	21	EG	272EL	A4 26.5
93TK-6C	EMERGENCY DIESEL GENERATOR C FUEL OIL STORAGE TANK	I	A	21	EG	272EL	A4 24.5
93TK-6D	EMERGENCY DIESEL GENERATOR D FUEL OIL STORAGE TANK	I	B	21	EG	272EL	A4 27
93TK-7A	EMERGENCY DIESEL GENERATOR A	I	A	21	EG	272EL	A4 24

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
Fo. Seismic Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	FUEL OIL DAY TANK						A4
93TK-7B	EMERGENCY DIESEL GENERATOR B FUEL OIL DAY TANK	I	B	21	EG	272EL	26.5 A4
93TK-7C	EMERGENCY DIESEL GENERATOR C FUEL OIL DAY TANK	I	A	21	EG	272EL	25 A4
93TK-7D	EMERGENCY DIESEL GENERATOR D FUEL OIL DAY TANK	I	B	21	EG	272EL	27 A4

522 records listed.

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
02-3LI-85A	REACTOR VESSEL LEVEL INDIC	I	A	20	CR	300EL	10.5 C
02-3LR-85B	DIV I RX WATER LEVEL RECORDER	I	B	20	CR	300EL	10.5 E
02-3LT-85A	REACTOR VESSEL WIDE RANGE LEVEL XMITTER EQ	I	A	18	RB	300EL	3 R
02-3LT-85B	REACTOR VESSEL WIDE RANGE LEVEL XMITTER EQ	I	B	18	RB	300EL	6 W
02SOV-17	ADS REACTOR HEAD VENT VALVE PILOT SOLENOID VALVE	I	X	8B	PC	333'3E L	4.5 R
02SOV-18	ADS REACTOR HEAD VENT VALVE PILOT SOLENOID VALVE	I	X	8B	PC	333'3E L	4.5 R
02SOV-71A1	ADS/MST A 02RV-71A AUTO/CR MANUAL PILOT SOLENOID VALVE	I	X	8B	PC	295'10 EL	5 R
02SOV-71A2	ADS/MST A 02RV-71A REMOTE MANUAL PILOT SOLENOID VALVE	I	X	8B	PC	295'11 EL	5 R
02SOV-71B1	ADS/MST A 02RV-71B AUTO/CR MANUAL PILOT SOLENOID VALVE	I	X	8B	PC	295'10 EL	5 R
02SOV-71B2	ADS/MST A	I	X	8B	PC	295'10	5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	02RV-71B REMOTE MANUAL PILOT SOLENOID VALVE					EL	
02SOV-71C1	ADS/MST B 02RV-71C AUTO/CR MANUAL PILOT SOLENOID VALVE	I	X	8B	PC	295'10 EL	R 5
02SOV-71C2	ADS/MST B 02RV-71C REMOTE MANUAL PILOT SOLENOID VALVE	I	X	8B	PC	295'11 EL	R 5
02SOV-71D1	ADS/MST B 02RV-71D AUTO/CR MANUAL PILOT SOLENOID VALVE	I	X	8B	PC	295'10 EL	R 4.5
02SOV-71D2	ADS/MST B 02RV-71D REMOTE MANUAL PILOT SOLENOID VALVE	I	X	8B	PC	295'10 EL	R 4.5
02SOV-71E1	ADS/MST C 02RV-71E AUTO/CR MANUAL PILOT SOLENOID VALVE	I	X	8B	PC	295'10 EL	R 5
02SOV-71E2	ADS/MST C 02RV-71E REMOTE MANUAL PILOT SOLENOID VALVE	I	X	8B	PC	295'10 EL	W 5
02SOV-71F1	ADS/MST C 02RV-71F AUTO/CR MANUAL PILOT SOLENOID VALVE	I	X	8B	PC	295'10 EL	W 5
02SOV-71F2	ADS/MST C	I	X	8B	PC	295'10	W 5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	02RV-71F REMOTE MANUAL PILOT SOLENOID VALVE					EL	
02SOV-71G1	ADS/MST C 02RV-71G AUTO/CR MANUAL PILOT SOLENOID VALVE	I	X	8B	PC	295'10 EL	W 4.5
02SOV-71G2	ADS/MST C 02RV-71G REMOTE MANUAL PILOT SOLENOID VALVE	I	X	8B	PC	295'10 EL	W 4.5
02SOV-71H1	ADS/MST D 02RV-71H AUTO/CR MANUAL PILOT SOLENOID VALVE	I	X	8B	PC	295'10 EL	W 5
02SOV-71H2	ADS/MST D 02RV-71H REMOTE MANUAL PILOT SOLENOID VALVE	I	X	8B	PC	295'10 EL	N 5
02SOV-71J1	ADS/MST D 02RV-71J AUTO/CR MANUAL PILOT SOLENOID VALVE	I	X	8B	PC	295'10 EL	W 5
02SOV-71J2	ADS/MST D 02RV-71J REMOTE MANUAL PILOT SOLENOID VALVE	I	X	8B	PC	295'10 EL	W 5
02SOV-71K1	ADS/MST A 02RV-71K AUTO/CR MANUAL PILOT SOLENOID VALVE	I	X	8B	PC	295'10 EL	W 4.5
02SOV-71K2	ADS/MST A	I	X	8B	PC	295'10	R 4.5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equipment List (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	02RV-71K REMOTE MANUAL PILOT SOLENOID VALVE					EL	
02SOV-71L1	ADS/MST D 02RV-71L AUTO/CR MANUAL PILOT SOLENOID VALVE	I	X	8B	PC	295'10 EL	R 4.5
02SOV-71L2	ADS/MST D 02RV-71L REMOTE MANUAL PILOT SOLENOID VALVE	I	X	8B	PC	295'10 EL	W 4.5
03SOV-117(HCU-02-19)	HCU-02-19 SCRAM PILOT AIR SOLENOID OPER VALVE	I	X	8B	RB	272EL	W 5
03SOV-118(HCU-02-19)	HCU-02-19 SCRAM PILOT AIR SOLENOID OPER VALVE	I	X	8B	RB	272EL	Y 5
03SOV-120(HCU-02-19)	HCU-02-19 WITHDRAW SETTLE SOLENOID OPER VALVE	I	X	8B	RB	272EL	Y 5
03SOV-121(HCU-02-19)	HCU-02-19 INSERT EXHAUST WATER SOLENOID OPER VALVE	I	X	8B	RB	272EL	Y 5
03SOV-122(HCU-02-19)	HCU-02-19 WITHDRAW DRIVE WATER SOLENOID OPER VALVE	I	X	8B	RB	272EL	Y 5
03SOV-123(HCU-02-19)	HCU-02-19 INSERT DRIVE WATER SOLENOID OPER VALVE	I	X	8B	RB	272EL	Y 5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
03SOV-140A	HYDRAULIC CONTROL UNITS BACKUP SCRAM PILOT SOLENOID VLV EQ	I	X	8B	RB	272EL	Y 3.5
03SOV-140B	HYDRAULIC CONTROL UNITS BACKUP SCRAM PILOT SOLENOID VLV EQ	I	X	8B	RB	272EL	A 3.5
03SOV-29	SDIV ISOL TEST SOLENOID VALVE	II/III	X	8B	RB	272EL	A 3.5
03SOV-31A	SDIV A AOV INSTRUMENT AIR SUPPLY SOLENOID VALVE EQ	I	X	8B	RB	272EL	A 3.5
03SOV-31B	SDIV B AOV INSTRUMENT AIR SUPPLY SOLENOID VALVE B EQ	I	X	8B	RB	272EL	A 3.5
06PI-61A	REACTOR VESSEL PRESS INDIC	I	A	20	CR	300EL	A 10
06PI-61B	REACTOR VESSEL PRESS INDIC	I	B	20	CR	300EL	F 10
06PT-61A	ECCS LOOP A FEEDWATER CONTROL REACTOR PRESS XMITTER EQ	I	A	18	RB	300EL	F 3.5
06PT-61B	ECCS LOOP B FEEDWATER CONTROL REACTOR PRESS XMITTER EQ	I	B	18	RB	300EL	R 5.5
							Y

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
10FI-132A	RHRSW PUMPS A&C DISCH FLOW INDIC	I	A	20	CR	300EL	F 10
10FI-132B	RHRSW PUMPS B&D DISCH FLOW INDIC	I	B	20	CR	300EL	F 10
10FI-133A	A REACTOR AND CONTAINMENT SPRAY LOOP FLOW INDIC	I	A	20	CR	300EL	F 10
10FI-133B	B REACTOR AND CONTAINMENT SPRAY LOOP FLOW INDIC	I	B	20	CR	300EL	F 10
10FT-109A	RHR LOOP A FLOW XMITTER EQ	I	A	18	RB	242'8E L	F 1
10FT-109B	RHR B DISCH HDR FLOW XMITTER	I	B	18	RB	227'6E L	R 1
10FT-97A	RHRSW A DISCH HDR FLOW XMITTER	I	A	18	RB	242EL	W 4
10FT-97B	RHRSW LOOP B FLOW XMITTER EQ	I	B	18	RB	242EL	A 4
10MOV-12A	RHR HEAT EXCH A OUTLET ISOL VALVE	I	A	8A	RB	272EL	D 2
10MOV-12B	RHR HEAT EXCH B OUTLET ISOL VALVE	I	B	8A	RB	272EL	A 2
10MOV-13A	RHR PUMP A SUCT TORUS ISOL VALVE	I	A	8A	RB	227'6E L	D 3.5
10MOV-13B	RHR PUMP B SUCT	I	B	8A	RB	227'6E	A 2

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	TORUS ISOL VALVE					L	
10MOV-13C	RHR PUMP C SUCT TORUS ISOL VALVE	I	A	8A	RB	227'6E L	D 3.5
10MOV-13D	RHR PUMP D SUCT TORUS ISOL VALVE	I	B	8A	RB	227'6E L	A 2
10MOV-148A	RHRSW A TO RHR CROSS TIE UPSTR ISOL VALVE	I	A	8A	RB	272EL	D 3
10MOV-148B	RHRSW B TO RHR CROSS TIE UPSTR ISOL VALVE	I	B	8A	RB	272EL	P 3
10MOV-15A	RHR PUMP A SUCT SHUTDOWN COOLING ISOL VALVE	I	A	8A	RB	227'6E L	Y 2
10MOV-15B	RHR PUMP B SUCT SHUTDOWN COOLING ISOL VALVE	I	B	8A	RB	227'6E L	A 2
10MOV-15C	RHR PUMP C SUCT SHUTDOWN COOLING ISOL VALVE	I	A	8A	RB	227'6E L	D 3.5
10MOV-15D	RHR PUMP D SUCT SHUTDOWN COOLING ISOL VALVE	I	B	8A	RB	227'6E L	A 3
10MOV-166A	RHR HEAT EXCH A UPSTR VENT TO TORUS ISOL VALVE	I	A	8A	RB	272EL	D 2
							A

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
10MOV-166B	RHR HEAT EXCH B UPSTR VENT TO TORUS ISOL VALVE	I	B	8A	RB	272EL	2
10MOV-16A	RHR A MIN FLOW ISOL VALVE	I	A	8A	RB	242'8E L	D 2
10MOV-16B	RHR B MIN FLOW ISOL VALVE	I	B	8A	RB	242'8E L	A 3
10MOV-17	RHR SHUTDOWN COOLING OUTBD ISOL VALVE	I	B	8A	RB	272EL	D 3
10MOV-18	RHR SHUTDOWN COOLING INBD ISOL VALVE	I	A	8A	PC	272EL	R 3
10MOV-21A	RHR HEAT EXCH A DISCH TO TORUS ISOL VALVE	I	A	8A	RB	254EL	T 3
10MOV-21B	RHR HEAT EXCH B DISCH TO TORUS ISOL VALVE	I	B	8A	RB	242'8E L	A 4
10MOV-25A	RHR A LPCI INBD INJ VALVE	I	A	8A	RB	286'6E L	D 3
10MOV-25B	RHR B LPCI INBD INJ VALVE	I	B	8A	RB	286'6E L	R 2
10MOV-26A	RHR A CONT SPRAY OUTBD ISOL VALVE	I	A	8A	RB	311EL	T 3
10MOV-26B	RHR B CONT SPRAY OUTBD ISOL VALVE	I	B	8A	RB	300EL	T 6
10MOV-27A	RHR A LPCI OUTBD INJ VALVE	I	A	8A	RB	286'6E L	T 3 R

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
10MOV-27B	RHR B LPCI OUTBD INJ VALVE	I	B	8A	RB	286'6E L	2 T
10MOV-34A	RHR A TORUS COOLING SUPPLY VALVE	I	A	8A	RB	254EL	3 A
10MOV-34B	RHR B TORUS COOLING SUPPLY VALVE	I	B	8A	RB	242'8E L	3 D
10MOV-38A	RHR A TO TORUS SPRAY ISOL VALVE	I	A	8A	RB	254EL	3 A
10MOV-38B	RHR B TO TORUS SPRAY ISOL VALVE	I	B	8A	RB	254EL	3 D
10MOV-39A	RHR A TORUS COOLING ISOL VALVE	I	A	8A	RB	242'8E L	3 A
10MOV-39B	RHR B TORUS COOLING ISOL VALVE	I	B	8A	RB	254EL	3 D
10MOV-65A	RHR HEAT EXCH A SHELL INLET ISOL VALVE	I	A	8A	RB	242'8E L	3 A
10MOV-65B	RHR HEAT EXCH B SHELL INLET ISOL VALVE	I	B	8A	RB	242'8E L	2 D
10MOV-66A	RHR HEAT EXCH A BYPASS VALVE	I	A	8A	RB	242'8E L	2 P
10MOV-66B	RHR HEAT EXCH B BYPASS VALVE	I	B	8A	RB	242'8E L	2 D
10MOV-70A	RHR HEAT EXCH A STEAM INLET ISOL VALVE	I	X	8A	RB	272EL	2

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
10MOV-70B	RHR HEAT EXCH B STEAM INLET ISOL VALVE	I	X	8A	RB	272EL	A 1
10MOV-89A	RHR HEAT EXCH A SERV WATER OUTLET ISOL VALVE	I	A	8A	RB	[illegible]	T 2
10MOV-89B	RHR HEAT EXCH B SERV WATER OUTLET ISOL VALVE	I	B	8A	RB	272EL	A 2.5
10P-1A	RHR SERVICE WATER PUMP A	I	A	6	SP	255EL	D 26
10P-1B	RHR SERVICE WATER PUMP B	I	B	6	SP	255EL	B 25
10P-1C	RHR SERVICE WATER PUMP C	I	A	6	SP	255EL	B 26.5
10P-1D	RHR SERVICE WATER PUMP D	I	B	6	SP	255EL	B 25
10P-3A	RESIDUAL HEAT REMOVAL PUMP A	I	A	6	RB	227'6EL	B 3
10P-3B	RESIDUAL HEAT REMOVAL PUMP B	I	B	6	RB	227'6EL	A 3
10P-3C	RESIDUAL HEAT REMOVAL PUMP C	I	A	6	RB	227'6EL	D 3
10P-3D	RESIDUAL HEAT REMOVAL PUMP D	I	B	6	RB	227'6EL	A 3
10SOV-101A	RHRSW PUMP A MOTOR COOLING WATER RETURN SOLENOID VALVE	I	A	8B	SP	255EL	D 26
							B

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
10SOV-101B	RHRSW PUMP B MOTOR COOLING WATER RETURN SOLENOID VALVE	I	B	8B	SP	255EL	25 B
10SOV-101C	RHRSW PUMP C MOTOR COOLING WATER RETURN SOLENOID VALVE	I	A	8B	SP	255EL	26.5 B
10SOV-101D	RHRSW PUMP D MOTOR COOLING WATER RETURN SOLENOID VALVE	I	B	8B	SP	255EL	25 B
10SOV-263A	RHR HEAT EXCHANGER A OUTLET INNER SAMPLE SOLENOID VALVE	I	A	8B	RB	272EL	2.5 B
10SOV-263B	RHR HEAT EXCHANGER B OUTLET INNER SAMPLE SOLENOID VALVE	I	B	8B	RB	272EL	2.5 A
10SOV-71A	RHR HEAT EXCHANGER A TO TORUS OR RCIC ISOL VALVE 10AOV-71A SOLENOID VALVE	II/III	A	8B	RB	272EL	2 D
10SOV-71B	RHR HEAT EXCHANGER B TO TORUS OR RCIC ISOL VALVE 10AOV-71B SOLENOID VALVE	II/III	B	8B	RB	272EL	2 A
11EV-14A	SLC A DOUBLE SQUIB ACTIVATED SHEAR EXPLOSIVE	I	X	0	RB	326'9E L	6 D

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	VALVE						
11EV-14B	SLC B DOUBLE SQUIB ACTIVATED SHEAR EXPLOSIVE VALVE	I	X	0	RB	326'9E L	R 6
11P-2A	STANDBY LIQUID CONTROL A PUMP	I	A	5	RB	326'9E L	R 6
11P-2B	STANDBY LIQUID CONTROL B PUMP	I	B	5	RB	326'9E L	P 6
11TK-1	STANDBY LIQUID CONTROL TANK	I	X	21	RB	326'9E L	P 6
12MOV-15	RWCU SUPPLY INBD ISOL VALVE	I	A	8A	PC	292EL	P 4
12MOV-18	RWCU SUPPLY OUTBD ISOL VALVE	I	B	8A	RB	314'6E L	T 3
13MOV-15	RCIC STEAM SUPPLY INBD ISOL VALVE	I	B	8A	PC	291EL	R 4
13MOV-16	RCIC TURBINE STEAM SUPPLY OUTBD ISOL VALVE	I	A	8A	RB	274EL	R 3
14MOV-12A	CORE SPRAY LOOP A INBD ISOL VALVE	I	A	8A	RB	300EL	R 4.5
14MOV-12B	CORE SPRAY LOOP B INBD ISOL VALVE	I	B	8A	RB	300EL	R 4.5
16-1TI-131A	SUPPRESSION CHAMBER A TEMP INDIC	I	A	20	RR	284'8E L	W 10.5 I

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
16-1TI-131B	SUPPRESSION CHAMBER B TEMP INDIC	I	B	20	RR	284'8E L	10.5
16-1TR-131A	TORUS BULK TEMP MON AVERAGE TEMP RECORDER	I	A	20	CR	300EL	I 10
16-1TR-131B	TORUS BULK TEMP MON AVERAGE TEMP RECORDER	I	B	20	CR	300EL	F 10
23AOV-53	HPCI TURBINE STEAM SUPPLY DRAIN TRAP T-3 BYPASS VALVE	I	B	7	RB	227'6E L	F 1
23FI-108-1	HPCI PUMP DISCHARGE FLOW INDICATOR	I	B	20	CR	300EL	T 10
23FT-82	HPCI MAIN PUMP P-1M DISCH FLOW XMITTER EQ	I	B	18	RB	242'8E L	F 4
23HOV-1	HPCI TURBINE STOP VALVE	I	B	7	RB	227'6E L	D 1
23HOV-2	HPCI TURBINE CONTROL VALVE	I	B	7	RB	227'6E L	T 1
23LI-202A	SUPPRESSION CHAMBER WATER LEVEL INDIC	I	A	20	CR	300EL	T 10
23LI-202B	SUPPRESSION CHAMBER WATER LEVEL INDIC	I	B	20	CR	300EL	F 10
23LT-202A	SUPPRESSION POOL HPCI LOGIC LEVEL XMITTER EQ	I	A	18	RB	227'6E L	F 4.5 A

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
23LT-202B	SUPPRESSION POOL HPCI LOGIC LEVEL XMITTER EQ	I	B	18	RB	227'6E L	4.5 D
23MOV-14	HPCI TURBINE STEAM SUPPLY ISOL VALVE	I	B	8A	RB	227'6E L	1 T
23MOV-15	HPCI STEAM SUPPLY INBD ISOL VALVE	I	A	8A	PC	269'9E L	4 W
23MOV-16	HPCI TURBINE STEAM SUPPLY OUTBD ISOL VALVE	I	B	8A	RB	273'4E L	2 W
23MOV-17	HPCI BOOSTER PUMP P-1B SUCT FROM 33TK-1A & B ISOL VALVE	I	B	8A	RB	242'8E L	3 A
23MOV-19	HPCI PUMP DISCH TO REACTOR INBD ISOL VALVE	I	B	8A	SU	262EL	7 W
23MOV-20	HPCI PUMP DISCH TO REACTOR OUTBD ISOL VALVE	I	B	8A	SU	262EL	7 W
23MOV-21	HPCI FULL FLOW TEST RETURN TO CST 33TK-1A & B UPSTR ISOL VALVE	I	B	8A	RB	262'5E L	5 T
23MOV-24	HPCI FULL FLOW TEST RETURN TO CST 33TK-1A & B DNSTR ISOL VALVE	II/III	B	8A	RB	262'5E L	3 P

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
23MOV-25	HPCI MAIN PUMP P-1M MIN FLOW ISOL VALVE	I	B	8A	SU	257'1E L	4
23MOV-57	HPCI BOOSTER PUMP P-1B SUCT FROM SUPPRESSION POOL DNSTR ISOL VALVE	I	B	8A	RB	227'6E L	D 1
23MOV-58	HPCI BOOSTER PUMP P-1B SUCT FROM SUPPRESSION POOL UPSTR ISOL VALVE	I	B	8A	SU	232'1E L	R 1, T
23MOV-59	HPCI TURB EXH LINE VAC BREAKER VALVE	I	B	8A	SU	260EL	2
23MOV-60	HPCI TURBINE STEAM SUPPLY OUTBD ISOL VALVE 23MOV-1(BYPASS VALVE	I	B	8A	RB	272EL	T 3
23P-150	HPCI TURBINE AUX LUBE OIL PUMP	I	B	5	RB	227'6E L	W 1
23SOV-42	HPCI TURBINE STEAM SUPPLY UPSTR DRAIN ISOL VALVE SOLENOID VALVE	I	B	8B	RB	227'6E L	T 1
23SOV-53	HPCI TURBINE STEAM SUPPLY DRAIN TRAP T-3 BYPASS SOLENOID VALVE	II/III	B	8B	RB	227'6E L	T 1
23SPI-161	HPCI TURBINE	I	B	20	CR	300EL	T 10

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	SPEED INDIC						
27EH-10A	CAD A AMBIENT VAPORIZER ELECTRIC HEATER	I	A	18	CB	271'8E L	F .5
27EH-10B	CAD B AMBIENT VAPORIZER ELECTRIC HEATER	I	B	18	CB	271'8E L	RT .5
27PI-115A2	CAD DRYWELL DIV I PRESS INDIC	I	A	20	CR	300EL	RT 10
27PI-115B2	CAD DRYWELL DIV II PRESS INDIC	I	B	20	CR	300EL	F 10
27PT-115A2	DRYWELL DIV I WIDE RANGE PRESS XMITTER EQ	I	A	18	RB	344'6E L	F 6
27PT-115B2	DRYWELL DIV II WIDE RANGE PRESS XMITTER EQ	I	B	18	RB	344'6E L	W 6
27SOV-126A	AMBIENT VAPORIZER A INLET VALVE SOLENOID VALVE	I	A	8B	CB	271'8E L	W .5
27SOV-126B	AMBIENT VAPORIZER B INLET VALVE SOLENOID VALVE	I	B	8B	CB	271'8E L	RP .5
27SOV-127A	STEAM VAPORIZER NV-8 LIQUID NITROGEN SUPPLY VALVE SOLENOID VALVE	I	A	8B	CB	271'8E L	TW .5
27SOV-127B	STEAM VAPORIZER NV-8 LIQUID	I	B	8B	CB	271'8E L	RP .5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	NITROGEN SUPPLY VALVE SOLENOID VALVE						
27SOV-128A	CAD TRAIN A NITROGEN MAKE-UP SUPPLY VALVE SOLENOID VALVE	I	A	8B	CB	271'8E L	TW .5
27SOV-128B	CAD TRAIN B NITROGEN MAKE-UP SUPPLY VALVE SOLENOID VALVE	I	B	8B	CB	271'8E L	RP .5
27SOV-129A	DRYWELL PCV AND INSTR CAD TRAIN A BACKUP ISOL VALVE SOLENOID VALVE	I	A	8B	CB	271'8E L	TW .5
27SOV-129B	DRYWELL PCV AND INSTR CAD TRAIN B BACKUP ISOL VALVE SOLENOID VALVE	I	B	8B	CB	271'8E L	RP .5
27SOV-131A	CAD TRAIN A NITROGEN MAKE-UP ISOL VALVE SOLENOID VALVE EQ	I	A	8B	SU	227'6E L	TW 2
27SOV-131B	CAD TRAIN B NITROGEN MAKE-UP ISOL VALVE SOLENOID VALVE EQ	I	B	8B	SU	227'6E L	T 2
27SOV-132A	CAD TRAIN A TORUS N2 MAKE-UP ISOL VALVE SOLENOID	I	A	8B	SU	227'6E L	T 2

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	VALVE EQ						
27SOV-132B	CAD TRAIN B TORUS N2 MAKE-UP ISOL VALVE SOLENOID VALVE EQ	I	B	8B	SU	227'6E L	T 2
27SOV-141	DRYWELL PCV AND INSTR INSTR AIR OR NORMAL N2 CROSS-TIE VALVE EQ	I	B	8B	RB	291'7E L	T 6
27SOV-145	CAD DRYWELL INSTR NITROGEN BACKUP SUPPLY ISOL VALVE	I	A	8B	RB	295'6E L	WY 3
29MOV-74	MST INBD LINE DRAIN INBD ISOL VALVE	I	A	8A	PC	272EL	RT 6
29SOV-80A2	MST A INBD MSIV PILOT SOLENOID VALVE	I	A	8B	PC	276'10 EL	T 5.5
29SOV-80A2(OP1)	MST A INBD MSIV PILOT SOLENOID VALVE COIL	I	A	8B	PC	276'10 EL	T 5.5
29SOV-80A2(OP2)	MST A INBD MSIV PILOT SOLENOID VALVE COIL	I	A	8B	PC	276'10 EL	T 5.5
29SOV-80B2	MST B INBD MSIV PILOT SOLENOID VALVE	I	A	8B	PC	276'10 EL	T 5.5
29SOV-80B2(OP1)	MST B INBD MSIV PILOT SOLENOID VALVE COIL	I	A	3B	PC	276'10 EL	T 5.5
29SOV-80B2(O	MST B INBD MSIV	I	A	8B	PC	276'10	T 5.5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
P2)	PILOT SOLENOID VALVE COIL					EL	
29SOV-80C2	MST C INBD MSIV PILOT SOLENOID VALVE	I	A	8B	PC	276'10 EL	T 5.5
29SOV-80C2(O P1)	MST C INBD MSIV PILOT SOLENOID VALVE COIL	I	A	8B	PC	276'10 EL	T 5.5
29SOV-80C2(O P2)	MST C INBD MSIV PILOT SOLENOID VALVE COIL	I	A	8B	PC	276'10 EL	T 5.5
29SOV-80D2	MST D INBD MSIV PILOT SOLENOID VALVE	I	A	8B	PC	276'10 EL	T 5.5
29SOV-80D2(O P1)	MST D INBD MSIV PILOT SOLENOID VALVE COIL	I	A	8B	PC	276'10 EL	T 5.5
29SOV-80D2(O P2)	MST D INBD MSIV PILOT SOLENOID VALVE COIL	I	A	8B	PC	276'10 EL	T 5.5
29SOV-86A2	MST A OUTBD MSIV PILOT SOLENOID VALVE	I	B	8B	ST	276'8E L	T 6.5
29SOV-86A2(O P1)	MST A OUTBD MSIV PILOT SOLENOID VALVE COIL	I	B	8B	ST	276'8E L	T 6.5
29SOV-86A2(O P2)	MST A OUTBD MSIV PILOT SOLENOID VALVE COIL	I	B	8B	ST	276'8E L	T 6.5
29SOV-86B2	MST B OUTBD MSIV PILOT SOLENOID VALVE	I	B	8B	ST	276'8E L	T 6.5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
29SOV-86B2(OP1)	MST B OUTBD MSIV PILOT SOLENOID VALVE COIL	I	B	8B	ST	276'8EL	T 6.5
29SOV-86B2(OP2)	MST B OUTBD MSIV PILOT SOLENOID VALVE COIL	I	B	8B	ST	276'8EL	T 6.5
29SOV-86C2	MST C OUTBD MSIV PILOT SOLENOID VALVE	I	B	8B	ST	276'8EL	T 6.5
29SOV-86C2(OP1)	MST C OUTBD MSIV PILOT SOLENOID VALVE COIL	I	B	8B	ST	276'8EL	T 6.5
29SOV-86C2(OP2)	MST C OUTBD MSIV PILOT SOLENOID VALVE COIL	I	B	8B	ST	276'8EL	T 6.5
29SOV-86D2	MST D OUTBD MSIV PILOT SOLENOID VALVE	I	B	8B	ST	276'8EL	T 6.5
29SOV-86D2(OP1)	MST D OUTBD MSIV PILOT SOLENOID VALVE COIL	I	B	8B	ST	276'8EL	T 6.5
29SOV-86D2(OP2)	MST D OUTBD MSIV PILOT SOLENOID VALVE COIL	I	B	8B	ST	276'8EL	T 6.5
33LI-101A	CND STORAGE TK-12A & B LEVEL INDIC	II/III	X	20	CR	300EL	T 10
33LT-101	CONDENSATE	II/III	X	18	YD	257EL	E NA

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	STORAGE TANKS LEVEL XMITTER						
46MOV-101A	EMERGENCY SERVICE WATER LOOP A SUPPLY HEADER ISOL VALVE	I	A	8A	SP	255EL	NA 26
46MOV-101B	EMERGENCY SERVICE WATER LOOP B SUPPLY HEADER ISOL VALVE	I	B	8A	SP	255EL	B 25
46MOV-102A	EMERGENCY SERVICE WATER PUMP A TEST VALVE	I	A	8A	SP	255EL	B 26
46MOV-102B	EMERGENCY SERVICE WATER PUMP B TEST VALVE	I	B	8A	SP	255EL	B 25
46P-2A	EMERGENCY SERVICE WATER PUMP A	I	A	6	SP	255EL	B 26
46P-2B	EMERGENCY SERVICE WATER PUMP B	I	B	6	SP	255EL	B 25
66UC-22B	EAST CRESCENT AREA UNIT COOLER 22B	I	B	10	RB	242'8E L	B 4
66UC-22C	WEST CRESCENT AREA UNIT COOLER 22C	I	A	10	RB	242'8E L	D 2.5
66UC-22D	EAST CRESCENT AREA UNIT COOLER 22D	I	B	10	RB	242'8E L	A 3.5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
66UC-22E	WEST CRESCENT AREA UNIT COOLER 22E	I	A	10	RB	242'8E L	D 3
66UC-22F	EAST CRESCENT AREA UNIT COOLER 22F	I	B	10	RB	242'8E L	A 3
66UC-22G	WEST CRESCENT AREA UNIT COOLER 22G	I	A	10	RB	242'8E L	D 3.5
66UC-22H	EAST CRESCENT AREA UNIT COOLER 22H	I	B	10	RB	242'8E L	A 2.5
66UC-22J	WEST CRESCENT AREA UNIT COOLER 22J	I	A	10	RB	242'8E L	D 4
66UC-22K	HPCI ROOM UNIT COOLER 22K	I	B	10	RB	242'8E L	A 1
67MOD-16A1	WEST ELECTRIC BAY UC-16A DISCH ISOL DAMPER	I	A	10	EB	286EL	T 18
67MOD-16A2	WEST ELECTRIC BAY UC-16A DISCH ISOL DAMPER	I	A	10	EB	286EL	A1 18
67MOD-16B1	EAST ELECTRIC BAY UC-16B DISCH ISOL DAMPER	I	B	10	EB	286EL	A1 18
67MOD-16B2	EAST ELECTRIC BAY UC-16B DISCH ISOL DAMPER	I	B	10	EB	286EL	A1 18
							A1

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
67UC-16A	WEST ELECTRIC BAY UNIT COOLER	I	A	10	EB	286EL	17 A1
67UC-16A1(M)	WEST ELECTRIC BAY UNIT COOLER 16A FAN MOTOR A1 71MCC-251-001	I	A	10	EB	286EL	17 A1
67UC-16A2(M)	WEST ELECTRIC BAY UNIT COOLER 16A FAN MOTOR A2 71MCC-251-002	I	A	10	EB	286EL	17 A1
67UC-16B	EAST ELECTRIC BAY UNIT COOLER	I	B	10	EB	286EL	17 B
67UC-16B1(M)	EAST ELECTRIC BAY UNIT COOLER 16B FAN MOTOR 16B1 71MCC-262-004	I	B	10	EB	286EL	17 B
67UC-16B2(M)	EAST ELECTRIC BAY UNIT COOLER 16B FAN MOTOR B2 71MCC-262-005	I	B	10	EB	286EL	17 B
70AHU-12A	RELAY ROOM VENT AIR HANDLING UNIT A	I	A	10	AD	300EL	9.5 Z
70AHU-12B	RELAY ROOM VENT AIR HANDLING UNIT B	I	B	10	AD	300EL	9.5 X
70AHU-19A	CHILLER ROOM VENT AIR HANDLING UNIT A	I	A	10	AD	300EL	9 S
70AHU-19B	CHILLER ROOM VENT AIR	I	B	10	AD	300EL	9

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	HANDLING UNIT B						
70AHU-3A	CONTROL ROOM VENT AIR HANDLING UNIT A	I	A	10	AD	300EL	S 9.5
70AHU-3B	CONTROL ROOM VENT AIR HANDLING UNIT B	I	B	10	AD	300EL	Z 9.5
70FN-13A	RELAY ROOM VENT EXHAUST FAN A	I	A	9	AD	300EL	X 9.5
70FN-13B	RELAY ROOM VENT EXHAUST FAN B	I	B	9	AD	300EL	Z 9.5
70FN-4A	CONTROL ROOM VENT EXHAUST FAN A	I	A	9	AD	310'6E L	Z 9.5
70FN-4B	CONTROL ROOM VENT EXHAUST FAN B	I	B	9	AD	310'6E L	V 9.5
70MOD-101A	RELAY ROOM VENT AHU-12A OUTLET ISOL DAMPER	I	A	10	AD	300EL	V 9.5
70MOD-101B	RELAY ROOM VENT AHU-12B OUTLET ISOL DAMPER	I	B	10	AD	300EL	Z 9.5
70MOD-102A	RELAY ROOM VENT EXHAUST FAN 13A OUTLET ISOL DAMPER	I	A	10	AD	310'6E L	X 9.5
70MOD-102B	RELAY ROOM VENT EXHAUST FAN 13B OUTLET ISOL DAMPER	I	B	10	AD	310'6E L	X 10
70MOD-104A	RELAY ROOM VENT RECIRC ISOL	I	A	10	AD	310'6E L	Z 9.5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	DAMPER A						
70MOD-104B	RELAY ROOM VENT RECIRC ISOL DAMPER B	I	B	10	AD	310'6E L	X 9.5
70MOD-106A	CONTROL ROOM VENT AHU-3A OUTLET ISOL DAMPER	I	A	10	AD	300EL	X 9.5
70MOD-106B	CONTROL ROOM VENT AHU-3B OUTLET ISOL DAMPER	I	B	10	AD	300EL	Z 9.5
70MOD-108A	CONTROL ROOM VENT EXHAUST FAN 4A OUTLET ISOL DAMPER	I	A	10	AD	310'6E L	Z 9.5
70MOD-108B	CONTROL ROOM VENT EXHAUST FAN 4B OUTLET ISOL DAMPER	I	B	10	AD	310'6E L	V 9.5
70MOD-110A	CONTROL ROOM VENT RECIRC ISOL DAMPER A	I	A	10	AD	310'6E L	V 9.5
70MOD-110B	CONTROL ROOM VENT RECIRC ISOL DAMPER B	I	B	10	AD	310'6E L	V 9.5
70TCV-123A	CR/RR CHILLER ROOM AHU-19A CHILLED WATER OUTLET TEMP CONTROL VALVE	I	A	7	AD	300EL	V 9.5
70TCV-123B	CR/RR CHILLER ROOM AHU-19B CHILLED WATER OUTLET TEMP	I	B	7	AD	300EL	S 9.5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	CONTROL VALVE						
							S
71-10502	INCOMING FEED FROM EDGA SUPPLY BREAKER	I	A	3	EG	272EL	24
							A1
71-10504	DIESEL GEN A&C TIE BREAKER	I	A	3	EG	272EL	24
							A1
71-10512	INCOMING FEED FROM EDGC SUPPLY BREAKER	I	A	3	EG	272EL	24
							A1
71-10514	BUS 10300 TO 10500 TIE BREAKER	I	A	3	EG	272EL	24
							A1
71-10560	AUX POWER TO UNIT SUBSTATION L15 & L25 SUPPLY BREAKER	I	A	3	EG	272EL	26
							A1
71-10602	INCOMING FEED FROM EDGB SUPPLY BREAKER	I	B	3	EG	272EL	26
							A1
71-10604	DIESEL GEN B&D TIE BREAKER	I	B	3	EG	272EL	26
							A1
71-10612	INCOMING FEED FROM EDGD SUPPLY BREAKER	I	B	3	EG	272EL	26
							A1
71-10614	BUS 10400 TO 10600 TIE BREAKER	I	B	3	EG	272EL	26
							A1
71-10660	AUX POWER TO UNIT SUBSTATION L16 & L26 SUPPLY BREAKER	I	B	3	EG	272EL	26
							A1
71-11502	600V MAIN SUPPLY TO L15	I	A	2	RB	300EL	2

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	(BREAKER)						
71-11602	600V MAIN SUPPLY TO L16	I	B	2	RB	300EL	R 6
71-12502	600V MAIN SUPPLY TO L25 (BREAKER)	I	A	2	EB	272EL	R 18.5
71-12602	600V MAIN SUPPLY TO L26(BREAKER)	I	B	2	EB	272EL	A 18.5
71ACA2	DISTRIBUTION PANEL 71ACA2 EMERGENCY CONTROL & INST POWER A	I	A	14	RR	284'8E L	B 11
71ACA4	DISTRIBUTION PANEL 71ACA4 EMERGENCY CONTROL & INST POWER A	I	A	14	EG	272EL	C 24
71ACB2	DISTRIBUTION PANEL 71ACB2 EMERG CONTROL & INST POWER B	I	B	14	RR	284'8	A 12
71ACB4	DISTRIBUTION PANEL 71ACB4 EMERGENCY CONTROL & INST POWER B	I	B	14	EG	272EL	E 25
71ACUPS	DISTRIBUTION PANEL 71ACUPS UNINTERUPTABLE BUS	II/III	X	14	RR	284'8E L	A 11
71ACUPS-1	DISTRIBUTION PANEL 71ACUPS-1 UNINTERUPTABLE	II/III	X	14	RR	284'8E L	F 11

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	BUS						
71BC-1A	125 VDC STATION BATTERY CHARGER	I	A	16	BR	272EL	F 12.5
71BC-1B	125 VDC STATION BATTERY CHARGER	I	B	16	BR	272EL	E 12.5
71BCB-2A	BATTERY A CONTROL BOARD	I	A	14	BR	272EL	F 13
71BCB-2B	BATTERY B CONTROL BOARD	I	B	14	BR	272EL	C 13
71BMCC-1	RB WEST CRESCENT DC MOTOR CONTROL CENTER	I	A	1	RB	242'8E L	G 1
71BMCC-2	RB EAST CRESCENT DC MOTOR CONTROL CENTER	I	B	1	RB	242'8E L	R 1
71BMCC-3	RB WEST CRESCENT DC MOTOR CONTROL CENTER	I	A	1	RB	242'8E L	D 1
71BMCC-4	RB EAST CRESCENT DC MOTOR CONTROL CENTER	I	B	1	RB	242EL	R 1
71BMCC-6	RB DC MOTOR CONTROL CENTER	I	B	1	RB	272EL	D 8
71DC-A2	DISTRIBUTION PANEL 71DC-A2 DC CONTROL POWER A	I	A	14	RR	284'8E L	Y 10
71DC-A4	DISTRIBUTION PANEL 71DC-A4	I	A	14	EG	272EL	F 25

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	DC CONTROL POWER A						
71DC-A5	DISTRIBUTION PANEL 71DC-A5 DC CONTROL POWER A	I	A	14	RR	284'8E L	A 10
71DC-B2	DISTRIBUTION PANEL 71DC-B2 DC CONTROL POWER B	I	B	14	RR	284'8E L	G 9
71DC-B4	DISTRIBUTION PANEL 71DC-B4 DC CONTROL POWER B	I	B	14	EG	272EL	F 27
71DSC-11561	L15 UNIT SUBSTATION TRANSF T-13 HIGH SIDE DISC SW	I	A	3	RB	300EL	A 2
71DSC-11661	L16 UNIT SUBSTATION TRANSF T-14 HIGH SIDE DISC SW	I	B	3	RB	300EL	R 6
71DSC-12561	L25 UNIT SUBSTATION TRANSF T-15 HIGH SIDE DISC SWITCH	I	A	3	EB	272EL	P 18.5
71DSC-12661	L26 UNIT SUBSTATION TRANSF T-16 HIGH SIDE DISC SWITCH	I	B	3	EB	272EL	B 18.5
71ESSA1	SAFEGUARD CONTROL & INST	I	A	14	RR	284'8E L	B 11, C

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	POWER A DISTRIBUTION PANEL						
71ESSB1	SAFEGUARD CONTROL & INST POWER B DISTRIBUTION PANEL	I	B	14	RR	284'8E L	12
71H05	4160V SWITCHGEAR DISTRIBUTION (BUS 10500)	I	A	3	EG	272EL	E 24
71H06	4160V SWITCHGEAR DISTRIBUTION (BUS 10600)	I	B	3	EG	272EL	A1 27
71INV-3A	LPCI MOV INDEP POWER SUPPLY A INVERTER	I	A	16	RB	344'6E L	A1 5.5
71INV-3B	LPCI MOV INDEP POWER SUPPLY B INVERTER	I	B	16	RB	344'6E L	P 2
71L15	600V SWITCHGEAR DISTRIBUTION (BUS 11500)	I	A	2	RB	300EL	W 2
71L16	600V SWITCHGEAR DISTRIBUTION (BUS 11600)	I	B	2	RB	300EL	R 6
71L25	600V SWITCHGEAR DISTRIBUTION (BUS 12500)	I	A	2	EB	272EL	P 18.5
71L26	600V SWITCHGEAR DISTRIBUTION (BUS 12600)	I	B	2	EB	272EL	A1 18.5
71MCC-151	600V MOTOR	I	A	1	RB	272EL	B 1

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	CONTROL CENTER (BUS 115100)						
71MCC-152	600V MOTOR CONTROL CENTER (BUS 115200)	I	A	1	RB	272EL	T 8
71MCC-153	600V MOTOR CONTROL CENTER (BUS 115300)	I	A	1	RB	242'8E L	P .5
71MCC-155	600V MOTOR CONTROL CENTER (BUS 115500)	I	A	1	RB	242'8E L	A .5
71MCC-156	600V MOTOR CONTROL CENTER(BUS 115600)	I	A	1	RB	344'6E L	A 3.5
71MCC-161	600V MOTOR CONTROL CENTER (BUS 116100)	I	B	1	RB	272EL	T 1.5
71MCC-162	600V MOTOR CONTROL CENTER (BUS 116200)	I	B	1	RB	272EL	W 7
71MCC-163	600V MOTOR CONTROL CENTER (BUS 116300)	I	B	1	RB	242'8E L	D 1.5
71MCC-165	600V MOTOR CONTROL CENTER (BUS 116500)	I	B	1	RB	242'8E L	D 1.5
71MCC-166	600V MOTOR CONTROL CENTER(BUS 115600)	I	B	1	RB	344'6E L	D 2
71MCC-251	600V MOTOR CONTROL CENTER (BUS 125100)	I	A	1	EB	272EL	D 18

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equipment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
71MCC-252	600V MOTOR CONTROL CENTER(BUS 125200)	I	A	1	EB	272EL	A 18
71MCC-253	600V MOTOR CONTROL CENTER (BUS 125300)	I	A	1	AD	300EL	A 10
71MCC-254	600V MOTOR CONTROL CENTER (BUS 125400)	I	A	1	EG	272EL	C 23
71MCC-261	600V MOTOR CONTROL CENTER (BUS 126100)	I	B	1	EB	272EL	A1 18
71MCC-262	600V MOTOR CONTROL CENTER(BUS 126200)	I	B	1	EB	272EL	B 18
71MCC-263	600V MOTOR CONTROL CENTER (BUS 126300)	I	B	1	AD	300EL	B 9
71MCC-264	600V MOTOR CONTROL CENTER (BUS 126400)	I	B	1	EG	272EL	C 25.5
71T-13	600V UNIT SUBSTATION L15 TRANSFORMER	I	A	4	RB	300EL	A1 2
71T-14	600V UNIT SUBSTATION L16 TRANSFORMER	I	B	4	RB	300EL	R 6
71T-15	SWITCHGEAR L25 100KVA TRANSFORMER 71-10560	I	A	4	EB	272EL	P 19 AB

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
71T-16	SWITCHGEAR L26 100KVA TRANSFORMER 71-10660	I	B	4	EB	272EL	18.5 AB
71UPS-1	UNINTERRUPTABLE BUS MG SET	II/III	X	13	EB	272EL	14 B
72AHU-30A	BATTERY ROOM A AIR HANDLING UNIT	I	A	10	BR	282EL	12 E
72AHU-30B	BATTERY ROOM B AIR HANDLING UNIT	I	B	10	BR	282EL	12 G
72FN-31A	BATTERY ROOM A RECIRC FAN	I	A	9	BR	282EL	12 E
72FN-31B	BATTERY ROOM B RECIRC FAN	I	B	9	BR	282EL	12 F
72FN-46A	BATTERY ROOM A EXHAUST FAN	I	A	9	BR	282EL	12 E
72FN-46B	BATTERY ROOM B EXHAUST FAN	I	B	9	BR	282EL	12 F
72FN-46C	BATTERY ROOM A EXHAUST FAN	I	A	9	BR	282EL	12 E
72FN-46D	BATTERY ROOM D EXHAUST FAN	I	B	9	BR	282EL	12 F
72MOD-100A	BATTERY ROOM A AHU-30A FRESH AIR SUPPLY ISOL DAMPER	I	A	10	BR	282EL	12 E
72MOD-100B	BATTERY ROOM B AHU-30B FRESH AIR SUPPLY ISOL DAMPER	I	B	10	BR	282EL	12 F

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
72MOD-101A	BATTERY ROOM A AHU-30A RECIRC ISOL DAMPER	I	A	10	BR	282EL	12 E
72MOD-101B	BATTERY ROOM B AHU-30B RECIRC ISOL DAMPER	I	B	10	BR	282EL	12 F
72MOD-102A	BATTERY ROOM A RECIRC FAN A DISCH ISOL DAMPER	I	A	10	BR	282EL	12 E
72MOD-102B	BATTERY ROOM B RECIRC FAN B DISCH ISOL DAMPER	I	B	10	BR	282EL	12 F
72MOD-103A	BATTERY ROOM A EXHAUST FAN A DISCH ISOL DAMPER	I	A	10	BR	282EL	12 E
72MOD-103B	BATTERY ROOM B EXHAUST FAN B DISCH ISOL DAMPER	I	B	10	BR	282EL	12 F
72MOD-103C	BATTERY ROOM A EXHAUST FAN C DISCH ISOL DAMPER	I	A	10	BR	282EL	12 E
72MOD-103D	BATTERY ROOM B EXHAUST FAN D DISCH ISOL DAMPER	I	B	10	BR	282EL	12 F
72MOD-104A	BATTERY ROOM A VENT RECIRC FAN A EXHAUST DAMPER	I	A	10	BR	282EL	12 E
72MOD-104B	BATTERY ROOM B	I	B	10	BR	282EL	12

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	VENT RECIRC FAN B EXHAUST DAMPER						F
73FN-3A	ESW/RHRSW PUMP ROOM EXHAUST FAN A	I	A	9	SW	255EL	26
73FN-3B	ESW/RHRSW PUMP ROOM EXHAUST FAN B	I	B	9	SW	255EL	A 25
92CD-1	EDG A SWITCHGEAR AREA VENT CO2 ISOL DAMPER	I	A	10	EG	272EL	A 24.5
92CD-2	EDG B SWITCHGEAR AREA VENT CO2 ISOL DAMPER	I	B	10	EG	272EL	A1 24.5
92CD-3	EDG C SWITCHGEAR AREA VENT CO2 ISOL DAMPER	I	A	10	EG	272EL	A1 24.5
92CD-4	EDG D SWITCHGEAR AREA VENT CO2 ISOL DAMPER	I	B	10	EG	272EL	A1 24.5
92FN-1A	EMERG DIESEL GEN A VENT SUPPLY FAN	I	A	9	EG	272EL	A1 24
92FN-1B	EMERG DIESEL GEN B VENT SUPPLY FAN	I	B	9	EG	272EL	A1 26
92FN-1C	EMERG DIESEL GEN C VENT SUPPLY FAN	I	A	9	EG	272EL	A1 25
							A1

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
92FN-1D	EMERG DIESEL GEN D VENT SUPPLY FAN	I	B	9	EG	272EL	27 A1
92MOD-143A	EMERG DIESEL GEN A VENT EXHAUST ISOL DAMPER	I	A	10	EG	272EL	24 A4
92MOD-143B	EMERG DIESEL GEN B VENT EXHAUST ISOL DAMPER	I	B	10	EG	272EL	26.5 A4
92MOD-143C	EMERG DIESEL GEN C VENT EXHAUST ISOL DAMPER	I	A	10	EG	272EL	25 A4
92MOD-143D	EMERG DIESEL GEN D VENT EXHAUST ISOL DAMPER	I	B	10	EG	272EL	27 A4
92MOD-148A	EMERG DIESEL GEN VENT SUPPLY FAN A RECIRC SUCT ISOL DAMPER	I	A	10	EG	272EL	24 A1
92MOD-148B	EMERG DIESEL GEN VENT SUPPLY FAN B RECIRC SUCT ISOL DAMPER	I	B	10	EG	272EL	26.5 A1
92MOD-148C	EMERG DIESEL GEN VENT SUPPLY FAN C RECIRC SUCT ISOL DAMPER	I	A	10	EG	272EL	24.5 A1
92MOD-148D	EMERG DIESEL GEN VENT SUPPLY	I	B	10	EG	272EL	27.5

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	FAN D RECIRC SUCT ISOL DAMPER						
92MOD-149A	EMERG DIESEL GEN VENT SUPPLY FAN A FRESH AIR SUCT ISOL DAMPER	I	A	10	EG	272EL	A1 24
92MOD-149B	EMERG DIESEL GEN VENT SUPPLY FAN B FRESH AIR SUCT ISOL DAMPER	I	B	10	EG	272EL	A1 26.5
92MOD-149C	EMERG DIESEL GEN VENT SUPPLY FAN C FRESH AIR SUCT ISOL DAMPER	I	A	10	EG	272EL	A1 24.5
92MOD-149D	EMERG DIESEL GEN VENT SUPPLY FAN D FRESH AIR SUCT ISOL DAMPER	I	B	10	EG	272EL	A1 27.5
92MOD-150A	EMERG DIESEL GEN VENT SUPPLY FANS A & C FRESH AIR WEST SUPPLY ISOL DAMPER	I	A	10	EG	272EL	A1 23
92MOD-150B	EMERG DIESEL GEN VENT SUPPLY FANS B & D FRESH AIR WEST SUPPLY ISOL DAMPER	I	B	10	EG	272EL	A2 28
92MOD-150C	EMERG DIESEL GEN VENT SUPPLY	I	A	10	EG	272EL	A2 23

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	FANS A & C FRESH AIR EAST SUPPLY ISOL DAMPER						
92MOD-150D	EMERG DIESEL GEN VENT SUPPLY FANS B & D FRESH AIR EAST SUPPLY ISOL DAMPER	I	B	10	EG	272EL	A2 28
92RTD-101A	EMERG DIESEL GEN A ROOM SOUTH SIDE RESIST TEMP DETECTOR	I	A	19	EG	272EL	A2 23
92RTD-101B	EMERG DIESEL GEN B ROOM SOUTH SIDE RESIST TEMP DETECTOR	I	B	19	EG	272EL	A2 27
92RTD-101C	EMERG DIESEL GEN C ROOM NORTH SIDE RESIST TEMP DETECTOR	I	A	19	EG	272EL	A2 25
92RTD-101D	EMERG DIESEL GEN D ROOM NORTH SIDE RESIST TEMP DETECTOR	I	B	19	EG	276'6E L	A4 24.5
93EDG-A	EMERGENCY DIESEL GENERATOR A	I	A	17	EG	272EL	A4 24
93EDG-B	EMERGENCY DIESEL GENERATOR B	I	B	17	EG	272EL	A2 26.5
							A2

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equipment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
93EDG-C	EMERGENCY DIESEL GENERATOR C	I	A	17	EG	272EL	25
93EDG-D	EMERGENCY DIESEL GENERATOR D	I	B	17	EG	272EL	A2 25
93LI-102A	EDG A FUEL OIL DAY TANK 7A LEVEL INDIC	II/III	A	18	EG	272EL	A2 23.5
93LI-102B	EDG B FUEL OIL DAY TANK 7B LEVEL INDIC	II/III	B	18	EG	272EL	A4 26
93LI-102C	EDG C FUEL OIL DAY TANK 7C LEVEL INDIC	II/III	A	18	EG	272EL	A4 24.5
93LI-102D	EDG D FUEL OIL DAY TANK 7D LEVEL INDIC	II/III	B	18	EG	272EL	A4 27
93LT-102A	EDG A FUEL OIL DAY TANK 7A LEVEL XMITTER	II/III	A	18	EG	272EL	A4 24
93LT-102B	EDG B FUEL OIL DAY TANK 7B LEVEL XMITTER	II/III	B	18	EG	272EL	A4 26.5
93LT-102C	EDG C FUEL OIL DAY TANK 7C LEVEL XMITTER	II/III	A	18	EG	272EL	A4 25
93LT-102D	EDG D FUEL OIL DAY TANK 7D LEVEL XMITTER	II/III	B	18	EG	272EL	A4 27
93P-2A	EMERGENCY DIESEL GENERATOR A CIRCULATING	I	A	6	EG	272EL	A4 24

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	LUBE OIL PUMP						
							A3
93P-2B	EMERGENCY DIESEL GENERATOR B CIRCULATING LUBE OIL PUMP	I	B	6	EG	272EL	26
							A3
93P-2C	EMERGENCY DIESEL GENERATOR C CIRCULATING LUBE OIL PUMP	I	A	6	EG	272EL	25
							A3
93P-2D	EMERGENCY DIESEL GENERATOR D CIRCULATING LUBE OIL PUMP	I	B	6	EG	272EL	27.5
							A3
93P-3A	EMERGENCY DIESEL GENERATOR A TURBOCHARGER LUBE OIL PUMP	I	A	6	EG	272EL	24
							A3
93P-3B	EMERGENCY DIESEL GENERATOR B TURBOCHARGER LUBE OIL PUMP	I	B	6	EG	272EL	26
							A4
93P-3C	EMERGENCY DIESEL GENERATOR C TURBOCHARGER LUBE OIL PUMP	I	A	6	EG	272EL	24
							A3
93P-3D	EMERGENCY DIESEL GENERATOR D TURBOCHARGER LUBE OIL PUMP	I	B	6	EG	272EL	26
							A4

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
93P-4A	EMERGENCY DIESEL GENERATOR A FUEL OIL PUMP	I	A	5	EG	272EL	24 A4
93P-4B	EMERGENCY DIESEL GENERATOR B FUEL OIL PUMP	I	B	5	EG	272EL	26.5 A4
93P-4C	EMERGENCY DIESEL GENERATOR C FUEL OIL PUMP	I	A	5	EG	272EL	25 A4
93P-4D	EMERGENCY DIESEL GENERATOR D FUEL OIL PUMP	I	B	5	EG	272EL	27.5 A4
93P1-A1	EMERGENCY DIESEL GENERATOR A FUEL OIL TRANSFER PUMP A1	I	A	5	EG	272EL	24 A4
93P1-A2	EMERGENCY DIESEL GENERATOR A FUEL OIL TRANSFER PUMP A2	I	A	5	EG	272EL	24 A4
93P1-B1	EMERGENCY DIESEL GENERATOR B FUEL OIL TRANSFER PUMP B1	I	B	5	EG	272EL	26.5 A4
93P1-B2	EMERGENCY DIESEL GENERATOR B	I	B	5	EG	272EL	26.5 A4

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	FUEL OIL TRANSFER PUMP B2						
93P1-C1	EMERGENCY DIESEL GENERATOR C FUEL OIL TRANSFER PUMP C1	I	A	5	EG	272EL	A4 24.5
93P1-C2	EMERGENCY DIESEL GENERATOR C FUEL OIL TRANSFER PUMP C2	I	A	5	EG	272EL	A4 24.5
93P1-D1	EMERGENCY DIESEL GENERATOR D FUEL OIL TRANSFER PUMP D1	I	B	5	EG	272EL	A4 26.5
93P1-D2	EMERGENCY DIESEL GENERATOR D FUEL OIL TRANSFER PUMP D2	I	B	5	EG	272EL	A4 26.5
93SOV-1A	EDG A AIR START RIGHT BANK SOLENOID VALVE	I	A	8B	EG	272EL	A4 23.5
93SOV-1B	EDG B AIR START RIGHT BANK SOLENOID VALVE	I	B	8B	EG	272EL	A3 23.5
93SOV-1C	EDG C AIR START RIGHT BANK SOLENOID VALVE	I	A	8B	EG	272EL	A3 25
							A2

New York Power Authority
James A. FitzPatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Safe Shutdown Equiment list (SSEL)
For Relay Evaluation

Main..... Equipment... Designation.	Description....	Safety.. Class...	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
93SOV-1D	EDG D AIR START RIGHT BANK SOLENOID VALVE	I	B	8B	EG	272EL	28 A3
93SOV-2A	EDG A AIR START LEFT BANK SOLENOID VALVE	I	A	8B	EG	272EL	24 A3
93SOV-2B	EDG B AIR START LEFT BANK SOLENOID VALVE	I	B	8B	EG	272EL	23.5 A3
93SOV-2C	EDG C AIR START LEFT BANK SOLENOID VALVE	I	A	8B	EG	272EL	24.5 A2
93SOV-2D	EDG D AIR START LEFT BANK SOLENOID VALVE	I	B	8B	EG	272EL	27 A3

405 records listed.

New York Power Authority
James A. Fitzpatrick Nuclear Power Plant
Unresolved Safety Issue A-46
List of Panels Containing Essential Relays - Field Mounted Process Instruments

Main..... Equipment... Designation.	Description....	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
09-32	CHANNEL "A" RHR/RCIC RELAY PANEL	A	20	RR	284'8E L	9.5 F
09-33	CHANNEL "B" RHR/RCIC RELAY PANEL	B	20	RR	284'8E L	9 F
09-39	HPCI RELAY PANEL	X	20	RR	284'8E L	9 G
09-45	AUTO BLOWDOWN RELAY CABINET	X	20	RR	284'8E L	9.5 FG
09-46	CORE SPRAY CHANNEL "A" RELAY CABINET	A	20	RR	284'8E L	9.5 FG
09-47	CORE SPRAY CHANNEL "B" RELAY CABINET	B	20	RR	284'8E L	9 FG
09-95	EMERGENCY CORE COOLING SYSTEM DIV 1 A/C TRIP CABINET	X	20	RR	284'8E L	10.5 G
09-96	EMERGENCY CORE COOLING SYSTEM DIV 2 B/D TRIP CABINET	X	20	RR	284'8E L	10.5 F
09AR-5A	(RED) A AUXILIARY RELAY CABINET	A	20	RR	284'8E L	10.5 E
09AR-5B	(BLUE) B AUXILIARY RELAY CABINET	B	20	RR	284'8E L	10.5

New York Power Authority
James A. Fitzpatrick Nuclear Power Plant
Unresolved Safety Issue A-46
List of Panels Containing Essential Relays - Field Mounted Process Instruments

Main..... Equipment... Designation.	Description....	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
						E
10DPIS-125A	RHR LOOP A DIFF PRESS INDIC SWITCH EQ	A	18	RB	242'8E L	4
						A
10DPIS-125B	RHR B DISCH HDR FLOW DIFF PRESS INDIC SWITCH	B	18	RB	242'8E L	3
						D
15PS-122A	RBCLC PUMPS DISCH HDR PRESS SWITCH	X	18	RB	300EL	4
						A
15PS-122B	RBCLC PUMPS DISCH HDR PRESS SWITCH	X	18	RB	300EL	4.5
						A
15PS-122C	RBCLC PUMPS DISCH HDR PRESS SWITCH	X	18	RB	300EL	4
						A
15PS-122D	RBCLC PUMPS DISCH HDR PRESS SWITCH	X	18	RB	300EL	4.5
						A
25-50	HPCI INST RACK	A	18	RB	242'8E L	1
						R
27CAD	CONTAINMENT AIR DILUTION PANEL	X	20	RR	284'8E L	9
						E
71BMCC-2	RB EAST CRESCENT DC MOTOR CONTROL CENTER	B	1	RB	242'8E L	1
						D
71BMCC-4	RB EAST CRESCENT DC	B	1	RB	242EL	1

Main..... Equipment... Designation.	Description....	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
	MOTOR CONTROL CENTER					D
71BMCC-6	RB DC MOTOR CONTROL CENTER	B	1	RB	272EL	B Y
71H05	4160V SWITCHGEAR DISTRIBUTION (BUS 10500)	A	3	EG	272EL	24 A1
71H06	4160V SWITCHGEAR DISTRIBUTION (BUS 10600)	B	3	EG	272EL	27 A1
71MCC-152	600V MOTOR CONTROL CENTER (BUS 115200)	A	1	RB	272EL	8 P
71MCC-153	600V MOTOR CONTROL CENTER (BUS 115300)	A	1	RB	242'8E L	.5 A
71MCC-155	600V MOTOR CONTROL CENTER (BUS 115500)	A	1	RB	242'8E L	.5 A
71MCC-161	600V MOTOR CONTROL CENTER (BUS 116100)	B	1	RB	272EL	1.5 W
71MCC-163	600V MOTOR CONTROL CENTER (BUS 116300)	B	1	RB	242'8E L	1.5 D
71MCC-165	600V MOTOR CONTROL CENTER (BUS 116500)	B	1	RB	242'8E L	1.5

New York Power Authority
James A. Fitzpatrick Nuclear Power Plant
Unresolved Safety Issue A-46
List of Panels Containing Essential Relays - Field Mounted Process Instruments

Main..... Equipment... Designation.	Description....	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
						D
71MCC-254	600V MOTOR CONTROL CENTER (BUS 125400)	A	1	EG	272EL	23
						A1
71MCC-264	600V MOTOR CONTROL CENTER (BUS 126400)	B	1	EG	272EL	25.5
						A1
93AURP-01	EDG A & C AUX UNDERVOLTAGE RELAY PANEL	X	20	EG	272EL	24.5
						A
93AURP-02	EDG B & D AUX UNDERVOLTAGE RELAY PANEL	X	20	EG	272EL	24.5
						A
93ECP-A	EDG A ENGINE CONTROL PANEL	A	20	EG	272EL	24
						A3
93ECP-B	EDG B ENGINE CONTROL PANEL	B	20	EG	272EL	26
						A3
93ECP-C	EDG C ENGINE CONTROL PANEL	A	20	EG	272EL	25
						A3
93ECP-D	EDG D ENGINE CONTROL PANEL	B	20	EG	272EL	27
						A1
93ECSP-A	EDG A ENGINE CONTROL SUB PANEL	A	20	EG	272EL	24
						A3
93ECSP-B	EDG B ENGINE CONTROL SUB PANEL	B	20	EG	272EL	26
						A3

New York Power Authority
James A. Fitzpatrick Nuclear Power Plant
Unresolved Safety Issue A-46
List of Panels Containing Essential Relays - Field Mounted Process Instruments

Main..... Equipment... Designation.	Description....	Safety Train.	Equip. Class.	Bldg..	Elev..	Loc...
93ECSP-C	EDG C ENGINE CONTROL SUB PANEL	A	20	EG	272EL	25 A3
93ECSP-D	EDG D ENGINE CONTROL SUB PANEL	B	20	EG	272EL	27 A3
93EGP-A	EDG A GENERATOR CONTROL PANEL	A	20	EG	272EL	24 A1
93EGP-B	EDG B GENERATOR CONTROL PANEL	B	20	EG	272EL	26 A1
93EGP-C	EDG C GENERATOR CONTROL PANEL	A	20	EG	272EL	25 A1
93EGP-D	EDG D GENERATOR CONTROL PANEL	B	20	EG	272EL	27 A1
93FPAC	EDG A & C FORCED PARALLELING PANEL	A	20	EG	272EL	24.5 A
93FPBD	EDG B & D FORCED PARALLELING PANEL	B	20	EG	272EL	26.5 A

47 records listed.

New York Power Authority
James A. Fitzpatrick Nuclear Power Plant
Unresolved Safety Issue A-46
USI A-46 Relays

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
02-1-1ADSB01 *	GENERAL ELECTRIC	CR2940	CS	N	02ADS-71	02SOV-71A2	N	Y	NV	*	ESK-11AAM REV 2
02-1-1ADSB02 *	GENERAL ELECTRIC	CR2940	CS	N	02ADS-71	02SOV-71B2	N	Y	NV	*	ESK-11AAM REV 2
02-1-1ADSB03 *	GENERAL ELECTRIC	CR2940	CS	N	02ADS-71	02SOV-71C2	N	Y	NV	*	ESK-11AMM REV 2
02-1-1ADSB04 *	GENERAL ELECTRIC	CR2940	CS	N	02ADS-71	02SOV-71D2	N	Y	NV	*	ESK-11AAM REV 2
02-1-1ADSB05 *	GENERAL ELECTRIC	CR2940	CS	N	02ADS-71	02SOV-71E2	N	Y	NV	*	ESK-11AAM REV 2
02-1-1ADSB06 *	GENERAL ELECTRIC	CR2940	CS	N	02ADS-71	02SOV-71F2	N	Y	NV	*	ESK-11AAM REV 2
02-1-1ADSB07 *	GENERAL ELECTRIC	CR2940	CS	N	02ADS-71	02SOV-71G2	N	Y	NV	*	ESK-11AAM REV 2
02-1-1ADSB08 *	GENERAL ELECTRIC	CR2940	CS	N	02ADS-71	02SOV-71H2	N	Y	NV	*	ESK-11AAM REV 2
02-1-1ADSB09 *	GENERAL ELECTRIC	CR2940	CS	N	02ADS-71	02SOV-71J2	N	Y	NV	*	ESK-11AAM REV 2
02-1-1ADSB10 *	GENERAL ELECTRIC	CR2940	CS	N	02ADS-71	02SOV-71K2	N	Y	NV	*	ESK-11AAM REV 2
02-1-1ADSB11 *	GENERAL ELECTRIC	CR2940	CS	N	02ADS-71	02SOV-71L2	N	Y	NV	*	ESK-11AAM REV 2
02-3A-K101A	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-95	02SOV-71A1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71B1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71C1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71D1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71E1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71G1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71H1	Y	Y	GERS	N	1.83-38 REV G
						93EDG-A	Y	Y	GERS	N	1.60-20 REV H
						93EDG-B	Y	Y	GERS	N	1.60-20 REV H
						93EDG-C	Y	Y	GERS	N	1.60-20 REV H
						93EDG-D	Y	Y	GERS	N	1.60-20 REV H
02-3A-K101B	AGASTAT	EGPBC20004003	RLY	N	09-96	02SOV-71A1	Y	Y	GERS	N	1.83-38 REV G

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
	RELAY CO (AMERACE)										
						02SOV-71B1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71C1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71D1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71E1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71G1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71H1	Y	Y	GERS	N	1.83-38 REV G
						93EDG-A	Y	Y	GERS	N	1.60-30 REV P, 1.60-21 REV H
						93EDG-B	Y	Y	GERS	N	1.60-30 REV P, 1.60-21 REV H
						93EDG-C	Y	Y	GERS	N	1.60-30 REV P, 1.60-21 REV H
						93EDG-D	Y	Y	GERS	N	1.60-30 REV P, 1.60-21 REV H
02-3A-K102A	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-95	23MOV-14	Y	Y	GERS	N	1.61-142 REV G, 1.61-143 REV H
						23MOV-15	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-16	Y	Y	GERS	N	1.61-143 REV H, 1.61-142 REV G, ESK-11AK REV 015
						23MOV-17	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-19	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-20	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-21	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-24	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
02-3A-K102B	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-96	23MOV-14	Y	Y	GERS	N	1.61-142 REV G, 1.61-143 REV H
						23MOV-15	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-16	Y	Y	GERS	N	1.61-143 REV H, 1.61-142 REV G, ESK-11AK REV 015
						23MOV-17	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-19	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
						23MOV-20	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-21	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-24	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
02-3A-K104A	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-95	02SOV-71A1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71B1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71C1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71D1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71E1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71G1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71H1	Y	Y	GERS	N	1.83-38 REV G
						93EDG-A	Y	Y	GERS	N	1.60-20 REV H
						93EDG-B	Y	Y	GERS	N	1.60-20 REV H
						93EDG-C	Y	Y	GERS	N	1.60-20 REV H
						93EDG-D	Y	Y	GERS	N	1.60-20 REV H
02-3A-K104B	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-96	02SOV-71A1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71B1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71C1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71D1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71E1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71G1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71H1	Y	Y	GERS	N	1.83-38 REV G
						93EDG-A	Y	Y	GERS	N	1.60-30 REV P, 1.60-21 REV H
						93EDG-B	Y	Y	GERS	N	1.60-30 REV P, 1.60-21 REV H
						93EDG-C	Y	Y	GERS	N	1.60-30 REV P, 1.60-21 REV H
						93EDG-D	Y	Y	GERS	N	1.60-30 REV P, 1.60-21 REV H
02-3A-K105A	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-95	23MOV-14	Y	Y	GERS	N	1.61-142 REV G, 1.61-143 REV H
						23MOV-15	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-16	Y	Y	GERS	N	1.61-143 REV H, 1.61-142 REV G, ESK-11AK REV 015
						23MOV-17	N	Y	CA	*	1.61-142 REV G,

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
											1.61-143 REV H
						23MOV-19	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-20	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-21	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-24	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
02-3A-K105B	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-96	23MOV-14	Y	Y	GERS	N	1.61-142 REV G, 1.61-143 REV H
						23MOV-15	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-16	Y	Y	GERS	N	1.61-143 REV H, 1.61-142 REV G, ESK-11AK REV 015
						23MOV-17	N	Y	NV	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-19	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-20	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-21	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-24	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
02-3A-K106A	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-95	23HOV-1	N	Y	CA	*	1.60-20 REV H, 1.61-142 REV G, 1.61-143 REV H
02-3A-K106B	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-96	23HOV-1	N	Y	CA	*	1.60-20 REV H, 1.61-142 REV G, 1.61-143 REV H
02-3A-K108A	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-95	02SOV-71A1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71B1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71C1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71D1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71E1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71G1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71H1	Y	Y	GERS	N	1.83-38 REV G
02-3A-K108B	AGASTAT	EGPBC20004003	RLY	N	09-96	02SOV-71A1	Y	Y	GERS	N	1.83-38 REV G

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
	RELAY CO (AMERACE)										
						02SOV-71B1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71C1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71D1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71E1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71G1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71H1	Y	Y	GERS	N	1.83-38 REV G
02-3LT-72A	ROSEMOUNT INC	1153DB5RC	INST	N	25-05	02SOV-71A1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71B1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71C1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71D1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71E1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71G1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71H1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						23MOV-14	N	Y	NV	*	1.60-20 REV H
						23MOV-15	N	Y	NV	*	1.60-20 REV H
						23MOV-16	N	Y	NV	*	1.60-20 REV H
						23MOV-17	N	Y	NV	*	1.60-20 REV H
						23MOV-19	N	Y	NV	*	1.60-20 REV H
						23MOV-20	N	Y	NV	*	1.60-20 REV H
						23MOV-21	N	Y	NV	*	1.60-20 REV H
						23MOV-24	N	Y	NV	*	1.60-20 REV H
						93EDG-A	N	Y	NV	*	1.60-20 REV H
						93EDG-B	N	Y	NV	*	1.60-20 REV H
						93EDG-C	N	Y	NV	*	1.60-20 REV H
						93EDG-D	N	Y	NV	*	1.60-20 REV H
02-3LT-72B	ROSEMOUNT INC	1153DB5RC	INST	N	25-06	02SOV-71A1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						02SOV-71B1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						02SOV-71C1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						02SOV-71D1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						02SOV-71E1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						02SOV-71G1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer. Part\model. Number.	Relay. type..	Low. ruggedness. relay.	Rack/Panel:	Component. For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
						02SOV-71H1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						23MOV-14	N	Y	NV	*	1.60-21 REV H
						23MOV-15	N	Y	NV	*	1.60-21 REV H
						23MOV-16	N	Y	NV	*	LP-02-3B REV 2
						23MOV-17	N	Y	NV	*	1.60-21 REV H
						23MOV-19	N	Y	NV	*	1.60-21 REV H
						23MOV-20	N	Y	NV	*	1.60-21 REV H
						23MOV-21	N	Y	NV	*	1.60-21 REV H
						23MOV-24	N	Y	NV	*	1.60-21 REV H
						93EDG-A	N	Y	NV	*	1.60-21 REV H
						93EDG-B	N	Y	NV	*	1.60-21 REV H
						93EDG-C	N	Y	NV	*	1.60-21 REV H
						93EDG-D	N	Y	NV	*	1.60-21 REV H
02-3LT-72C	ROSEMOUNT INC	1153DB5RC	INST	N	25-05	02SOV-71A1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71B1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71C1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71D1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71E1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71G1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71H1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						23MOV-14	N	Y	NV	*	1.60-20 REV H
						23MOV-15	N	Y	NV	*	1.60-20 REV H
						23MOV-16	N	Y	NV	*	LP-02-3C REV 3
						23MOV-17	N	Y	NV	*	1.60-20 REV H
						23MOV-19	N	Y	NV	*	1.60-20 REV H
						23MOV-20	N	Y	NV	*	1.60-20 REV H
						23MOV-21	N	Y	NV	*	1.60-20 REV H
						23MOV-24	N	Y	NV	*	1.60-20 REV H
						93EDG-A	N	Y	NV	*	1.60-20 REV H
						93EDG-B	N	Y	NV	*	1.60-20 REV H
						93EDG-C	N	Y	NV	*	1.60-20 REV H
						93EDG-D	N	Y	NV	*	1.60-20 REV H
02-3LT-72D	ROSEMOUNT INC	1153DB5RC	INST	N	25-06	02SOV-71A1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						02SOV-71B1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						02SOV-71C1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
						02SOV-71D1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						02SOV-71E1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						02SOV-71G1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						02SOV-71H1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						23MOV-14	N	Y	NV	*	1.60-21 REV H
						23MOV-15	N	Y	NV	*	1.60-21 REV H
						23MOV-16	N	Y	NV	*	LP-02-3D REV 2
						23MOV-17	N	Y	NV	*	1.60-21 REV H
						23MOV-19	N	Y	NV	*	1.60-21 REV H
						23MOV-20	N	Y	NV	*	1.60-21 REV H
						23MOV-21	N	Y	NV	*	1.60-21 REV H
						23MOV-24	N	Y	NV	*	1.60-21 REV H
						93EDG-A	N	Y	NV	*	1.60-21 REV H
						93EDG-B	N	Y	NV	*	1.60-21 REV H
						93EDG-C	N	Y	NV	*	1.60-21 REV H
						93EDG-D	N	Y	NV	*	1.60-21 REV H
02-3LT-83A	ROSEMOUNT INC	1153DB4RC	INST	N	25-05	02SOV-71A1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71B1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71C1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71D1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71E1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71G1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71H1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
02-3LT-83B	ROSEMOUNT INC	1153DB4RC	INST	N	25-06	02SOV-71A1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						02SOV-71B1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						02SOV-71C1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						02SOV-71D1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						02SOV-71E1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						02SOV-71G1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
						02SOV-71H1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
02-3LT-83C	ROSEMOUNT INC	1153DB4RC	INST	N	25-05	23HOV-1	N	Y	NV	*	1.60-20 REV H, 1.61-142 REV G, 1.61-143 REV H
02-3LT-83D	ROSEMOUNT INC	1153DB4RC	INST	N	25-06	23HOV-1	N	Y	NV	*	1.60-20 REV H, 1.61-142 REV G, 1.61-143 REV H
02-3MTU-272A	ROSEMOUNT INC	510DU	INST	N	09-95	02SOV-71A1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71B1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71C1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71D1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71E1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71G1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71H1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						23MOV-14	N	Y	NV	*	1.60-20 REV H
						23MOV-15	N	Y	NV	*	1.60-20 REV H
						23MOV-16	N	Y	NV	*	1.60-20 REV H
						23MOV-17	N	Y	NV	*	1.60-20 REV H
						23MOV-19	N	Y	NV	*	1.60-20 REV H
						23MOV-20	N	Y	NV	*	1.60-20 REV H
						23MOV-21	N	Y	NV	*	1.60-20 REV H
						23MOV-24	N	Y	NV	*	1.60-20 REV H
						93EDG-A	N	Y	NV	*	1.60-20 REV H
						93EDG-B	N	Y	NV	*	1.60-20 REV H
						93EDG-C	N	Y	NV	*	1.60-20 REV H
						93EDG-D	N	Y	NV	*	1.60-20 REV H
02-3MTU-272B	ROSEMOUNT INC	510DU	INST	N	09-96	02SOV-71A1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						02SOV-71B1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						02SOV-71C1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						02SOV-71D1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						02SOV-71E1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
						02SOV-71G1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						02SOV-71H1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						23MOV-14	N	Y	NV	*	1.60-21 REV H
						23MOV-15	N	Y	NV	*	1.60-21 REV H
						23MOV-16	N	Y	NV	*	1.60-21 REV H
						23MOV-17	N	Y	NV	*	1.60-21 REV H
						23MOV-19	N	Y	NV	*	1.60-21 REV H
						23MOV-20	N	Y	NV	*	1.60-21 REV H
						23MOV-21	N	Y	NV	*	1.60-21 REV H
						23MOV-24	N	Y	NV	*	1.60-21 REV H
						93EDG-A	N	Y	NV	*	1.60-21 REV H
						93EDG-B	N	Y	NV	*	1.60-21 REV H
						93EDG-C	N	Y	NV	*	1.60-21 REV H
						93EDG-D	N	Y	NV	*	1.60-21 REV H
02-3MTU-272C	ROSEMOUNT INC	510DU	INST	N	09-95	02SOV-71A1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71B1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71C1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71D1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71E1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71G1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71H1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						23MOV-14	N	Y	NV	*	1.60-20 REV H
						23MOV-15	N	Y	NV	*	1.60-20 REV H
						23MOV-16	N	Y	NV	*	1.60-20 REV H
						23MOV-17	N	Y	NV	*	1.60-20 REV H
						23MOV-19	N	Y	NV	*	1.60-20 REV H
						23MOV-20	N	Y	NV	*	1.60-20 REV H
						23MOV-21	N	Y	NV	*	1.60-20 REV H
						23MOV-24	N	Y	NV	*	1.60-20 REV H
						93EDG-A	N	Y	NV	*	1.60-20 REV H
						93EDG-B	N	Y	NV	*	1.60-20 REV H
						93EDG-C	N	Y	NV	*	1.60-20 REV H
						93EDG-D	N	Y	NV	*	1.60-20 REV H
02-3MTU-272D	ROSEMOUNT INC	510DU	INST	N	09-96	02SOV-71A1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						02SOV-71B1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
						02SOV-71C1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						02SOV-71D1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						02SOV-71E1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						02SOV-71G1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						02SOV-71H1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						23MOV-14	N	Y	NV	*	1.60-21 REV H
						23MOV-15	N	Y	NV	*	1.60-21 REV H
						23MOV-16	N	Y	NV	*	1.60-21 REV H
						23MOV-17	N	Y	NV	*	1.60-21 REV H
						23MOV-19	N	Y	NV	*	1.60-21 REV H
						23MOV-20	N	Y	NV	*	1.60-21 REV H
						23MOV-21	N	Y	NV	*	1.60-21 REV H
						23MOV-24	N	Y	NV	*	1.60-21 REV H
						93EDG-A	N	Y	NV	*	1.60-21 REV H
						93EDG-B	N	Y	NV	*	1.60-21 REV H
						93EDG-C	N	Y	NV	*	1.60-21 REV H
						93EDG-D	N	Y	NV	*	1.60-21 REV H
02-3MTU-283A	ROSEMOUNT INC	510DU	INST	N	09-95	02SOV-71A1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71B1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71C1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71D1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71E1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71G1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
						02SOV-71H1	N	Y	NV	*	1.60-20 REV H, 1.60-16 REV D
02-3MTU-283B	ROSEMOUNT INC	510DU	INST	N	09-96	02SOV-71A1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						02SOV-71B1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						02SOV-71C1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						02SOV-71D1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						02SOV-71E1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
						02SOV-71G1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
						02SOV-71H1	N	Y	NV	*	1.60-21 REV H, 1.60-16 REV D
02-3MTU-283C	ROSEMOUNT INC	710DU	INST	N	09-95	23HOV-1	N	Y	NV	*	1.60-20 REV H, 1.61-142 REV G, 1.61-143 REV H
02-3MTU-283D	ROSEMOUNT INC	710DU	INST	N	09-96	23HOV-1	N	Y	NV	*	1.60-20 REV H, 1.61-142 REV G, 1.61-143 REV H
02-3STU-273A	ROSEMOUNT INC	510DU	INST	N	09-95	23MOV-14	N	Y	NV	*	1.60-20 REV H
						23MOV-15	N	Y	NV	*	1.60-20 REV H
						23MOV-16	N	Y	NV	*	1.61-20 REV H
						23MOV-17	N	Y	NV	*	1.60-20 REV H
						23MOV-19	N	Y	NV	*	1.60-20 REV H
						23MOV-20	N	Y	NV	*	1.60-20 REV H
						23MOV-21	N	Y	NV	*	1.60-20 REV H
						23MOV-24	N	Y	NV	*	1.60-20 REV H
02-3STU-273B	ROSEMOUNT INC	510DU	INST	N	09-96	23MOV-14	N	Y	NV	*	1.60-21 REV H
						23MOV-15	N	Y	NV	*	1.60-21 REV H
						23MOV-16	N	Y	NV	*	1.60-21 REV H
						23MOV-17	N	Y	NV	*	1.60-21 REV H
						23MOV-19	N	Y	NV	*	1.60-21 REV H
						23MOV-20	N	Y	NV	*	1.60-21 REV H
						23MOV-21	N	Y	NV	*	1.60-21 REV H
						23MOV-24	N	Y	NV	*	1.60-21 REV H
02-3STU-273C	ROSEMOUNT INC	510DU	INST	N	09-95	23MOV-14	N	Y	NV	*	1.60-20 REV H
						23MOV-15	N	Y	NV	*	1.60-20 REV H
						23MOV-16	N	Y	NV	*	1.60-20 REV H
						23MOV-17	N	Y	NV	*	1.60-20 REV H
						23MOV-19	N	Y	NV	*	1.60-20 REV H
						23MOV-20	N	Y	NV	*	1.60-20 REV H
						23MOV-21	N	Y	NV	*	1.60-20 REV H
						23MOV-24	N	Y	NV	*	1.60-20 REV H
02-3STU-273D	ROSEMOUNT INC	510DU	INST	N	09-96	23MOV-14	N	Y	NV	*	1.60-21 REV H
						23MOV-15	N	Y	NV	*	1.60-21 REV H
						23MOV-16	N	Y	NV	*	1.60-21 REV H
						23MOV-17	N	Y	NV	*	1.60-21 REV H

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... for equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
						23MOV-19	N	Y	NV	*	1.60-21 REV H
						23MOV-20	N	Y	NV	*	1.60-21 REV H
						23MOV-21	N	Y	NV	*	1.60-21 REV H
						23MOV-24	N	Y	NV	*	1.60-21 REV H
02-74-1ADSB01*			RLY	N		02SOV-71A2	N	Y	CA	*	ESK-11AAM REV 2
02-74-1ADSB02*			RLY	N		02SOV-71B2	N	Y	CA	*	ESK-11AAM REV 2
02-74-1ADSB03*			RLY	N		02SOV-71C2	N	Y	CA	*	ESK-11AAM REV 2
02-74-1ADSB04*			RLY	N		02SOV-71D2	N	Y	CA	*	ESK-11AAM REV 2
02-74-1ADSB05*			RLY	N		02SOV-71E2	N	Y	CA	*	ESK-11AAM REV 2
02-74-1ADSB06*			RLY	N		02SOV-71F2	N	Y	CA	*	ESK-11AAM REV 2
02-74-1ADSB07*			RLY	N		02SOV-71G2	N	Y	CA	*	ESK-11AAM REV 2
02-74-1ADSB08*			RLY	N		02SOV-71H2	N	Y	CA	*	ESK-11AAM REV 2
02-74-1ADSB09*			RLY	N		02SOV-71J2	N	Y	CA	*	ESK-11AAM REV 2
02-74-1ADSB10*			RLY	N		02SOV-71K2	N	Y	CA	*	ESK-11AAM REV 2
02-74-1ADSB11*			RLY	N		02SOV-71L2	N	Y	CA	*	ESK-11AAM REV 2
02E-K10C*			RLY	N		02SOV-71K1	N	Y	CA	*	ESK-11AAC REV 7, 1.83-39 REV E
02E-K11A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-45	02SOV-71A1	N	Y	CA	*	1.83-38 REV G, 1.83-37 REV M, 1.83-39 REV E
02E-K11B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-45	02SOV-71B1	N	Y	CA	*	1.83-38 REV G, 1.83-37 REV M, 1.83-39 REV E

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer Part\model Number	Relay. type	Low. ruggedness. relay	Rack/Panel:	Component. For equipment	Essential.	Satisfactory	Reason. code	Outlier	Reference drwg(s)
02E-K11C	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-45	02SOV-71C1	N	Y	CA	*	1.83-38 REV G
02E-K11C*			RLY	N		02SOV-71L1	N	Y	CA	*	ESK-11AAL REV 6, 1.83-39 REV E
02E-K11D	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-45	02SOV-71D1	N	Y	CA	*	1.83-38 REV G
02E-K11E	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-45	02SOV-71E1	N	Y	CA	*	1.83-38 REV G
02E-K11F	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-45	02SOV-71F1	N	Y	CA	*	ESK-11AAB REV 5, 1.83-38 REV G
02E-K11G	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-45	02SOV-71G1	N	Y	CA	*	1.83-38 REV G
02E-K11H	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-45	02SOV-71H1	N	Y	CA	*	1.83-38 REV G
02E-K11J	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-45	02SOV-71J1	N	Y	CA	*	ESK-11AAD REV 5, 1.83-37 REV M
02E-K11K	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-45	02SOV-71K1	N	Y	CA	*	ESK-11AAC REV 7, 1.83-39 REV E
02E-K11L	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-45	02SOV-71L1	N	Y	CA	*	ESK-11AAL REV 6, 1.83-39 REV E
02E-K12A	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-45	02SOV-71A1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71B1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71C1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71D1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71E1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71G1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71H1	Y	Y	GERS	N	1.83-38 REV G
02E-K12B	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-45	02SOV-71A1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71B1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71C1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71D1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71E1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71G1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71H1	Y	Y	GERS	N	1.83-38 REV G

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
02E-K14A	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-45	02SOV-71A1	Y	Y	GERS	N	1.83-38 REV G
02E-K14B	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-45	02SOV-71B1	Y	Y	GERS	N	1.83-38 REV G
02E-K14C	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-45	02SOV-71C1	Y	Y	GERS	N	1.83-38 REV G
02E-K14D	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-45	02SOV-71D1	Y	Y	GERS	N	1.83-38 REV G
02E-K14E	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-45	02SOV-71E1	Y	Y	GERS	N	1.83-38 REV G
02E-K14F	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-45	02SOV-71F1	N	Y	CA	*	ESK-11AAB REV 5, 1.83-38 REV G
02E-K14G	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-45	02SOV-71G1	Y	Y	GERS	N	1.83-38 REV G
02E-K14H	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-45	02SOV-71H1	Y	Y	GERS	N	1.83-38 REV G
02E-K14J	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-45	02SOV-71J1	N	Y	CA	*	ESK-11AAD REV 5, 1.83-37 REV M
02E-K14K	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-45	02SOV-71K1	N	Y	CA	*	ESK-11AAC REV 7, 1.83-39 REV E
02E-K14L	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-45	02SOV-71L1	N	Y	CA	*	1.83-39 REV E
02E-K15A	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-45	02SOV-71A1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71B1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71C1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71D1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71E1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71G1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71H1	Y	Y	GERS	N	1.83-38 REV G
02E-K15B	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-45	02SOV-71A1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71B1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71C1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71D1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71E1	Y	Y	GERS	N	1.83-38 REV G

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer. Part\model. Number.	Relay. type..	Low. ruggedness. relay.	Rack/Panel:	Component. For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
						02SOV-71G1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71H1	Y	Y	GERS	N	1.83-38 REV G
02E-K16	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-33	02SOV-71A1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71B1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71C1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71D1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71E1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71G1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71H1	Y	Y	GERS	N	1.83-38 REV G
02E-K17	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-33	02SOV-71A1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71B1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71C1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71D1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71E1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71G1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71H1	Y	Y	GERS	N	1.83-38 REV G
02E-K18	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-33	02SOV-71A1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71B1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71C1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71D1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71E1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71G1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71H1	Y	Y	GERS	N	1.83-38 REV G
02E-K19A	GENERAL ELECTRIC	12HMA124A2	RLY	N	09-45	02SOV-71A1	N	Y	NA	*	1.83-38 REV G
						02SOV-71B1	N	Y	NA	*	1.83-38 REV G
						02SOV-71C1	N	Y	NA	*	1.83-38 REV G
						02SOV-71D1	Y	*	CR	Y	1.83-38 REV G
						02SOV-71E1	N	Y	NA	*	1.83-38 REV G
						02SOV-71G1	N	Y	NA	*	1.83-38 REV G
						02SOV-71H1	N	Y	NA	*	1.83-38 REV G
02E-K19B	GENERAL ELECTRIC	12HMA124A2	RLY	N	09-45	02SOV-71A1	N	Y	NA	*	1.83-38 REV G
						02SOV-71B1	N	Y	NA	*	1.83-38 REV G
						02SOV-71C1	N	Y	NA	*	1.83-38 REV G
						02SOV-71D1	Y	*	CR	Y	1.83-38 REV G
						02SOV-71E1	N	Y	NA	*	1.83-38 REV G
						02SOV-71G1	N	Y	NA	*	1.83-38 REV G
						02SOV-71H1	N	Y	NA	*	1.83-38 REV G

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
02E-K1C*			RLY	N		02SOV-71A1	N	Y	CA	*	1.83-38 REV G, 1.83-37 REV M, 1.83-39 REV E
02E-K20A	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-45	02SOV-71A1	N	Y	NA	*	1.83-38 REV G
						02SOV-71B1	N	Y	NA	*	1.83-38 REV G
						02SOV-71C1	N	Y	NA	*	1.83-38 REV G
						02SOV-71D1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71E1	N	Y	NA	*	1.83-38 REV G
						02SOV-71G1	N	Y	NA	*	1.83-38 REV G
						02SOV-71H1	N	Y	NA	*	1.83-38 REV G
02E-K20B	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-45	02SOV-71A1	N	Y	NA	*	1.83-38 REV G
						02SOV-71B1	N	Y	NA	*	1.83-38 REV G
						02SOV-71C1	N	Y	NA	*	1.83-38 REV G
						02SOV-71D1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71E1	N	Y	NA	*	1.83-38 REV G
						02SOV-71G1	N	Y	NA	*	1.83-38 REV G
						02SOV-71H1	N	Y	NA	*	1.83-38 REV G
02E-K2C*			RLY	N		02SOV-71B1	N	Y	CA	*	1.83-38 REV G, 1.83-37 REV M, 1.83-39 REV E
02E-K3A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-45	02SOV-71A1	N	Y	CA	*	1.83-38 REV G
						02SOV-71B1	N	Y	CA	*	1.83-38 REV G
						02SOV-71C1	N	Y	CA	*	1.83-38 REV G
						02SOV-71D1	N	Y	CA	*	1.83-38 REV G
						02SOV-71E1	N	Y	CA	*	1.83-38 REV G
						02SOV-71G1	N	Y	CA	*	1.83-38 REV G
						02SOV-71H1	N	Y	CA	*	1.83-38 REV G
02E-K3B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-45	02SOV-71A1	N	Y	CA	*	1.83-38 REV G
						02SOV-71B1	N	Y	CA	*	1.83-38 REV G
						02SOV-71C1	N	Y	CA	*	1.83-38 REV G
						02SOV-71D1	N	Y	CA	*	1.83-38 REV G
						02SOV-71E1	N	Y	CA	*	1.83-38 REV G
						02SOV-71G1	N	Y	CA	*	1.83-38 REV G
						02SOV-71H1	N	Y	CA	*	1.83-38 REV G
02E-K3C*			RLY	N		02SOV-71C1	N	Y	CA	*	1.83-38 REV G
02E-K4A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-45	02SOV-71A1	N	Y	CA	*	1.83-38 REV G

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
						02SOV-71B1	N	Y	CA	*	1.83-38 REV G
						02SOV-71C1	N	Y	CA	*	1.83-38 REV G
						02SOV-71D1	N	Y	CA	*	1.83-38 REV G
						02SOV-71E1	N	Y	CA	*	1.83-38 REV G
						02SOV-71G1	N	Y	CA	*	1.83-38 REV G
						02SOV-71H1	N	Y	CA	*	1.83-38 REV G
02E-K4B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-45	02SOV-71A1	N	Y	CA	*	1.83-38 REV G
						02SOV-71B1	N	Y	CA	*	1.83-38 REV G
						02SOV-71C1	N	Y	CA	*	1.83-38 REV G
						02SOV-71D1	N	Y	CA	*	1.83-38 REV G
						02SOV-71E1	N	Y	CA	*	1.83-38 REV G
						02SOV-71G1	N	Y	CA	*	1.83-38 REV G
						02SOV-71H1	N	Y	CA	*	1.83-38 REV G
02E-K4C*			RLY	N		02SOV-71D1	N	Y	CA	*	1.83-38 REV G
02E-K5A	AMERACE CORP (AGASTAT)	ETR14D3EC2004-0 02	RLY	N	09-45	02SOV-71A1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71B1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71C1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71D1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71E1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71G1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71H1	Y	Y	GERS	N	1.83-38 REV G
02E-K5B	AMERACE CORP (AGASTAT)	ETR14D3EC2004-0 02	RLY	N	09-45	02SOV-71A1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71B1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71C1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71D1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71E1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71G1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71H1	Y	Y	GERS	N	1.83-38 REV G
02E-K5C*			RLY	N		02SOV-71E1	N	Y	CA	*	1.83-38 REV G
02E-K6A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-45	02SOV-71A1	Y	Y	GERS	N	1.83-38 REV G, 1.83-37 REV M
						02SOV-71B1	Y	Y	GERS	N	1.83-38 REV G, 1.83-37 REV M
						02SOV-71C1	Y	Y	GERS	N	1.83-38 REV G, 1.83-37 REV M
						02SOV-71E1	Y	Y	GERS	N	1.83-38 REV G, 1.83-37 REV M
						02SOV-71G1	Y	Y	GERS	N	1.83-38 REV G, 1.83-37 REV M

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
						02SOV-71H1	Y	Y	GERS	N	1.83-38 REV G, 1.83-37 REV M
02E-K6B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-45	02SOV-71A1	Y	Y	GERS	N	1.83-38 REV G, 1.83-37 REV M, 1.83-39 REV E
						02SOV-71B1	Y	Y	GERS	N	1.83-38 REV G, 1.83-37 REV M, 1.83-39 REV E
						02SOV-71C1	Y	Y	GERS	N	1.83-38 REV G, 1.83-37 REV M, 1.83-39 REV E
						02SOV-71E1	Y	Y	GERS	N	1.83-38 REV G, 1.83-37 REV M, 1.83-39 REV E
						02SOV-71G1	Y	Y	GERS	N	1.83-38 REV G, 1.83-37 REV M, 1.83-39 REV E
						02SOV-71H1	Y	Y	GERS	N	1.83-38 REV G, 1.83-37 REV M, 1.83-39 REV E
02E-K6C*			RLY	N		02SOV-71F1	N	Y	CA	*	ESK-11AAB REV 5, 1.83-38 REV G
02E-K7A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-45	02SOV-71A1	Y	Y	GERS	N	1.83-38 REV G, 1.83-37 REV M, 1.83-39 REV E
						02SOV-71B1	Y	Y	GERS	N	1.83-38 REV G, 1.83-37 REV M, 1.83-39 REV E
						02SOV-71C1	Y	Y	GERS	N	1.83-38 REV G, 1.83-37 REV M, 1.83-39 REV E
						02SOV-71E1	Y	Y	GERS	N	1.83-38 REV G, 1.83-37 REV M, 1.83-39 REV E
						02SOV-71G1	Y	Y	GERS	N	1.83-38 REV G, 1.83-37 REV M, 1.83-39 REV E
						02SOV-71H1	Y	Y	GERS	N	1.83-38 REV G, 1.83-37 REV M, 1.83-39 REV E
02E-K7B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-45	02SOV-71A1	Y	Y	GERS	N	1.83-38 REV G, 1.83-37 REV M, 1.83-39 REV E
						02SOV-71B1	Y	Y	GERS	N	1.83-38 REV G,

Main Equipment Designation	Manufacturer Designation	Manufacturer Part\model Number	Relay type	Low ruggedness relay	Rack/Panel	Component for equipment	Essential	Satisfactory	Reason code	Outlier	Reference drwg(s)
											1.83-37 REV M, 1.83-39 REV E
						02SOV-71C1	Y	Y	GERS	N	1.83-38 REV G, 1.83-37 REV M, 1.83-39 REV E
						02SOV-71E1	Y	Y	GERS	N	1.83-38 REV G, 1.83-37 REV M, 1.83-39 REV E
						02SOV-71G1	Y	Y	GERS	N	1.83-38 REV G, 1.83-37 REV M, 1.83-39 REV E
						02SOV-71H1	Y	Y	GERS	N	1.83-38 REV G, 1.83-37 REV M, 1.83-39 REV E
02E-K7C*			RLY	N		02SOV-71G1	N	Y	CA	*	1.83-38 REV G
02E-K8A	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-45	02SOV-71A1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71B1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71C1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71D1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71E1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71G1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71H1	Y	Y	GERS	N	1.83-38 REV G
02E-K8B	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-45	02SOV-71A1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71B1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71C1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71D1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71E1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71G1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71H1	Y	Y	GERS	N	1.83-38 REV G
02E-K8C*			RLY	N		02SOV-71H1	N	Y	CA	*	1.83-38 REV G
02E-K9C*			RLY	N		02SOV-71J1	N	Y	CA	*	ESK-11AAD REV 5, 1.83-37 REV M
02E-S1A	GENERAL ELECTRIC	CR2940	CS	N	09-4	02SOV-71A1	N	Y	NV	*	1.83-38 REV G, 1.83-37 REV M, 1.83-39 REV E
02E-S1B	GENERAL ELECTRIC	CR2940	CS	N	09-4	02SOV-71B1	N	Y	NV	*	1.83-38 REV G, 1.83-37 REV M, 1.83-39 REV E

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
02E-S1C	GENERAL ELECTRIC	CR2940	CS	N	09-4	02SOV-71C1	N	Y	NV	*	1.83-38 REV G
02E-S1D	GENERAL ELECTRIC	CR2940	CS	N	09-4	02SOV-71E1	N	Y	NV	*	1.83-38 REV G
02E-S1E	GENERAL ELECTRIC	CR2940	CS	N	09-4	02SOV-71G1	N	Y	NV	*	1.83-38 REV G
02E-S1F	GENERAL ELECTRIC	CR2940	CS	N	09-4	02SOV-71H1	N	Y	NV	*	1.83-38 REV G
02E-S2A	GENERAL ELECTRIC	CR2940	CS	N	09-4	02SOV-71A1	N	Y	NV	*	1.83-38 REV G
						02SOV-71B1	N	Y	NV	*	1.83-38 REV G
						02SOV-71C1	N	Y	NV	*	1.83-38 REV G
						02SOV-71D1	N	Y	NV	*	1.83-38 REV G
						02SOV-71E1	N	Y	NV	*	1.83-38 REV G
						02SOV-71G1	N	Y	NV	*	1.83-38 REV G
						02SOV-71H1	N	Y	NV	*	1.83-38 REV G
02E-S2B	GENERAL ELECTRIC	CR2940	CS	N	09-4	02SOV-71A1	N	Y	NV	*	1.83-38 REV G
						02SOV-71B1	N	Y	NV	*	1.83-38 REV G
						02SOV-71C1	N	Y	NV	*	1.83-38 REV G
						02SOV-71D1	N	Y	NV	*	1.83-38 REV G
						02SOV-71E1	N	Y	NV	*	1.83-38 REV G
						02SOV-71G1	N	Y	NV	*	1.83-38 REV G
						02SOV-71H1	N	Y	NV	*	1.83-38 REV G
02E-S4A	GENERAL ELECTRIC	CR2940	CS	N	09-4	02SOV-71D1	N	Y	NV	*	1.83-38 REV G
02E-S4B	GENERAL ELECTRIC	CR2940	CS	N	09-4	02SOV-71F1	N	Y	NV	*	ESK-11AAB REV 5, 1.83-38 REV G
02E-S4C	GENERAL ELECTRIC	CR2940	CS	N	09-4	02SOV-71J1	N	Y	NV	*	ESK-11AAD REV 5, 1.83-37 REV M
02E-S4K	GENERAL ELECTRIC	CR2940	CS	N	09-4	02SOV-71K1	N	Y	NV	*	ESK-11AAC REV 7, 1.83-39 REV E
02E-S4L	GENERAL ELECTRIC	CR2940	CS	N	09-4	02SOV-71L1	N	Y	NV	*	ESK-11AAL REV 6, 1.83-39 REV E
02F-K4A	GENERAL ELECTRIC	12HGA11J70	RLY	N	09-2	23MOV-15	N	Y	CA	*	1.61-143 REV H, 1.85-14 REV F
						23MOV-58	N	Y	CA	*	1.61-143 REV H,

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
											1.85-14 REV F
02F-K4B	GENERAL ELECTRIC	12HGA11J70	RLY	N	09-21	23HOV-1	N	Y	CA	*	1.85-14 REV F, 1.61-142 REV G, 1.61-143 REV H
						23MOV-16	N	Y	CA	*	1.85-14 REV F, 1.61-142 REV G, 1.61-143 REV H
						23MOV-57	N	Y	CA	*	1.61-143 REV H, 1.85-14 REV F
						23MOV-60	N	Y	CA	*	1.61-143 REV H, 1.85-14 REV F
02F-S6A	GENERAL ELECTRIC	CR2940	CS	N	09-21	23MOV-15	N	Y	NV	*	1.61-143 REV H
						23MOV-58	N	Y	NV	*	1.61-142 REV G, 1.61-143 REV H
02F-S6B	GENERAL ELECTRIC	CR2940	CS	N	09-21	23HOV-1	N	Y	NV	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-16	N	Y	NV	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-57	N	Y	NV	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-60	N	Y	NV	*	1.85-12 REV E, 1.61-140 REV L, 1.60-143 REV H
02IS-1ADSA01	ELECTRO SWITCH CORP	20K	CS	N	25ASP-5	02SOV-71A1	N	Y	NV	*	1.83-38 REV G, ESK-11AZ REV 5
02IS-1ADSA02	ELECTRO SWITCH CORP	20K	CS	N	25ASP-5	02SOV-71B1	N	Y	NV	*	ESK-11AZ REV 5
02IS-1ADSA03	ELECTRO SWITCH CORP	20K	CS	N	25ASP-5	02SOV-71C1	N	Y	NV	*	ESK-11AAA REV 7
02IS-1ADSA04	ELECTRO SWITCH CORP	20K	CS	N	25ASP-5	02SOV-71D1	N	Y	NV	*	ESK-11AAA REV 7
02IS-1ADSA05	ELECTRO SWITCH CORP	20K	CS	N	25ASP-5	02SOV-71E1	N	Y	NV	*	ESK-11AAA REV 7
02IS-1ADSA06	ELECTRO SWITCH CORP	20K	CS	N	25ASP-5	02SOV-71F1	N	Y	NV	*	ESK-11AAB REV 5, 1.83-38 REV G
02IS-1ADSA07	ELECTRO SWITCH CORP	20K	CS	N	25ASP-5	02SOV-71G1	N	Y	NV	*	ESK-11AAC REV 7

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
02IS-1ADSA08	ELECTRO SWITCH CORP	20K	CS	N	25ASP-5	02SOV-71H1	N	Y	NV	*	ESK-11AAD REV 5
02IS-1ADSA09	ELECTRO SWITCH CORP	20K	CS	N	25ASP-5	02SOV-71J1	N	Y	NV	*	ESK-11AAD REV 5, 1.83-37 REV M
02IS-1ADSA11	ELECTRO SWITCH CORP	20K	CS	N	25ASP-5	02SOV-71K1	N	Y	NV	*	ESK-11AAC REV 7, 1.83-39 REV E
02IS-1ADSA12	ELECTRO SWITCH CORP	20K	CS	N	25ASP-5	02SOV-71L1	N	Y	NV	*	ESK-11AAL REV 6, 1.83-39 REV E
02IS-1PCIN04*	ELECTRO SWITCH CORP	20K	CS	N		02SOV-17	N	Y	NV	*	ESK-7F REV 5
10-27-1RHRA01*			RLY	N		10P-3A	N	Y	CA	*	ESK-5BU REV 21
10-27-1RHRA02*			RLY	N		10P-1A	N	Y	CA	*	ESK-5BG REV 12
10-27-1RHRB01*			RLY	N		10P-3B	N	Y	CA	*	ESK-5BV REV 19
10-27-1RHRB02*			RLY	N		10P-1B	N	Y	CA	*	ESK-5BH REV 16
10-27-1RHRC01*			RLY	N		10P-3C	N	Y	CA	*	ESK-5BW REV 18
10-27-1RHRC02*			RLY	N		10P-1C	N	Y	CA	*	ESK-5BQ REV 11
10-27-1RHRD01*			RLY	N		10P-3D	N	Y	CA	*	ESK-5BX REV 21
10-27-1RHRD02*			RLY	N		10P-1D	N	Y	CA	*	ESK-5BR REV 12
10-42X-1PCIB08*			RLY	N		10MOV-17	N	Y	CA	*	ESK-11AE REV. 10
10-50GS-1RHRA01	GENERAL ELECTRIC	[illegible]A	RLY	N	71H05	10P-3A	Y	Y	GERS	N	ESK-5BU REV 21
10-50GS-1RHRC01	GENERAL ELECTRIC	PJC11A	RLY	N	71H06	10P-3C	Y	Y	GERS	N	ESK-5BW REV 18

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
10-51X-1RHRA 01*			RLY	N		10P-3A	N	Y	CA	*	ESK-5BU REV 21
10-51X-1RHRA 02*			RLY	N		10P-1A	N	Y	CA	*	ESK-5BG REV 12
10-51X-1RHRB 01*			RLY	N		10P-3B	N	Y	CA	*	ESK-B5V REV 19
10-51X-1RHRB 02*			RLY	N		10P-1B	N	Y	CA	*	ESK-5BH REV 16
10-51X-1RHRC 01*			RLY	N		10P-3C	N	Y	CA	*	ESK-5BW REV 18
10-51X-1RHRC 02*			RLY	N		10P-1C	N	Y	CA	*	ESK-5BQ REV 11
10-51X-1RHRD 01*			RLY	N		10P-3D	N	Y	CA	*	ESK-5BX REV 21
10-51X-1RHRD 02*			RLY	N		10P-1D	N	Y	CA	*	ESK-5BR REV 12
10-52A-1RHRA 01	AMERACE CORP (AGASTAT)	E7012PBL	RLY	N	71-10550	10P-3A	N	Y	CA	*	ESK-5BU REV 21
10-52A-1RHRB 01	AMERACE CORP (AGASTAT)	E7012PBL	RLY	N	71-10540	10P-3B	N	Y	CA	*	ESK-5BV REV 19
10-52A-1RHRC 01	AMERACE CORP (AGASTAT)	E7012PBL	RLY	N	71-10560	10P-3C	N	Y	CA	*	ESK-5BW REV 18
10-52A-1RHRD 01	AMERACE CORP (AGASTAT)	E7012PBL	RLY	N	71-10640	10P-3D	N	Y	CA	*	ESK-5BX REV 21
10-52B-1RHRA 01*			RLY	N		10P-3A	N	Y	CA	*	ESK-5BU REV 21
10-52B-1RHRB 01*			RLY	N		10P-3B	N	Y	CA	*	ESK-5BV REV 19
10-52B-1RHRC 01*			RLY	N		10P-3C	N	Y	CA	*	ESK-5BW REV 18
10-52B-1RHRD 01*			RLY	N		10P-3D	N	Y	CA	*	ESK-5BX REV 21

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
10-74-1PCIA07	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5A	10MOV-18	N	Y	CA	*	ESK-6MAF REV 13
10-74-1PCIB08*			RLY	N		10MOV-17	N	Y	CA	*	ESK 11AE REV 10
10-74-1RHRA03	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5A	10MOV-12A	N	Y	CA	*	ESK-6MF REV 12, 1.65-82 REV E
10-74-1RHRA04	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5A	10MOV-13A	N	Y	CA	*	ESK-6MG REV 9, 1.65-82 REV E
10-74-1RHRA05	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5A	10MOV-15A	N	Y	CA	*	ESK-6MJ REV 8, 1.65-82 REV E
10-74-1RHRA06	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5A	10MOV-16A	N	Y	CA	*	ESK-6ML REV 12, 1.65-82 REV E
10-74-1RHRA07	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5A	10MOV-21A	N	Y	CA	*	ESK-6MN REV 11, 1.65-82 REV E
10-74-1RHRA08	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5A	10MOV-25A	N	Y	CA	*	ESK-6MP REV 19, 1.65-82 REV E
10-74-1RHRA09	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5A	10MOV-26A	N	Y	CA	*	ESK-6MQ REV 11, 1.65-82 REV E
10-74-1RHRA10	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5A	10MOV-27A	N	Y	CA	*	ESK-6MR REV 14
10-74-1RHRA12	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5A	10MOV-34A	N	Y	CA	*	ESK-6MT REV 10, 1.65-82 REV E
10-74-1RHRA14	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5A	10MOV-166A	N	Y	CA	*	ESK-6MD REV 11, 1.65-82 REV E
10-74-1RHRA15	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5A	10MOV-65A	N	Y	CA	*	ESK-6MX REV 10, 1.65-82 REV E
10-74-1RHRA17	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5A	10MOV-38A	N	Y	CA	*	ESK-6MV REV 9
10-74-1RHRA18	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5A	10MOV-39A	N	Y	CA	*	ESK-6MW REV 17, 1.65-82 REV E
10-74-1RHRA19	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5A	10MOV-89A	N	Y	CA	*	ESK-6MZ REV 13, 1.65-82 REV E

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
10-74-1RHRA24	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5A	10MOV-66A	N	Y	CA	*	ESK-6MY REV 15, 1.65-82 REV E
10-74-1RHRA25	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5A	10MOV-148A	N	Y	CA	*	ESK-6MM REV 9, 1.65-82 REV E
10-74-1RHRA3d	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5A	10MOV-70A	N	Y	CA	*	ESK-6MAE REV 10, 1.65-82 REV E
10-74-1RHRB03	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5B	10MOV-12B	N	Y	CA	*	ESK-6MF REV 12, 1.65-82 REV E
10-74-1RHRB04	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5B	10MOV-13B	N	Y	CA	*	ESK-6MH REV 12, 1.65-82 REV E
10-74-1RHRB05	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5B	10MOV-15B	N	Y	CA	*	ESK-6MK REV 11, 1.65-82 REV E
10-74-1RHRB06	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5B	10MOV-16B	N	Y	CA	*	ESK-6ML REV 12, 1.65-82 REV E
10-74-1RHRB07	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5B	10MOV-21B	N	Y	CA	*	ESK-6MN REV 11, 1.65-82 REV E
10-74-1RHRB08	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5B	10MOV-25B	N	Y	CA	*	ESK-6MP REV 19, 1.65-82 REV E
10-74-1RHRB09	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5B	10MOV-26B	N	Y	CA	*	ESK-6MQ REV 11, 1.65-82 REV E
10-74-1RHRB10	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5B	10MOV-27B	N	Y	CA	*	ESK-6MR REV 14
10-74-1RHRB12	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5B	10MOV-34B	N	Y	CA	*	ESK-6MT REV 10, 1.65-82 REV E, 1.65-89 REV Q
10-74-1RHRB14	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5B	10MOV-166B	N	Y	CA	*	ESK-6MD REV 11, 1.65-82 REV E
10-74-1RHRB15	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5B	10MOV-65B	N	Y	CA	*	ESK-6MX REV 10, 1.65-82 REV E
10-74-1RHRB17	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5B	10MOV-38B	N	Y	CA	*	ESK-6MV REV 9
10-74-1RHRB18	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5B	10MOV-39B	N	Y	CA	*	ESK-6MW REV 17, 1.65-89 REV Q

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
10-74-1RHRB19	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5B	10MOV-89B	N	Y	CA	*	ESK-6MZ REV 13, 1.65-88 REV J
10-74-1RHRB24	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5B	10MOV-66B	N	Y	CA	*	ESK-6MY REV 15, 1.65-82 REV E
10-74-1RHRB25	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5B	10MOV-148B	N	Y	CA	*	ESK-6MM REV 9, 1.65-82 REV E
10-74-1RHRB30	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5B	10MOV-70B	N	Y	CA	*	ESK-6MAE REV 10
10-74-1RHRC04	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5A	10MOV-13C	N	Y	CA	*	ESK-6MG REV 9, 1.65-82 REV E
10-74-1RHRC05	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5A	10MOV-15C	N	Y	CA	*	ESK-6MJ REV 8, 1.65-82 REV E
10-74-1RHRD04	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5B	10MOV-13D	N	Y	CA	*	ESK-6MH REV 12, 1.65-82 REV E
10-74-1RHRD05	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5B	10MOV-15D	N	Y	CA	*	ESK-6MK REV 11, 1.65-82 REV E
10-86-1RHRA01	GENERAL ELECTRIC	HEA61C	RLY	N	71H05	10P-3A	Y	Y	GERS	N	ESK-5BU REV 21
10-86-1RHRA02	GENERAL ELECTRIC	HEA61C	RLY	N	71H05	10P-1A	Y	Y	GERS	N	ESK-5BG REV 12
10-86-1RHRB01	GENERAL ELECTRIC	HEA61C	RLY	N	71H05	10P-3B	Y	Y	GERS	N	ESK-85V REV 19
10-86-1RHRB02	GENERAL ELECTRIC	HEA61C	RLY	N	71H06	10P-1B	Y	Y	GERS	N	ESK-5BH REV 16
10-86-1RHRC01	GENERAL ELECTRIC	HEA61C	RLY	N	71H06	10P-3C	Y	Y	GERS	N	ESK-5BW REV 18
10-86-1RHRC02	GENERAL ELECTRIC	HEA61C	RLY	N	71H05	10P-1C	Y	Y	GERS	N	ESK-5BQ REV 11
10-86-1RHRD01	GENERAL ELECTRIC	HEA61C	RLY	N	71H06	10P-3D	Y	Y	GERS	N	ESK-5BX REV 21
10-86-1RHRD02	GENERAL ELECTRIC	HEA61C	RLY	N	71H06	10P-1D	Y	Y	GERS	N	ESK-5BR REV 12

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
10-ISX-1RHRD 01*			RLY	N		10P-3D	N	Y	CA	*	ESK-5BX REV 21
10A-K101A	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-32	02SOV-71A1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71B1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71C1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71D1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71E1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71G1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71H1	Y	Y	GERS	N	1.83-38 REV G
10A-K101B	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-33	02SOV-71A1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71B1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71C1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71D1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71E1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71G1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71H1	Y	Y	GERS	N	1.83-38 REV G
10A-K102A	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-32	02SOV-71A1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71B1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71C1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71D1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71E1	Y	Y	GERS	N	1 83-38 REV G
						02SOV-71G1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71H1	Y	Y	GERS	N	1.83-38 REV G
10A-K102B	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-33	02SOV-71A1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71B1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71C1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71D1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71E1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71G1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71H1	Y	Y	GERS	N	1.83-38 REV G
10A-K108A	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-32	93EDG-A	Y	Y	GERS	N	1.65-129 REV J, ESK-5BY REV 5
						93EDG-C	Y	Y	GERS	N	1.65-129 REV J, ESK-5BY REV 5
10A-K108B	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-33	93EDG-B	Y	Y	GERS	N	1.65-130 REV J, ESK-5BZ REV 5
						93EDG-D	Y	Y	GERS	N	1.65-130 REV J, ESK-5BZ REV 5

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
10A-K109A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-32	10MOV-16A	Y	Y	GERS	N	ESK-6ML REV 12, 1.65-124 REV N, 1.65-129 REV J
						10MOV-16B	Y	Y	GERS	N	ESK-6ML REV 12, 1.65-124 REV N, 1.65-129 REV J
10A-K109B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-33	10MOV-16A	Y	Y	GERS	N	ESK-6ML REV 12, 1.65-124 REV N, 1.65-130 REV J
						10MOV-16B	Y	Y	GERS	N	ESK-6ML REV 12, 1.65-124 REV N, 1.65-130 REV J
10A-K10A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-32	93EDG-A	Y	Y	GERS	N	1.65-129 REV J, ESK-11BA REV 18, ESK-11BF REV 17, ESK-11BH REV 16, ESK-11BC REV 16, ESK-5BS REV 18
						93EDG-C	Y	Y	GERS	N	1.65-129 REV J, ESK-11BA REV 18, ESK-11BF REV 17, ESK-11BH REV 16, ESK-11BC REV 16, ESK-5BS REV 18
10A-K10B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-33	93EDG-B	Y	Y	GERS	N	1.65-130 REV J, ESK-11BK REV 20, ESK-11BQ REV 21, ESK-11BS REV 19, ESK-11BM REV 18, ESK-5BT REV 19
						93EDG-D	Y	Y	GERS	N	1.65-130 REV J, ESK-11BK REV 20, ESK-11BQ REV 21, ESK-11BS REV 19, ESK-11BM REV 18, ESK-5BT REV 19
10A-K110	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-32	10MOV-16A	Y	Y	GERS	N	ESK-6ML REV 12, 1.65-124 REV N, 1.65-129 REV J, 1.65-130 REV J
						10MOV-16B	Y	Y	GERS	N	ESK-6ML REV 12, 1.65-124 REV N, 1.65-129 REV J, 1.65-130 REV J

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
10A-K111A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-32	10P-3A	N	Y	CA	*	ESK-5BU REV 21, 1.65-129 REV J, 1.65-124 REV N, 1.65-126 REV E
10A-K111B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-33	10P-3C	N	Y	CA	*	1.65-124 REV N, 1.65-130 REV J, 1.65-126 REV E, ESK-5BW REV 18
10A-K112A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-32	10P-3B	N	Y	CA	*	ESK-5BV REV 19, 1.65-129 REV J, 1.65-124 REV N, 1.65-126 REV E
10A-K112B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-33	10P-3D	N	Y	CA	*	1.65-130 REV J, 1.65-124 REV N, 1.65-126 REV E, ESK-5BX REV 21
10A-K113A	GENERAL ELECTRIC	12HMA124A2	RLY	N	09-32	93EDG-A	N	Y	CA	*	1.65-129 REV J, ESK-11BA REV 18, ESK-11BF REV 17
						93EDG-C	N	Y	CA	*	1.65-129 REV J, ESK-11BA REV 18, ESK-11BF REV 17
10A-K113B	GENERAL ELECTRIC	12HMA124A2	RLY	N	09-33	93EDG-B	N	Y	CA	*	1.65-130 REV J, ESK-11BK REV 20, ESK-11BQ REV 21
						93EDG-D	N	Y	CA	*	1.65-130 REV J, ESK-11BK REV 20, ESK-11BQ REV 21
10A-K115A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-32	93EDG-A	Y	Y	GERS	N	1.65-129 REV J, ESK-5BY REV 5
						93EDG-C	Y	Y	GERS	N	1.65-129 REV J, ESK-5BY REV 5
10A-K115B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-33	93EDG-B	Y	Y	GERS	N	1.65-130 REV J, ESK-5BZ REV 5
						93EDG-D	Y	Y	GERS	N	1.65-130 REV J, ESK-5BZ REV 5
10A-K133A	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-95	23MOV-14	Y	Y	GERS	N	1.61-142 REV G, 1.60-21 REV H
						23MOV-15	N	Y	CA	*	1.61-142 REV G,

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
											1.60-21 REV H
						23MOV-16	Y	Y	GERS	N	1.61-142 REV G, 1.60-21 REV H, 1.64-30 REV P
						23MOV-17	N	Y	CA	*	1.61-142 REV G, 1.60-21 REV H
						23MOV-19	N	Y	CA	*	1.61-142 REV G, 1.60-21 REV H
						23MOV-20	N	Y	CA	*	1.61-142 REV G, 1.60-21 REV H
						23MOV-21	N	Y	CA	*	1.61-142 REV G, 1.60-21 REV H
						23MOV-24	N	Y	CA	*	1.61-142 REV G, 1.60-21 REV H
						93EDG-A	Y	Y	GERS	N	1.60-30 REV P, 1.60-21 REV H
						93EDG-B	Y	Y	GERS	N	1.60-30 REV P, 1.60-21 REV H
						93EDG-C	Y	Y	GERS	N	1.60-30 REV P, 1.60-21 REV H
						93EDG-D	Y	Y	GERS	N	1.60-30 REV P, 1.60-21 REV H
10A-K133B	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-96	23MOV-14	Y	Y	GERS	N	1.61-142 REV G, 1.60-21 REV H
						23MOV-15	N	Y	CA	*	1.61-142 REV G, 1.60-21 REV H
						23MOV-16	Y	Y	GERS	N	1.61-142 REV G, 1.60-21 REV H, 1.64-30 REV P
						23MOV-17	N	Y	CA	*	1.61-142 REV G, 1.60-21 REV H
						23MOV-19	N	Y	CA	*	1.61-142 REV G, 1.60-21 REV H
						23MOV-20	N	Y	CA	*	1.61-142 REV G, 1.60-21 REV H
						23MOV-21	N	Y	CA	*	1.61-142 REV G, 1.60-21 REV H
						23MOV-24	N	Y	CA	*	1.61-142 REV G, 1.60-21 REV H
						93EDG-A	Y	Y	GERS	N	1.60-30 REV P, 1.60-21 REV H
						93EDG-B	Y	Y	GERS	N	1.60-30 REV P, 1.60-21 REV H
						93EDG-C	Y	Y	GERS	N	1.60-30 REV P, 1.60-21 REV H
						93EDG-D	Y	Y	GERS	N	1.60-30 REV P,

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
											1.60-21 REV H
10A-K134A	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-95	23MOV-14	Y	Y	GERS	N	1.61-142 REV G, 1.60-21 REV H
						23MOV-15	N	Y	CA	*	1.61-142 REV G, 1.60-21 REV H
						23MOV-16	Y	Y	GERS	N	1.61-142 REV G, 1.60-21 REV H, 1.64-30 REV P
						23MOV-17	N	Y	CA	*	1.61-142 REV G, 1.60-21 REV H
						23MOV-19	N	Y	CA	*	1.61-142 REV G, 1.60-21 REV H
						23MOV-20	N	Y	CA	*	1.61-142 REV G, 1.60-21 REV H
						23MOV-21	N	Y	CA	*	1.61-142 REV G, 1.60-21 REV H
						23MOV-24	N	Y	CA	*	1.61-142 REV G, 1.60-21 REV H
						93EDG-A	Y	Y	GERS	N	1.60-30 REV P, 1.60-21 REV H
						93EDG-B	Y	Y	GERS	N	1.60-30 REV P, 1.60-21 REV H
						93EDG-C	Y	Y	GERS	N	1.60-30 REV P, 1.60-21 REV H
						93EDG-D	Y	Y	GERS	N	1.60-30 REV P, 1.60-21 REV H
10A-K134B	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-96	23MOV-14	Y	Y	GERS	N	1.61-142 REV G, 1.60-21 REV H
						23MOV-15	N	Y	CA	*	1.61-142 REV G, 1.60-21 REV H
						23MOV-16	Y	Y	GERS	N	1.61-142 REV G, 1.60-21 REV H, 1.64-30 REV P
						23MOV-17	N	Y	CA	*	1.61-142 REV G, 1.60-21 REV H
						23MOV-19	N	Y	CA	*	1.61-142 REV G, 1.60-21 REV H
						23MOV-20	N	Y	CA	*	1.61-142 REV G, 1.60-21 REV H
						23MOV-21	N	Y	CA	*	1.61-142 REV G, 1.60-21 REV H
						23MOV-24	N	Y	CA	*	1.61-142 REV G, 1.60-21 REV H
						93EDG-A	Y	Y	GERS	N	1.60-30 REV P,

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
											1.60-21 REV H
						93EDG-B	Y	Y	GERS	N	1.60-30 REV P, 1.60-21 REV H
						93EDG-C	Y	Y	GERS	N	1.60-30 REV P, 1.60-21 REV H
						93EDG-D	Y	Y	GERS	N	1.60-30 REV P, 1.60-21 REV H
10A-K19A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-32	10P-3A	N	Y	CA	*	ESK-5BU REV 21, 1.65-126 REV E, 1.65-74 REV L
10A-K19B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-33	10P-3C	N	Y	CA	*	1.65-124 REV N, ESK-5BW REV 18, 1.65-126 REV E
10A-K1A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-32	10MOV-25A	N	Y	CA	*	ESK-6MP REV 19, 1.65-131 REV J, 1.65-124 REV N
						10MOV-27A	N	Y	CA	*	ESK-6MR REV 14, 1.65-131 REV J, 1.65-124 REV N
10A-K1B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-33	10MOV-25B	N	Y	CA	*	ESK-6MP REV 19, 1.65-124 REV N, 1.65-132 REV L
						10MOV-27B	N	Y	CA	*	ESK-6MR REV 14, 1.65-132 REV L, 1.65-124 REV N
10A-K22A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-32	10P-3P	N	Y	CA	*	1.65-74 REV L, ESK-5BV REV 19, 1.65-124 REV N, 1.65-126 REV E
10A-K22B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-33	10P-3D	N	Y	CA	*	1.65-124 REV N, ESK-5BX REV 21, 1.65-77 REV J, 1.65-126 REV E
10A-K38A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-32	71INV-3A	N	Y	CA	*	ESK-6K REV 2
10A-K38B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-33	71INV-3A	N	Y	CA	*	ESK-6K REV 2
10A-K42A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-32	71INV-3B	N	Y	CA	*	ESK-6K REV 2

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer Part\model Number	Relay. type..	Low ruggedness. relay	Rack/Panel:	Component. For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
10A-K42B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-33	71INV-3B	N	Y	CA	*	ESK-6K REV 2
10A-K46A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-32	10MOV-27A	N	Y	CA	*	ESK-6MR REV 14, 1.65-131 REV J, 1.65-124 REV N
10A-K47B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-33	10MOV-27B	N	Y	CA	*	ESK-6MR REV 14, 1.65-132 REV L, 1.65-124 REV N
10A-K58A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-32	10MOV-34A	N	Y	CA	*	ESK-6MT REV 10, 1.65-112 REV J, 1.65-124 REV N, 1.65-74 REV L
						10MOV-39A	N	Y	CA	*	ESK-6MW REV 17, 1.65-124 REV N, 1.65-112 REV J
10A-K58B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-33	10MOV-34B	N	Y	CA	*	ESK-6MT REV 10, 1.65-89 REV Q, 1.65-124 REV N, 1.65-77 REV J
						10MOV-39B	N	Y	CA	*	ESK-6MW REV 17, 1.65-124 REV N, 1.65-89 REV Q
10A-K59A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-32	10MOV-26A	N	Y	CA	*	ESK-6MQ REV 11, 1.65-131 REV J, 1.65-74 REV L
						10MOV-38A	N	Y	CA	*	ESK-6MV REV 9, 1.65-124 REV N, 1.65-112 REV J
10A-K59B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-33	10MOV-26B	N	Y	CA	*	ESK-6MQ REV 11, 1.65-132 REV L, 1.65-77 REV J
						10MOV-38B	N	Y	CA	*	ESK-6MV REV 9, 1.65-124 REV N, 1.65-89 REV Q
10A-K5A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-32	93EDG-A	Y	Y	GERS	N	1.65-129 REV J
						93EDG-C	Y	Y	GERS	N	1.65-129 REV J
10A-K5B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-33	93EDG-B	Y	Y	GERS	N	1.65-130 REV J
						93EDG-D	Y	Y	GERS	N	1.65-130 REV J

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
10A-K61A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-32	10MOV-26A	N	Y	CA	*	ESK-6MQ REV 11, 1.65-131 REV J, 1.65-74 REV L
						10MOV-39A	N	Y	CA	*	ESK-6MW REV 17, 1.65-124 REV N, 1.65-112 REV J
10A-K61B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-33	10MOV-26B	N	Y	CA	*	ESK-6MQ REV 11, 1.65-132 REV L, 1.65-77 REV J
						10MOV-39B	N	Y	CA	*	ESK-6MW REV 17, 1.65-124 REV N, 1.65-89 REV Q
10A-K63A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-32	10MOV-25A	N	Y	CA	*	ESK-6MP REV 19, 1.65-131 REV J, 1.65-124 REV N
10A-K63B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-33	10MOV-25B	N	Y	CA	*	ESK-6MP REV 19, 1.65-124 REV N, 1.65-132 REV L
10A-K66A	GENERAL ELECTRIC	12HMA124A2	RLY	N	09-32	10MOV-25A	N	Y	CA	*	ESK-6MP REV 19, 1.65-131 REV J, 1.65-124 REV N
10A-K66B	GENERAL ELECTRIC	12HMA124A2	RLY	N	09-33	10MOV-25A	N	Y	CA	*	ESK-6MP REV 19, 1.65-131 REV J, 1.65-124 REV N
10A-K67A	GENERAL ELECTRIC	12HMA124A2	RLY	N	09-32	10MOV-25B	N	Y	CA	*	ESK-6MP REV 19, 1.65-124 REV N, 1.65-132 REV L
10A-K67B	GENERAL ELECTRIC	12HMA124A2	RLY	N	09-33	10MOV-25B	N	Y	CA	*	ESK-6MP REV 19, 1.65-124 REV N, 1.65-132 REV L
10A-K68A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-32	10MOV-34A	N	Y	CA	*	ESK-6MT REV 10, 1.65-112 REV J, 1.65-124 REV N, 1.65-74 REV L
						10MOV-38A	N	Y	CA	*	ESK-6MV REV 9, 1.65-112 REV J, 1.65-124 REV N
						10MOV-39A	N	Y	CA	*	ESK-6MW REV 17, 1.65-112 REV J, 1.65-124 REV N

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
10A-K68B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-33	10MOV-34B	N	Y	CA	*	ESK-6MT REV 10, 1.65-89 REV Q, 1.65-124 REV N, 1.65-77 REV J
						10MOV-38B	N	Y	CA	*	ESK-6MV REV 9, 1.65-89 REV Q, 1.65-124 REV N
						10MOV-39B	N	Y	CA	*	ESK-6MW REV 17, 1.65-89 REV Q, 1.65-124 REV N
10A-K6A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-32	93EDG-A	Y	Y	GERS	N	1.65-129 REV J
						93EDG-C	Y	Y	GERS	N	1.65-129 REV J
10A-K6B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-33	93EDG-B	Y	Y	GERS	N	1.65-130 REV J
						93EDG-D	Y	Y	GERS	N	1.65-130 REV J
10A-K73A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-32	10MOV-21A	N	Y	CA	*	ESK-6MN REV 11, 1.65-87 REV F
10A-K73B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-33	10MOV-21B	N	Y	CA	*	ESK-6MN REV 11, 1.65-87 REV F
10A-K84A	GENERAL ELECTRIC	CR2820B SERIES A	RLY	N	09-32	10MOV-16A	N	Y	CA	*	ESK-6ML REV 12, 1.65-124 REV N, 1.65-112 REV J, 1.65-129 REV J
10A-K84B	GENERAL ELECTRIC	CR2820B SERIES A	RLY	N	09-33	10MOV-16B	N	Y	CA	*	ESK-6ML REV 12, 1.65-124 REV N, 1.65-112 REV J, 1.65-130 REV J
10A-K94A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-32	10MOV-70A	N	Y	CA	*	ESK-6MAE REV 10, 1.65-87 REV F, 1.65-124 REV N
						10SOV-71A	N	Y	CA	*	1.65-74 REV L, 1.65-124 REV N
10A-K94B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-33	10MOV-70B	N	Y	CA	*	ESK-6MAE REV 10, 1.65-124 REV N, 1.65-91 REV J
						10SOV-71B	N	Y	CA	*	1.65-124 REV N, 1.65-77 REV J, 1.65-130 REV J

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer Part\model Number	Relay. type	Low ruggedness. relay	Rack/Panel:	Component For equipment	Essential.	Satisfactory	Reason. code	Outlier	Reference drwg(s)
10A-K95A	GENERAL ELECTRIC	12HMA124A2	RLY	N	09-32	10MOV-66A	N	Y	CA	*	ESK-6MY REV 15, 1.65-87 REV F, 1.65-124 REV N
10A-K95B	GENERAL ELECTRIC	12HMA124A2	RLY	N	09-33	10MOV-66B	N	Y	CA	*	ESK-6MY REV 15, 1.65-91 REV J, 1.65-124 REV N
10A-K96A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-32	10SOV-71A	N	Y	CA	*	ESK-7G REV 3, 1.65-74 REV L, 1.65-124 REV N, 1.65-87 REV F
10A-K96B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-33	10SOV-71B	N	Y	CA	*	ESK-7G REV 3, 1.65-77 REV J, 1.65-124 REV N, 1.65-91 REV J
10A-K9A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-32	10P-3A	N	Y	CA	*	ESK-5BU REV 21, 1.65-126 REV E, 1.65-124 REV N, 1.65-129 REV J
						10P-3B	N	Y	CA	*	ESK-5BV REV 19, 1.65-126 REV E, 1.65-124 REV N, 1.65-129 REV J
10A-K9B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-33	10P-3C	N	Y	CA	*	ESK-5BW REV 18, 1.65-124 REV N, 1.65-126 REV E, 1.65-130 REV J
						10P-3D	N	Y	CA	*	ESK-5BX REV 21, 1.65-130 REV J, 1.65-126 REV E
10A-S10A	GENERAL ELECTRIC	SBM	CS	N	09-3	10MOV-27A	N	Y	NV	*	ESK-6MR REV 14, 1.65-131 REV J, 1.65-127 REV P
10A-S10B	GENERAL ELECTRIC	SBM	CS	N	09-3	10MOV-27B	N	Y	NV	*	ESK-6MR REV 14, 1.65-132 REV L, 1.65-127 REV P
10A-S12A	GENERAL ELECTRIC	SBM	CS	N	09-3	10MOV-34A	N	Y	NV	*	ESK-6MT REV 10, 1.65-112 REV J, 1.65-127 REV P
10A-S12B	GENERAL	SBM	CS	N	09-3	10MOV-34B	N	Y	NV	*	ESK-6MT REV 10,

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer Part\model Number	Relay type	Low ruggedness relay	Rack/Panel:	Component For equipment	Essential	Satisfactory	Reason code	Outlier	Reference drwg(s)
	ELECTRIC										1.65-89 REV Q, 1.65-127 REV P
10A-S13A	GENERAL ELECTRIC	SBM	CS	N	09-3	10MOV-38A	N	Y	NV	*	ESK-6MV REV 9, 1.65-112 REV J, 1.65-127 REV P
10A-S13B	GENERAL ELECTRIC	SBM	CS	N	09-3	10MOV-38B	N	Y	NV	*	ESK-6MV REV 9, 1.65-89 REV Q, 1.65-127 REV P
10A-S14A	GENERAL ELECTRIC	CR2940	CS	N	09-3	10MOV-39A	N	Y	NV	*	ESK-6MW REV 17, 1.65-112 REV J
10A-S14B	GENERAL ELECTRIC	CR2940	CS	N	09-3	10MOV-39B	N	Y	NV	*	ESK-6MW REV 17, 1.65-89 REV Q
10A-S16A	GENERAL ELECTRIC	SBM	CS	N	09-3	10MOV-16A	N	Y	NV	*	ESK-6ML REV 12, 1.65-127 REV P, 1.65-128 REV G, 1.65-112 REV J
10A-S16B	GENERAL ELECTRIC	SBM	CS	N	09-3	10MOV-16B	N	Y	NV	*	ESK-6ML REV 12, 1.65-127 REV P, 1.65-128 REV G, 1.65-89 REV Q
10A-S20A	GENERAL ELECTRIC	SBM	CS	N	09-3	10P-1A	N	Y	NV	*	ESK-5BG REV 12
10A-S20B	GENERAL ELECTRIC	SBM	CS	N	09-3	10P-1B	N	Y	NV	*	ESK-5BH REV 16
10A-S20C	GENERAL ELECTRIC	SBM	CS	N	09-3	10P-1C	N	Y	NV	*	ESK-5BQ REV 11
10A-S20D	GENERAL ELECTRIC	SBM	CS	N	09-3	10P-1D	N	Y	NV	*	ESK-5BR REV 12
10A-S21A	GENERAL ELECTRIC	CR2940	CS	N	09-3	10MOV-16A	N	Y	NV	*	ESK-6ML REV 12, 1.65-127 REV P, 1.65-128 REV G, 1.65-112 REV J
10A-S21B	GENERAL ELECTRIC	CR2940	CS	N	09-3	10MOV-16B	N	Y	NV	*	ESK-6ML REV 12, 1.65-127 REV P, 1.65-128 REV G, 1.65-89 REV Q

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
10A-S22A	GENERAL ELECTRIC	CR2940	CS	N	09-3	10MOV-25A	N	Y	NV	*	ESK-6MP REV 19, 1.65-131 REV J, 1.65-127 REV P
10A-S22B	GENERAL ELECTRIC	CR2940	CS	N	09-3	10MOV-25B	N	Y	NV	*	ESK-6MP REV 19, 1.65-127 REV P, 1.65-132 REV L
10A-S23A	GENERAL ELECTRIC	CR2940	CS	N	09-3	10MOV-27A	N	Y	NV	*	ESK-6MR REV 14, 1.65-131 REV J, 1.65-127 REV P
10A-S23B	GENERAL ELECTRIC	CR2940	CS	N	09-3	10MOV-27B	N	Y	NV	*	ESK-6MR REV 14, 1.65-132 REV L, 1.65-127 REV P
10A-S24A	GENERAL ELECTRIC	CR2940	CS	N	09-3	10MOV-66A	N	Y	NV	*	ESK-6MY REV 15, 1.65-87 REV F, 1.65-127 REV P
10A-S24B	GENERAL ELECTRIC	CR2940	CS	N	09-3	10MOV-66B	N	Y	NV	*	ESK-6MY REV 15, 1.65-91 REV J, 1.65-127 REV P
10A-S27A	GENERAL ELECTRIC	CR2940	CS	N	95SP-7	10SOV-263A	N	Y	NV	*	1.65-87 REV F
10A-S27B	GENERAL ELECTRIC	CR2940	CS	N	95SP-7	10SOV-263B	N	Y	NV	*	1.65-87 REV F
10A-S29A	GENERAL ELECTRIC	SBM	CS	N	09-3	10MOV-166A	N	Y	NV	*	ESK-6MD REV 11, 1.65-84 REV F
10A-S29B	GENERAL ELECTRIC	SBM	CS	N	09-3	10MOV-166B	N	Y	NV	*	ESK-6MD REV 11, 1.65-88 REV J, 1.65-127 REV P
10A-S34A	GENERAL ELECTRIC	CR2940	CS	N	09-3	10MOV-65A	N	Y	NV	*	ESK-6MX REV 10, 1.65-84 REV F
10A-S34B	GENERAL ELECTRIC	CR2940	CS	N	09-3	10MOV-65B	N	Y	NV	*	ESK-6MX REV 10, 1.65-88 REV J
10A-S35A	GENERAL ELECTRIC	CR2940UB203F1	CS	N	09-3	10MOV-12A	N	Y	NV	*	ESK-6MF REV 12, 1.65-127 REV P, 1.65-84 REV F
10A-S35B	GENERAL	CR2940UB203F1	CS	N	09-3	10MOV-12B	N	Y	NV	*	ESK-6MF REV 12,

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
	ELECTRIC										1.65-127 REV P, 1.65-84 REV F
10A-S37A	GENERAL ELECTRIC	SBM	CS	N	09-3	10MOV-21A	N	Y	NV	*	ESK-6MN REV 11, 1.65-127 REV P, 1.65-87 REV F
10A-S37B	GENERAL ELECTRIC	SBM	CS	N	09-3	10MOV-21B	N	Y	NV	*	ESK-6MN REV 11, 1.65-127 REV P, 1.65-87 REV F
10A-S39A	GENERAL ELECTRIC	SBM	CS	N	09-3	10MOV-66A	N	Y	NV	*	ESK-6MY REV 15, 1.65-87 REV F, 1.65-127 REV P
10A-S39B	GENERAL ELECTRIC	SBM	CS	N	09-3	10MOV-66B	N	Y	NV	*	ESK-6MY REV 15, 1.65-91 REV J, 1.65-127 REV P
10A-S3A	GENERAL ELECTRIC	SBM	CS	N	09-3	10P-3A	N	Y	NV	*	ESK-5BU REV 21, 1.65-127 REV P, 1.65-128 REV G, 1.65-126 REV E, 1.65-129 REV J
10A-S3B	GENERAL ELECTRIC	SBM	CS	N	09-3	10P-3B	N	Y	NV	*	ESK-5BV REV 19, 1.65-127 REV P, 1.65-128 REV G, 1.65-126 REV E, 1.65-129 REV J
10A-S3C	GENERAL ELECTRIC	SBM	CS	N	09-3	10P-3C	N	Y	NV	*	ESK-5BW REV 18, 1.65-127 REV P, 1.65-128 REV G, 1.65-126 REV E, 1.65-129 REV J
10A-S3D	GENERAL ELECTRIC	SBM	CS	N	09-3	10P-3D	N	Y	NV	*	ESK-5BX REV 21, 1.65-127 REV P, 1.65-128 REV G, 1.65-126 REV E, 1.65-130 REV J
10A-S41A	GENERAL ELECTRIC	CR2940	CS	N	09-3	10SOV-71A	N	Y	NV	*	1.65-74 REV L, 1.65-87 REV F, 1.65-127 REV P
10A-S41B	GENERAL	CR2940	CS	N	09-3	10SOV-71B	N	Y	NV	*	1.65-77 REV J,

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
	ELECTRIC										1.65-91 REV J, 1.65-127 REV P
10A-S43A	GENERAL ELECTRIC	CR2940	CS	N	09-32	93EDG-A	N	Y	NV	*	1.65-129 REV J
						93EDG-C	N	Y	NV	*	1.65-129 REV J
10A-S43B	GENERAL ELECTRIC	CR2940	CS	N	09-33	93EDG-B	N	Y	NV	*	1.65-130 REV J
						93EDG-D	N	Y	NV	*	1.65-130 REV J
10A-S48A	GENERAL ELECTRIC	SBM	CS	N	09-3	10MOV-89A	N	Y	NV	*	ESK-6MZ REV 13, 1.65-127 REV P, 1.65-84 REV F
10A-S48B	GENERAL ELECTRIC	SBM	CS	N	09-3	10MOV-89B	N	Y	NV	*	ESK-6MZ REV 13, 1.65-127 REV P, 1.65-88 REV J
10A-S49A	GENERAL ELECTRIC	CR2940	CS	N	09-3	10MOV-148A	N	Y	NV	*	ESK-6MM REV 9, 1.65-127 REV P
10A-S49B	GENERAL ELECTRIC	CR2940	CS	N	09-3	10MOV-148B	N	Y	NV	*	ESK-6MM REV 9, 1.65-127 REV P
10A-S4A	GENERAL ELECTRIC	CR2940	CS	N	09-3	10MOV-13A	N	Y	NV	*	ESK-6MG REV 9, 1.65-127 REV P, 1.65-84 REV F, 1.65-128 REV G
10A-S4B	GENERAL ELECTRIC	CR2940	CS	N	09-3	10MOV-13B	N	Y	NV	*	ESK-6MH REV 12, 1.65-127 REV P, 1.65-88 REV J
10A-S4C	GENERAL ELECTRIC	CR2940	CS	N	09-3	10MOV-13C	N	Y	NV	*	ESK-6MG REV 9, 1.65-127 REV P, 1.65-84 REV F
10A-S4D	GENERAL ELECTRIC	CR2940	CS	N	09-3	10MOV-13D	N	Y	NV	*	ESK-6MH REV 12, 1.65-127 REV P, 1.65-88 REV J
10A-S54A	GENERAL ELECTRIC	SBM	CS	N	09-3	10MOV-70A	N	Y	NV	*	ESK-6MAE REV 10, 1.65-87 REV F, 1.65-127 REV P
10A-S54B	GENERAL ELECTRIC	SBM	CS	N	09-3	10MOV-70B	N	Y	NV	*	ESK-6MAE REV 10, 1.65-127 REV P,

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer. Part\model Number.	Relay. type..	Low. ruggedness. relay.	Rack/Panel:	Component. For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
											1.65-91 REV J
10A-S6A	GENERAL ELECTRIC	CR2940	CS	N	09-3	10MOV-15A	N	Y	NV	*	ESK-6MJ REV 8, 1.65-127 REV P, 1.65-84 REV F
10A-S6B	GENERAL ELECTRIC	CR2940	CS	N	09-3	10MOV-15B	N	Y	NV	*	ESK-6MK REV 11, 1.65-127 REV P, 1.65-88 REV J
10A-S6C	GENERAL ELECTRIC	CR2940	CS	N	09-3	10MOV-15C	N	Y	NV	*	ESK-6MJ REV 8, 1.65-27 REV P, 1.65-84 REV F
10A-S6D	GENERAL ELECTRIC	CR2940	CS	N	09-3	10MOV-15D	N	Y	NV	*	ESK-6MK REV 11, 1.65-127 REV P, 1.65-88 REV J
10A-S8A	GENERAL ELECTRIC	SBM	CS	N	09-3	10MOV-25A	N	Y	NV	*	ESK-6MP REV 19, 1.65-131 REV J, 1.65-127 REV P
10A-S8B	GENERAL ELECTRIC	SBM	CS	N	09-3	10MOV-25B	N	Y	NV	*	ESK-6MP REV 19, 1.65-127 REV P, 1.65-132 REV L
10A-S9A	GENERAL ELECTRIC	CR2940	CS	N	09-3	10MOV-26A	N	Y	NV	*	ESK-6MQ REV 11, 1.65-127 REV P, 1.65-131 REV J, 1.65-128 REV G
10A-S9B	GENERAL ELECTRIC	CR2940	CS	N	09-3	10MOV-26B	N	Y	NV	*	ESK-6MQ REV 11, 1.65-127 REV P, 1.65-132 REV L, 1.65-128 REV G
10CS-1PCIA07	GENERAL ELECTRIC	SB-1	CS	N	71MCC-156	10MOV-18	N	Y	NV	*	ESK-6MAF REV 13
10CS-1RHRA01	GENERAL ELECTRIC	SB1	CS	N	71H05	10P-3A	N	Y	NV	*	ESK-5BU REV 21
10CS-1RHRA02	GENERAL ELECTRIC	SB1	CS	N	71H05	10P-1A	N	Y	NV	*	ESK-5BG REV 12
10CS-1RHRB01	GENERAL ELECTRIC	SB-1	CS	N	71H05	10P-3B	N	Y	NV	*	ESK-5BV REV 19

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer. Part\model. Number.	Relay. type.	Low. ruggedness. relay.	Rack/Panel:	Component. For equipment.	Essential.	Satisfactory	Reason. code.	Outlier	Reference drwg(s)
10CS-1RHRB02	GENERAL ELECTRIC	SB1	CS	N	71H06	10P-1B	N	Y	NV	*	ESK-5BH REV 16
10CS-1RHRB03	ELECTRO SWITCH CORP	SERIES 20P	CS	N	25ASP-1	10MOV-12B	N	Y	NV	*	ESK-6MF REV 12, 1.65-88 REV J
10CS-1RHRB06	ELECTRO SWITCH CORP	SERIES 20P	CS	N	25ASP-2	10MOV-16B	N	Y	NV	*	ESK-6ML REV 12
10CS-1RHRB07	ELECTRO SWITCH CORP	SERIES 20P	CS	N	25ASP-2	10MOV-21B	N	Y	NV	*	ESK-6MN REV 11
10CS-1RHRB08	ELECTRO SWITCH CORP	SERIES 20P	CS	N	25RSP	10MOV-25B	N	Y	NV	*	ESK-6MP REV 19, 1.65-124 REV N, 1.65-132 REV L
10CS-1RHRB09	ELECTRO SWITCH CORP	SERIES 20P	CS	N	25ASP-3	10MOV-26B	N	Y	NV	*	ESK-6MQ REV 11
10CS-1RHRB10	ELECTRO SWITCH CORP	SERIES 20P	CS	N	25ASP-2	10MOV-27B	N	Y	NV	*	ESK-6MR REV 14, 1.65-132 REV L
10CS-1RHRB14	ELECTRO SWITCH CORP	SERIES 20P	CS	N	25ASP-1	10MOV-166B	N	Y	NV	*	ESK-6MD REV 11, 1.65-88 REV J
10CS-1RHRB15	ELECTRO SWITCH CORP	SERIES 20P	CS	N	25ASP-2	10MOV-65B	N	Y	NV	*	ESK-6MX REV 10, 1.65-88 REV J
10CS-1RHRB18	ELECTRO SWITCH CORP	SERIES 20P	CS	N	25ASP-2	10MOV-39B	N	Y	NV	*	ESK-6MW REV 17
10CS-1RHRB19	ELECTRO SWITCH CORP	SERIES 20P	CS	N	25RSP	10MOV-89B	N	Y	NV	*	ESK-6MZ REV 13, 1.65-88 REV J
10CS-1RHRB24	ELECTRO SWITCH CORP	SERIES 20P	CS	N	25RSP	10MOV-66B	N	Y	NV	*	ESK-6MY REV 15, 1.65-91 REV J
10CS-1RHRB25	ELECTRO SWITCH CORP	SERIES 20P	CS	N	25ASP-1	10MOV-148B	N	Y	NV	*	ESK-6MM REV 9
10CS-1RHRB30	ELECTRO SWITCH CORP	SERIES 20P	CS	N	25ASP-1	10MOV-70B	N	Y	NV	*	ESK-6MAE REV 10, 1.65-91 REV J
10CS-1RHRC01	GENERAL ELECTRIC	SB1	CS	N	71H06	10P-3C	N	Y	NV	*	ESK-5BW REV 18
10CS-1RHRC02			CS	N	71H05	10P-1C	N	Y	NV	*	ESK-5BQ REV 11

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer. Part\model Number.	Relay. type..	Low. ruggedness. relay.	Rack/Panel:	Component. For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
10CS-1RHRD01	GENERAL ELECTRIC	SB-1	CS	N	71H06	10P-3D	N	Y	NV	*	ESK-5BX REV 21
10CS-1RHRD02	GENERAL ELECTRIC	SB1	CS	N		10P-1D	N	Y	NV	*	ESK-5BR REV 12
10CS-1RHRD04	ELECTRO SWITCH CORP	SERIES 20P	CS	N	25ASP-2	10MOV-13D	N	Y	NV	*	ESK-6MH REV 12
10CS-1RHRD05	ELECTRO SWITCH CORP	SERIES 20P	CS	N	25ASP-2	10MOV-15D	N	Y	NV	*	ESK-6MK REV 11
10CS1-1RHRB02	ELECTRO SWITCH CORP	SERIES 20P	CS	N	25RSP	10P-1B	N	Y	NV	*	ESK-5BH REV 16
10CS1-1RHRD01	ELECTRO SWITCH CORP	SERIES 20P	CS	N	25RSP	10P-3D	N	Y	NV	*	ESK-5BX REV 21
10DPIS-125A	BARTON INSTRUMENT CO (ITT)	289	INST	N	NA	10MOV-16A	Y	N	CR	Y	1.65-129 REV J
10DPIS-125B	BARTON INSTRUMENT CO (ITT)	289	INST	N	NA	10MOV-16B	Y	N	CR	Y	1.65-130 REV J
10DS-1PCIA07	CUTLER-HAMMER INC (EATON CORP)	DH361UWK	CS	N	NA	10MOV-18	N	Y	NV	*	FE-1BH REV 8
10IS-1RHRB02	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25ASP-3	10P-1B	N	Y	NV	*	ESK-5BH REV 16
10IS-1RHRB03	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25ASP-1	10MOV-12B	N	Y	NV	*	ESK-6MF REV 12, 1.65-88 REV J
10IS-1RHRB06	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25ASP-2	10MOV-16B	N	Y	NV	*	ESK-6ML REV 12
10IS-1RHRB07	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25ASP-2	10MOV-21B	N	Y	NV	*	ESK-6MN REV 11
10IS-1RHRB08	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25RSP	10MOV-25B	N	Y	NV	*	ESK-6MP REV 19, 1.65-124 REV N, 1.65-132 REV L
10IS-1RHRB09	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25ASP-3	10MOV-26B	N	Y	NV	*	ESK-6MQ REV 11

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
10IS-1RHRB10	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25ASP-2	10MOV-27B	N	Y	NV	*	ESK-6MR REV 14, 1.65-132 REV L
10IS-1RHRB14	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25ASP-1	10MOV-166B	N	Y	NV	*	ESK-6MD REV 11, 1.65-88 REV J
10IS-1RHRB15	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25ASP-2	10MOV-65B	N	Y	NV	*	ESK-6MX REV 10, 1.65-88 REV J
10IS-1RHRB18	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25ASP-2	10MOV-39B	N	Y	NV	*	ESK-6MW REV 17
10IS-1RHRB19	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25RSP	10MOV-89B	N	Y	NV	*	ESK-6MZ REV 13, 1.65-88 REV J
10IS-1RHRB24	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25RSP	10MOV-66B	N	Y	NV	*	ESK-6MY REV 15, 1.65-91 REV J
10IS-1RHRB25	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25ASP-1	10MOV-148B	N	Y	NV	*	ESK-6MM REV 9
10IS-1RHRB30	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25ASP-1	10MOV-70B	N	Y	NV	*	ESK-6MAE REV 10, 1.65-91 REV J
10IS-1RHRD01	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25ASP-3	10P-3D	N	Y	NV	*	ESK-5BX REV 21
10IS-1RHRD04	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25ASP-2	10MOV-13D	N	Y	NV	*	ESK-6MH REV 12
10IS-1RHRD05	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25ASP-2	10MOV-15D	N	Y	NV	*	ESK-6MK REV 11
10ISX-1RHRB02*			RLY	N		10P-1B	N	Y	CA	*	ESK-5BH REV 16
10MOV-12A(OP)	LIMITORQUE CORP	SMB-0-25	OP	N	NA	10MOV-12A	N	Y	NV	*	ESK-6MF REV 12
10MOV-12B(OP)	LIMITORQUE CORP	SMB-0	OP	N	NA	10MOV-12B	N	Y	NV	*	ESK-6MF REV 12
10MOV-13A(OP)	LIMITORQUE CORP	SMB-0	OP	N	NA	10MOV-13A	N	Y	NV	*	ESK-6MG REV 9, 1.65-74 REV L
10MOV-13B(OP)	LIMITORQUE CORP	SMB-0	OP	N	NA	10MOV-13B	N	Y	NV	*	ESK-6MH REV 12, 1.65-74 REV L

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
10MOV-13C(OP)	LIMITORQUE CORP	SMB-0	OP	N	NA	10MOV-13C	N	Y	NV	*	ESK-6MG REV 9, 1.65-77 REV J
10MOV-13D(OP)	LIMITORQUE CORP	SMB-0	OP	N	NA	10MOV-13D	N	Y	NV	*	ESK-6MH REV 12, 1.65-77 REV J
10MOV-148A(OP)	LIMITORQUE CORP	SMB-0	OP	N	NA	10MOV-148A	N	Y	NV	*	ESK-6MM REV 9
10MOV-148B(OP)	LIMITORQUE CORP	SMB-0	OP	N	NA	10MOV-148B	N	Y	NV	*	ESK-6MM REV 9
10MOV-15A(OP)	LIMITORQUE CORP	SMB-0	OP	N	NA	10MOV-15A	N	Y	NV	*	ESK-6MJ REV 8, 1.65-84 REV F
10MOV-15B(OP)	LIMITORQUE CORP	SMB-0	OP	N	NA	10MOV-15B	N	Y	NV	*	ESK-6MK REV 11, 1.65-88 REV J
10MOV-15C(OP)	LIMITORQUE CORP	SMB-0	OP	N	NA	10MOV-15C	N	Y	NV	*	ESK-6MJ REV 8, 1.65-84 REV F
10MOV-15D(OP)	LIMITORQUE CORP	SMB-0	OP	N	NA	10MOV-15D	N	Y	NV	*	ESK-6MK REV 11, 1.65-88 REV J
10MOV-166A(OP)	LIMITORQUE CORP	SMB-000	OP	N	NA	10MOV-166A	N	Y	NV	*	ESK-6MD REV 11
10MOV-166B(OP)	LIMITORQUE CORP	SMB-000	OP	N	NA	10MOV-166B	N	Y	NV	*	ESK-6MD REV 11, 1.65-88 REV J
10MOV-16A(OP)	LIMITORQUE CORP	SMB-000	OP	N	NA	10MOV-16A	N	Y	NV	*	ESK-6ML REV12
10MOV-16B(OP)	LIMITORQUE CORP	SMB-000	OP	N	NA	10MOV-16B	N	Y	NV	*	ESK-6ML REV 12
10MOV-17(OP)	LIMITORQUE CORP	SB-1-60	OP	N	NA	10MOV-17	N	Y	NV	*	ESK-11AE REV 10
10MOV-18(OP)	LIMITORQUE CORP	SMB-00-15	OP	N	NA	10MOV-18	N	Y	NV	*	ESK-6MAF REV 13
10MOV-21A(OP)	LIMITORQUE CORP	SMB-000	OP	N	NA	10MOV-21A	N	Y	NV	*	ESK-6MN REV 11
10MOV-21B(OP)	LIMITORQUE CORP	SMB-000	OP	N	NA	10MOV-21B	N	Y	NV	*	ESK-6MN REV 11

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
10MOV-25A(OP)	LIMITORQUE CORP	SMB-4T	OP	N	NA	10MOV-25A	N	Y	NV	*	ESK-6MP REV 19
10MOV-25B(OP)	LIMITORQUE CORP	SMB-4T	OP	N	NA	10MOV-25B	N	Y	NV	*	ESK-6MP REV 19
10MOV-26A(OP)	LIMITORQUE CORP	SB-00-15	OP	N	NA	10MOV-26A	N	Y	NV	*	ESK-6MQ REV 11
10MOV-26B(OP)	LIMITORQUE CORP	SB-00-15	OP	N	NA	10MOV-26B	N	Y	NV	*	ESK-6MQ REV 11
10MOV-27A(OP)	LIMITORQUE CORP	SMB-4T	OP	N	NA	10MOV-27A	N	Y	NV	*	ESK-6MR REV 14, 1.65-131 REV J
10MOV-27B(OP)	LIMITORQUE CORP	SMB-4T	OP	N	NA	10MOV-27B	N	Y	NV	*	ESK-6MR REV 14, 1.65-132 REV L
10MOV-31A(OP)	LIMITORQUE CORP	SB-1-60	OP	N	NA	10MOV-26A	N	Y	NV	*	ESK-6MQ REV 11
10MOV-31B(OP)	LIMITORQUE CORP	SB-1-60	OP	N	NA	10MOV-26B	N	Y	NV	*	ESK-6MQ REV 11
10MOV-34A(OP)	LIMITORQUE CORP	SMB-3	OP	N	NA	10MOV-34A	N	Y	NV	*	ESK-6MT REV 10, 1.65-112 REV J
10MOV-34B(OP)	LIMITORQUE CORP	SMB-3	OP	N	NA	10MOV-34B	N	Y	NV	*	ESK-6MT REV 10, 1.65-89 REV Q
10MOV-38A(OP)	LIMITORQUE CORP	SMB-00	OP	N	NA	10MOV-38A	N	Y	NV	*	ESK-6MV REV 9
10MOV-38B(OP)	LIMITORQUE CORP	SMB-00	OP	N	NA	10MOV-38B	N	Y	NV	*	ESK-6MV REV 9
10MOV-39A(OP)	LIMITORQUE CORP	SMB-1	OP	N	NA	10MOV-39A	N	Y	NV	*	ESK-6MW REV 17
10MOV-39B(OP)	LIMITORQUE CORP	SMB-1	OP	N	NA	10MOV-39B	N	Y	NV	*	ESK-6MW REV 17
10MOV-65A(OP)	LIMITORQUE CORP	SMB-0	OP	N	NA	10MOV-65A	N	Y	NV	*	ESK-6MX REV 10
10MOV-65B(OP)	LIMITORQUE CORP	SMB-0	OP	N	NA	10MOV-65B	N	Y	NV	*	ESK-6MX REV 10

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
10MOV-66A(OP)	LIMITORQUE CORP	SMB-3	OP	N	NA	10MOV-66A	N	Y	NV	*	ESK-6MY REV 15
10MOV-66B(OP)	LIMITORQUE CORP	SMB-3	OP	N	NA	10MOV-66B	N	Y	NV	*	ESK-6MY REV 15
10MOV-70A(OP)	LIMITORQUE CORP	SMB-0	OP	N	NA	10MOV-70A	N	Y	NV	*	ESK-6MAE REV 10
10MOV-70B(OP)	LIMITORQUE CORP	SMB-0	OP	N	NA	10MOV-70B	N	Y	NV	*	ESK-6MAE REV 10
10MOV-89A(OP)	LIMITORQUE CORP	SMB-0-15	OP	N	NA	10MOV-89A	N	Y	NV	*	ESK-6MZ REV 13
10MOV-89B(OP)	LIMITORQUE CORP	SMB-0-15	OP	N	NA	10MOV-89B	N	Y	NV	*	ESK-6MZ REV 13
10MTU-201A	ROSEMOUNT INC	510DU	INST	N	09-95	23MOV-14	N	Y	NV	*	1.60-21 REV H
						23MOV-15	N	Y	NV	*	1.60-21 REV H
						23MOV-16	N	Y	NV	*	1.60-21 REV H
						23MOV-17	N	Y	NV	*	1.60-21 REV H
						23MOV-19	N	Y	NV	*	1.60-21 REV H
						23MOV-20	N	Y	NV	*	1.60-21 REV H
						23MOV-21	N	Y	NV	*	1.60-21 REV H
						23MOV-24	N	Y	NV	*	1.60-21 REV H
						93EDG-A	N	Y	NV	*	1.60-21 REV H
						93EDG-B	N	Y	NV	*	1.60-21 REV H
						93EDG-C	N	Y	NV	*	1.60-21 REV H
						93EDG-D	N	Y	NV	*	1.60-21 REV H
10MTU-201B	ROSEMOUNT INC	510DU	INST	N	09-96	23MOV-14	N	Y	NV	*	1.60-21 REV H
						23MOV-15	N	Y	NV	*	.60-21 REV H
						23MOV-16	N	Y	NV	*	1.60-21 REV H
						23MOV-17	N	Y	NV	*	1.60-21 REV H
						23MOV-19	N	Y	NV	*	1.60-21 REV H
						23MOV-20	N	Y	NV	*	1.60-21 REV H
						23MOV-21	N	Y	NV	*	1.60-21 REV H
						23MOV-24	N	Y	NV	*	1.60-21 REV H
						93EDG-A	N	Y	NV	*	1.60-21 REV H
						93EDG-B	N	Y	NV	*	1.60-21 REV H
						93EDG-C	N	Y	NV	*	1.60-21 REV H
						93EDG-D	N	Y	NV	*	1.60-21 REV H
10MTU-201C	ROSEMOUNT INC	510DU	INST	N	09-95	23MOV-14	N	Y	NV	*	1.60-21 REV H

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
						23MOV-15	N	Y	NV	*	1.60-21 REV H
						23MOV-16	N	Y	NV	*	1.60-21 REV H
						23MOV-17	N	Y	NV	*	1.60-21 REV H
						23MOV-19	N	Y	NV	*	1.60-21 REV H
						23MOV-20	N	Y	NV	*	1.60-21 REV H
						23MOV-21	N	Y	NV	*	1.60-21 REV H
						23MOV-24	N	Y	NV	*	1.60-21 REV H
						93EDG-A	N	Y	NV	*	1.60-21 REV H
						93EDG-B	N	Y	NV	*	1.60-21 REV H
						93EDG-C	N	Y	NV	*	1.60-21 REV H
						93EDG-D	N	Y	NV	*	1.60-21 REV H
10MTU-201D	ROSEMOUNT INC	510DU	INST	N	09-96	23MOV-14	N	Y	NV	*	1.60-21 REV H
						23MOV-15	N	Y	NV	*	1.60-21 REV H
						23MOV-16	N	Y	NV	*	1.60-21 REV H
						23MOV-17	N	Y	NV	*	1.60-21 REV H
						23MOV-19	N	Y	NV	*	1.60-21 REV H
						23MOV-20	N	Y	NV	*	1.60-21 REV H
						23MOV-21	N	Y	NV	*	1.60-21 REV H
						23MOV-24	N	Y	NV	*	1.60-21 REV H
						93EDG-A	N	Y	NV	*	1.60-21 REV H
						93EDG-B	N	Y	NV	*	1.60-21 REV H
						93EDG-C	N	Y	NV	*	1.60-21 REV H
						93EDG-D	N	Y	NV	*	1.60-21 REV H
10PS-120A	STATIC-O-RING	6N6-B5-NX-C1A-J JTTX6	INST	N	25-59	02SOV-71A1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71B1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71C1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71D1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71E1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71G1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71H1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
10PS-120B	STATIC-O-RING	6N6-B5-NX-C1A-J JTTX6	INST	N	25-62	02SOV-71A1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71B1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71C1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71D1	N	Y	CA	*	1.65-77 REV J,

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer. Part\model. Number.	Relay. type.	Low. ruggedness. relay.	Rack/Panel:	Component. For equipment.	Essential.	Satisfactory	Reason. code.	Outlier	Reference drwg(s)
											1.65-74 REV L
						02SOV-71E1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71G1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71H1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
10PS-120C	STATIC-O-RING	6N6-B5-NX-C1A-J JTTX6	INST	N	25-59	02SOV-71A1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71B1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71C1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71D1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71E1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71G1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71H1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
10PS-120D	STATIC-O-RING	6N6-B5-NX-C1A-J JTTX6	INST	N	25-62	02SOV-71A1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71B1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71C1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71D1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71E1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71G1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71H1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
10PS-120E	STATIC-O-RING	6N6-B5-NX-C1A-J JTTX6	INST	N	25-59	02SOV-71A1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71B1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71C1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71D1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71E1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
						02SOV-71G1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71H1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
10PS-120F	STATIC-O-RING	6N6-B5-NX-C1A-J INST JTTX6		N	25-62	02SOV-71A1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71B1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71C1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71D1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71E1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71G1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71H1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
10PS-120G	STATIC-O-RING	6N6-B5-NX-C1A-J INST JTTX6		N	25-59	02SOV-71A1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71B1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71C1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71D1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71E1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71G1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71H1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
10PS-120H	STATIC-O-RING	6N6-B5-NX-C1A-J INST JTTX6		N	25-62	02SOV-71A1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71B1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71C1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71D1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71E1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71G1	N	Y	CA	*	1.65-77 REV J, 1.65-74 REV L
						02SOV-71H1	N	Y	CA	*	1.65-77 REV J,

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
											1.65-74 REV L
10PT-101A	ROSEMOUNT INC	1153GB5RC	INST	N	25-05	23MOV-14	N	Y	NV	*	1.60-21 REV H
						23MOV-15	N	Y	NV	*	1.60-21 REV H
						23MOV-16	N	Y	NV	*	LP-10B REV 1
						23MOV-17	N	Y	NV	*	1.60-21 REV H
						23MOV-19	N	Y	NV	*	1.60-21 REV H
						23MOV-20	N	Y	NV	*	1.60-21 REV H
						23MOV-21	N	Y	NV	*	1.60-21 REV H
						23MOV-24	N	Y	NV	*	1.60-21 REV H
						93EDG-A	N	Y	NV	*	1.60-21 REV H
						93EDG-B	N	Y	NV	*	1.60-21 REV H
						93EDG-C	N	Y	NV	*	1.60-21 REV H
						93EDG-D	N	Y	NV	*	1.60-21 REV H
10PT-101B	ROSEMOUNT INC	1153GB5RC	INST	N	25-06	23MOV-14	N	Y	NV	*	1.60-21 REV H
						23MOV-15	N	Y	NV	*	1.60-21 REV H
						23MOV-16	N	Y	NV	*	LP-10C REV 1
						23MOV-17	N	Y	NV	*	1.60-21 REV H
						23MOV-19	N	Y	NV	*	1.60-21 REV H
						23MOV-20	N	Y	NV	*	1.60-21 REV H
						23MOV-21	N	Y	NV	*	1.60-21 REV H
						23MOV-24	N	Y	NV	*	1.60-21 REV H
						93EDG-A	N	Y	NV	*	1.60-21 REV H
						93EDG-B	N	Y	NV	*	1.60-21 REV H
						93EDG-C	N	Y	NV	*	1.60-21 REV H
						93EDG-D	N	Y	NV	*	1.60-21 REV H
10PT-101C	ROSEMOUNT INC	1153GB5RC	INST	N	25-05	23MOV-14	N	Y	NV	*	1.60-21 REV H
						23MOV-15	N	Y	NV	*	1.60-21 REV H
						23MOV-16	N	Y	NV	*	LP-10B REV 1
						23MOV-17	N	Y	NV	*	1.60-21 REV H
						23MOV-19	N	Y	NV	*	1.60-21 REV H
						23MOV-20	N	Y	NV	*	1.60-21 REV H
						23MOV-21	N	Y	NV	*	1.60-21 REV H
						23MOV-24	N	Y	NV	*	1.60-21 REV H
						93EDG-A	N	Y	NV	*	1.60-21 REV H
						93EDG-B	N	Y	NV	*	1.60-21 REV H
						93EDG-C	N	Y	NV	*	1.60-21 REV H
						93EDG-D	N	Y	NV	*	1.60-21 REV H
10PT-101D	ROSEMOUNT INC	1153GB5RC	INST	N	25-06	23MOV-14	N	Y	NV	*	1.60-21 REV H
						23MOV-15	N	Y	NV	*	1.60-21 REV H
						23MOV-16	N	Y	NV	*	LP-10C REV 1

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer. Part\model. Number.	Relay. type.	Low. ruggedness. relay.	Rack/Panel:	Component. For equipment.	Essential.	Satisfactory	Reason. code.	Outlier	Reference drwg(s)
						23MOV-17	N	Y	NV	*	1.60-21 REV H
						23MOV-19	N	Y	NV	*	1.60-21 REV H
						23MOV-20	N	Y	NV	*	1.60-21 REV H
						23MOV-21	N	Y	NV	*	1.60-21 REV H
						23MOV-24	N	Y	NV	*	1.60-21 REV H
						93EDG-A	N	Y	NV	*	1.60-21 REV H
						93EDG-B	N	Y	NV	*	1.60-21 REV H
						93EDG-C	N	Y	NV	*	1.60-21 REV H
						93EDG-D	N	Y	NV	*	1.60-21 REV H
11A-S1	GENERAL ELECTRIC	SB-1	CS	N	09-3	11EV-14A	N	Y	NV	*	1.72-7 REV T, 1.70-110 REV F
						11EV-14B	N	Y	NV	*	1.72-7 REV T, 1.70-110 REV F
						11P-2A	N	Y	NV	*	1.72-7 REV T, 1.70-110 REV F
						11P-2B	N	Y	NV	*	1.72-7 REV T, 1.70-110 REV F
11MR-67A	GENERAL ELECTRIC	195	RLY	N	09-3	11EV-14A	N	Y	CA	*	1.72-7 REV T
						11P-2A	N	Y	CA	*	1.72-7 REV T
11MR-67B	GENERAL ELECTRIC	195	RLY	N	09-3	11EV-14B	N	Y	CA	*	1.72-7 REV T
						11P-2B	N	Y	CA	*	1.72-7 REV T
12-42X-1PC1B 09	GENERAL ELECTRIC	IC28001607	CONT	N	718MCC-4	12MOV-18	Y	Y	GERS	N	ESK-11AD REV 14
12-74-1PC1A0 8	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5A	12MOV-15	N	Y	CA	*	ESK-6MAF REV 13
12-74-1PC1B0 9*			RLY	N		12MOV-18	N	Y	CA	*	ESK-11AD REV 14
12CS-1PC1J09	ELECTRO SWITCH CORP	SERIES 20P	CS	N	25ASP-2	12MOV-18	N	Y	NV	*	ESK-11AD REV 14
12IS-1PC1B09	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25ASP-2	12MOV-18	N	Y	NV	*	ESK-11AD REV 14
12MOV-15(OP)	LIMITORQUE CORP	SB-00	OP	N	NA	12MOV-15	N	Y	NV	*	ESK-6MAF REV 13
12MOV-18(OP)	LIMITORQUE CORP	SB-00	OP	N	NA	12MOV-18	N	Y	NV	*	ESK-11AD REV 14

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
13-42X-1C1CA 01*			RLY	N		13MOV-16	N	Y	CA	*	ESK-11AQ REV 016
13-74-1C1CA0 1	GENERAL ELECTRIC	IC2820	RLY	N	71BMCC-1	13MOV-16	N	Y	CA	*	ESK-11AQ REV 016
13-74-1C1CB0 1	GENERAL ELECTRIC	CR2810	RLY	N	09AR-6B	13MOV-15	N	Y	CA	*	ESK-6MAZ REV 009
13A-K117A	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-95	23MOV-15	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H
						23MOV-58	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H, 1.60-21 REV H
13A-K117B	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-96	23HOV-1	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H, 1.60-21 REV H
						23MOV-16	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H, 1.60-21 REV H
						23MOV-57	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H, 1.60-21 REV H
						23MOV-60	N	Y	CA	*	1.60-20 REV H
13A-K118A	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-95	23MOV-15	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H
						23MOV-58	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H, 1.60-21 REV H
13A-K118B	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-96	23HOV-1	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H, 1.60-21 REV H
						23MOV-16	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H, 1.60-21 REV H
						23MOV-57	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H, 1.60-21 REV H
						23MOV-60	N	Y	CA	*	1.60-20 REV H
13A-K15	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-30	13MOV-16	N	Y	CA	*	ESK-11AQ REV 016, 1.61-156 REV D

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
13A-K2	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-30	13MOV-16	N	Y	CA	*	ESK-11AQ REV 016, 1.61-156 REV D
13A-K3	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-30	13MOV-15	N	Y	CA	*	ESK-6MAZ REV 009, 1.61-156 REV D
13A-K33	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-33	13MOV-15	N	Y	CA	*	ESK-6MAZ REV 009, 1.61-150 REV G, 1.61-156 REV D
13A-S1	GENERAL ELECTRIC	SBM	CS	N	09-4	13MOV-15	N	Y	NV	*	ESK-6MAZ REV 009, 1.61-151 REV F, 1.61-156 REV D
13A-S2	GENERAL ELECTRIC	SBM	CS	N	09-4	13MOV-16	N	Y	NV	*	ESK-11AQ REV 016, 1.61-151 REV F, 1.61-156 REV D
13A-S2A	GENERAL ELECTRIC	CR2940U202	CS	N	09-4	13MOV-16	N	Y	NV	*	ESK-11AQ REV 016, 1.61-151 REV F, 1.61-156 REV D
13MOV-15(OP)	LIMITORQUE CORP	SB-000	OP	N	NA	13MOV-15	N	Y	NV	*	ESK-6MAZ REV 009
13MOV-16(OP)	LIMITORQUE CORP	SB-00-10	OP	N	NA	13MOV-16	N	Y	NV	*	ESK-11AQ REV 016
13MTU-202C	ROSEMOUNT INC	510DU	INST	N	09-95	23MOV-15	N	Y	NV	*	1.60-20 REV H
						23MOV-58	N	Y	NV	*	1.60-20 REV H
13MTU-202D	ROSEMOUNT INC	510DU	INST	N	09-96	23HOV-1	N	Y	NV	*	1.60-21 REV H
						23MOV-16	N	Y	NV	*	1.60-21 REV H
						23MOV-57	N	Y	NV	*	1.60-20 REV H
						23MOV-60	N	Y	NV	*	1.60-21 REV H
13MTU-207C	ROSEMOUNT INC	510DU	INST	N	09-95	23MOV-15	N	Y	NV	*	1.60-20 REV H
						23MOV-58	N	Y	NV	*	1.60-20 REV H
13MTU-207D	ROSEMOUNT INC	510DU	INST	N	09-96	23HOV-1	N	Y	NV	*	1.60-21 REV H
						23MOV-16	N	Y	NV	*	1.60-21 REV H
						23MOV-57	N	Y	NV	*	1.60-20 REV H
						23MOV-60	N	Y	NV	*	1.60-21 REV H

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
13RTD-102C	WEED INSTRUMENT CO INC	611D-1B-C-6-C-2 -A2-0	INST	N	NA	23MOV-15	N	Y	NV	*	1.60-20 REV H
						23MOV-58	N	Y	NV	*	1.60-21 REV H
13RTD-102D	WEED INSTRUMENT CO INC	611D-1B-C-6-C-2 -A2-0	INST	N	NA	23HOV-1	N	Y	NV	*	1.60-21 REV H
						23MOV-16	N	Y	NV	*	1.60-21 REV H
						23MOV-57	N	Y	NV	*	1.60-21 REV H
						23MOV-60	N	Y	NV	*	1.60-21 REV H
13RTD-107C	WEED INSTRUMENT CO INC	611D-1B-C-6-C-2 -A2-0	INST	N	NA	23MOV-15	N	Y	NV	*	1.60-20 REV H
						23MOV-58	N	Y	NV	*	1.60-21 REV H
13RTD-107D	WEED INSTRUMENT CO INC	611D-1B-C-6-C-2 -A2-0	INST	N	NA	23HOV-1	N	Y	NV	*	1.60-21 REV H
						23MOV-16	N	Y	NV	*	1.60-21 REV H
						23MOV-57	N	Y	NV	*	1.60-21 REV H
						23MOV-60	N	Y	NV	*	1.60-21 REV H
14-74-1CSPA02	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5A	14MOV-12A	N	Y	CA	*	ESK-6MAJ REV 009
14-74-1CSPB02	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5B	14MOV-12B	N	Y	CA	*	ESK-6MAJ REV 009
14A-K11A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-46	93EDG-A	Y	Y	GERS	N	1.64-30 REV P, ESK-5BY REV 5
						93EDG-C	Y	Y	GERS	N	1.64-30 REV P, ESK-5BY REV 5, ESK-5BA REV 18, ESK-5BS REV 18
14A-K11B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-47	93EDG-B	Y	Y	GERS	N	1.64-30 REV P, ESK-5BZ REV 5, ESK-5BK REV 23, ESK-5BQ REV 11, ESK-5BT REV 19
						93EDG-D	Y	Y	GERS	N	1.64-30 REV P, ESK-5BZ REV 5, ESK-5BK REV 23, ESK-5BQ REV 11, ESK-5BT REV 19

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
14A-K13A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-46	14MOV-12A	N	Y	CA	*	ESK-6MAJ REV 009, 1.64-28 REV M, 1.64-30 REV P
14A-K13B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-47	14MOV-12B	N	Y	CA	*	ESK-6MAJ REV 009, 1.64-28 REV M, 1.64-30 REV P
14A-K14A	GENERAL ELECTRIC	12HMA124A2	RLY	N	09-46	14MOV-12A	N	Y	CA	*	ESK-6MAJ REV 009, 1.64-28 REV M
14A-K14B	GENERAL ELECTRIC	12HMA124A2	RLY	N	09-47	14MOV-12B	N	Y	CA	*	ESK-6MAJ REV 009, 1.64-28 REV M
14A-K18A	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-46	14MOV-12A	N	Y	CA	*	ESK-6MAJ REV 009, 1.64-28 REV M, 1.64-35 REV K
14A-K18B	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-47	14MOV-12B	N	Y	CA	*	ESK-6MAJ REV 009, 1.64-28 REV M, 1.64-35 REV K
14A-K23A	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-46	02SOV-71A1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71B1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71C1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71D1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71E1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71G1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71H1	Y	Y	GERS	N	1.83-38 REV G
14A-K23B	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-47	02SOV-71A1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71B1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71C1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71D1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71E1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71G1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71H1	Y	Y	GERS	N	1.83-38 REV G
14A-K24A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-46	93EDG-A	Y	Y	GERS	N	1.64-30 REV P, ESK-5BY REV 5, ESK-11BA REV 18, ESK-11BF REV 17
						93EDG-C	Y	Y	GERS	N	1.64-30 REV P, ESK-5BY REV 5, ESK-11BA REV 18, ESK-11BF REV 17

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer. Part\model. Number.	Relay. type.	Low. ruggedness. relay.	Rack/Panel:	Component. For equipment.	Essential.	Satisfactory	Reason. code.	Outlier	Reference drwg(s)
14A-K24B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-47	93EDG-B	Y	Y	GERS	N	1.64-30 REV P, ESK-5BZ REV 5, ESK-11BQ REV 21, ESK-11BK REV 20
						93EDG-D	Y	Y	GERS	N	1.64-30 REV P, ESK-5BZ REV 5
14A-K25A	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-46	02SOV-71A1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71B1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71C1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71D1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71E1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71G1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71H1	Y	Y	GERS	N	1.83-38 REV G
14A-K25B	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-47	02SOV-71A1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71B1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71C1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71D1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71E1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71G1	Y	Y	GERS	N	1.83-38 REV G
						02SOV-71H1	Y	Y	GERS	N	1.83-38 REV G
14A-K26A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-46	93EDG-A	Y	Y	GERS	N	1.64-30 REV P, ESK-11BC REV 16, ESK-11BH REV 16
						93EDG-C	Y	Y	GERS	N	1.64-30 REV P, ESK-11BC REV 16, ESK-11BH REV 16
14A-K26B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-47	93EDG-B	Y	Y	GERS	N	1.64-30 REV P, ESK-11BM REV 18, ESK-11BS REV 19
						93EDG-D	Y	Y	GERS	N	1.64-30 REV P, ESK-11BM REV 18, ESK-11BS REV 19
14A-K5A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-46	23MOV-14	Y	Y	GERS	N	1.61-142 REV G
						23MOV-15	N	Y	CA	*	1.61-142 REV G
						23MOV-16	Y	Y	GERS	N	1.61-142 REV G, ESK-11AK REV 015
						23MOV-17	N	Y	CA	*	1.61-142 REV G
						23MOV-19	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-20	N	Y	CA	*	1.61-142 REV G,

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
											1.61-143 REV H
						23MOV-21	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-24	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						93EDG-A	Y	Y	GERS	N	1.64-30 REV P
						93EDG-B	Y	Y	GERS	N	1.64-30 REV P
						93EDG-C	Y	Y	GERS	N	1.64-30 REV P
						93EDG-D	Y	Y	GERS	N	1.64-30 REV P
14A-K5B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-47	23MOV-14	Y	Y	GERS	N	1.61-142 REV G
						23MOV-15	N	Y	CA	*	1.61-142 REV G
						23MOV-16	Y	Y	GERS	N	1.61-142 REV G, ESK-11AK REV 015
						23MOV-17	N	Y	CA	*	1.61-142 REV G
						23MOV-19	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-20	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-21	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-24	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						93EDG-A	Y	Y	GERS	N	1.64-30 REV P
						93EDG-B	Y	Y	GERS	N	1.64-30 REV P
						93EDG-C	Y	Y	GERS	N	1.64-30 REV P
						93EDG-D	Y	Y	GERS	N	1.64-30 REV P
14A-K6A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-46	23MOV-14	Y	Y	GERS	N	1.61-142 REV G
						23MOV-15	N	Y	CA	*	1.61-142 REV G
						23MOV-16	Y	Y	GERS	N	1.61-142 REV G, ESK-11AK REV 015
						23MOV-17	N	Y	CA	*	1.61-142 REV G
						23MOV-19	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-20	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-21	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-24	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						93EDG-A	Y	Y	GERS	N	1.64-30 REV P
						93EDG-B	Y	Y	GERS	N	1.64-30 REV P
						93EDG-C	Y	Y	GERS	N	1.64-30 REV P
						93EDG-D	Y	Y	GERS	N	1.64-30 REV P

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
14A-K6B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-47	23MOV-14	Y	Y	GERS	N	1.61-142 REV G
						23MOV-15	N	Y	NV	*	1.61-142 REV G
						23MOV-16	Y	Y	GERS	N	1.61-142 REV G, ESK-11AK REV 015
						23MOV-17	N	Y	CA	*	1.61-142 REV G
						23MOV-19	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-20	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-21	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-24	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						93EDG-A	Y	Y	GERS	N	1.64-30 REV P
						93EDG-B	Y	Y	GERS	N	1.64-30 REV P
						93EDG-C	Y	Y	GERS	N	1.64-30 REV P
						93EDG-D	Y	Y	GERS	N	1.64-30 REV P
14A-K7A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-46	93EDG-A	Y	Y	GERS	N	1.64-30 REV P
						93EDG-B	Y	Y	GERS	N	1.64-30 REV P
						93EDG-C	*	Y	GERS	N	1.64-30 REV P
						93EDG-D	Y	Y	GERS	N	1.64-30 REV P
14A-K7B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-47	93EDG-A	Y	Y	GERS	N	1.64-30 REV P
						93EDG-B	Y	Y	GERS	N	1.64-30 REV P
						93EDG-C	Y	Y	GERS	N	1.64-30 REV P
						93EDG-D	Y	Y	GERS	N	1.64-30 REV P
14A-K8A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-46	93EDG-A	Y	Y	GERS	N	1.64-30 REV P
						93EDG-B	Y	Y	GERS	N	1.64-30 REV P
						93EDG-C	Y	Y	GERS	N	1.64-30 REV P
						93EDG-D	Y	Y	GERS	N	1.64-30 REV P
14A-K8B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-47	93EDG-A	Y	Y	GERS	N	1.64-30 REV P
						93EDG-B	Y	Y	GERS	N	1.64-30 REV P
						93EDG-C	Y	Y	GERS	N	1.64-30 REV P
						93EDG-D	Y	Y	GERS	N	1.64-30 REV P
14A-S14A	GENERAL ELECTRIC	CR2940	CS	N	09-46	93EDG-A	N	Y	NV	*	1.64-30 REV P
						93EDG-C	N	Y	NV	*	1.64-30 REV P
14A-S14B	GENERAL	CR2940	CS	N	09-47	93EDG-B	N	Y	NV	*	1.64-30 REV P

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer. Part\model. Number.	Relay. type.	Low. ruggedness. relay.	Rack/Panel:	Component. For equipment.	Essential.	Satisfactory	Reason. code.	Outlier	Reference drwg(s)
	ELECTRIC					93EDG-D	N	Y	NV	*	1.64-30 REV P
14A-S1A	GENERAL ELECTRIC	SBM	CS	N	09-3	14MOV-12A	N	Y	NV	*	ESK-6MAJ REV 009, 1.64-29 REV E
14A-S1B	GENERAL ELECTRIC	SBM	CS	N	09-3	14MOV-12B	N	Y	NV	*	ESK-6MAJ REV 009, 1.64-29 REV E
14MOV-12A(OP)	LIMITORQUE CORP	SMB-2	OP	N	NA	14MOV-12A	N	Y	NV	*	ESK-6MAJ REV 009
14MOV-12B(OP)	LIMITORQUE CORP	SMB-2	OP	N	NA	14MOV-12B	N	Y	NV	*	ESK-6MAJ REV 009
14PS-41A	STATIC-O-RING	6N6-B5-NX-C1A-J JTTX6	INST	N	25-01	02SOV-71A1	N	Y	CA	*	1.64-30 REV P
						02SOV-71B1	N	Y	CA	*	1.64-30 REV P
						02SOV-71C1	N	Y	CA	*	1.64-30 REV P
						02SOV-71D1	N	Y	CA	*	1.64-30 REV P
						02SOV-71E1	N	Y	CA	*	1.64-30 REV P
						02SOV-71G1	N	Y	CA	*	1.64-30 REV P
						02SOV-71H1	N	Y	CA	*	1.64-30 REV P
14PS-41B	STATIC-O-RING	6N6-B5-NX-C1A-J JTTX6	INST	N	25-60	02SOV-71A1	N	Y	CA	*	1.64-30 REV P
						02SOV-71B1	N	Y	CA	*	1.64-30 REV P
						02SOV-71C1	N	Y	CA	*	1.64-30 REV P
						02SOV-71D1	N	Y	CA	*	1.64-30 REV P
						02SOV-71E1	N	Y	CA	*	1.64-30 REV P
						02SOV-71G1	N	Y	CA	*	1.64-30 REV P
						02SOV-71H1	N	Y	CA	*	1.64-30 REV P
14PS-44A	STATIC-O-RING	6N6-B5-NX-C1A-J JTTX6	INST	N	25-01	02SOV-71A1	N	Y	CA	*	1.64-30 REV P
						02SOV-71B1	N	Y	CA	*	1.64-30 REV P
						02SOV-71C1	N	Y	CA	*	1.64-30 REV P
						02SOV-71D1	N	Y	CA	*	1.64-30 REV P
						02SOV-71E1	N	Y	CA	*	1.64-30 REV P
						02SOV-71G1	N	Y	CA	*	1.64-30 REV P
						02SOV-71H1	N	Y	CA	*	1.64-30 REV P
14PS-44B	STATIC-O-RING	6N6-B5-NX-C1A-J JTTX6	INST	N	25-60	02SOV-71A1	N	Y	CA	*	1.64-30 REV P
						02SOV-71B1	N	Y	CA	*	1.64-30 REV P
						02SOV-71C1	N	Y	CA	*	1.64-30 REV P
						02SOV-71D1	N	Y	CA	*	1.64-30 REV P
						02SOV-71E1	N	Y	CA	*	1.64-30 REV P

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
						02SOV-71G1	N	Y	CA	*	1.64-30 REV P
						02SOV-71H1	N	Y	CA	*	1.64-30 REV P
15PS-122A	STATIC-O-RING	4N6-B5-NX-C1A-J JTTX6	INST	N	NA	46P-2A	Y	Y	GERS	N	ESK-11AC REV 007
						46P-2B	Y	Y	GERS	N	ESK-11AC REV 007
15PS-122B	STATIC-O-RING	4N6-B5-NX-C1A-J JTTX6	INST	N	NA	46P-2A	Y	Y	GERS	N	ESK-11AC REV 007
						46P-2B	Y	Y	GERS	N	ESK-11AC REV 007
15PS-122C	STATIC-O-RING	4N6-B5-NX-C1A-J JTTX6	INST	N	NA	46P-2A	Y	Y	GERS	N	ESK-11AC REV 007
						46P-2B	Y	Y	GERS	N	ESK-11AC REV 007
15PS-122D	STATIC-O-RING	4N6-B5-NX-C1A-J JTTX6	INST	N	NA	46P-2A	Y	Y	GERS	N	ESK-11AC REV 007
						46P-2B	Y	Y	GERS	N	ESK-11AC REV 007
16-1SS-131A1	ELECTRO SWITCH CORP	SERIES 20K	CS	N	27MAP	16-1TI-131A	N	Y	NV	*	LP-16-1-50 REV 3
16-1SS-131A2	ELECTRO SWITCH CORP	SERIES 20K	CS	N	27MAP	16-1TI-131A	N	Y	NV	*	LP-16-1-50 REV 3
16-1SS-131B1	ELECTRO SWITCH CORP	SERIES 20K	CS	N	27MAP	16-1TI-131B	N	Y	NV	*	LP-16-1-55 REV 3
16-1SS-131B2	ELECTRO SWITCH CORP	SERIES 20K	CS	N	27MAP	16-1TI-131B	N	Y	NV	*	LP-16-1-55 REV 3
16A-K14	GENERAL ELECTRIC	12HFA151A9H	RLY	N	09-41	29SOV-80A2(OP1)	N	Y	CA	*	ESK-7A REV 9, 1.70-107 REV E
						29SOV-80B2(OP1)	N	Y	CA	*	ESK-7A REV 9, 1.70-107 REV E
						29SOV-80C2(OP1)	N	Y	CA	*	ESK-7A REV 9, 1.70-107 REV E
						29SOV-80D2(OP1)	N	Y	CA	*	ESK-7A REV 9, 1.70-107 REV E
16A-K16	GENERAL ELECTRIC	12HFA151A9H	RLY	N	09-42	29SOV-86A2(OP1)	N	Y	CA	*	ESK-7B REV 13, 1.70-108 REV F
						29SOV-86B2(OP1)	N	Y	CA	*	ESK-7B REV 13, 1.70-108 REV F
						29SOV-86C2(OP1)	N	Y	CA	*	ESK-7B REV 13, 1.70-108 REV F
						29SOV-86D2(OP1)	N	Y	CA	*	ESK-7B REV 13, 1.70-108 REV F

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
16A-K17	GENERAL ELECTRIC	CR120A06002AA	RLY	N	09-41	10SOV-263A	N	Y	CA	*	1.65-87 REV F, 1.70-98 REV L, 1.70-104 REV G
16A-K26	GENERAL ELECTRIC	CR120A04002AA	RLY	N	09-41	12MOV-15	N	Y	CA	*	ESK-6MAF REV 13, 1.70-98 REV L
16A-K27	GENERAL ELECTRIC	CR120A04002AA	RLY	N	09-42	12MOV-18	N	Y	CA	*	ESK-11AD REV 14, 1.70-98 REV L, 1.70-110 REV F
16A-K29	GENERAL ELECTRIC	CR120A06002AA	RLY	N	09-41	10MOV-18	N	Y	CA	*	ESK-6MAF REV 13
16A-K30	GENERAL ELECTRIC	CR120A06002AA	RLY	N	09-42	10MOV-17	N	Y	CA	*	ESK-11AE REV 10, 1.70-110 REV F, 1.70-109 REV G
16A-K31	GENERAL ELECTRIC	CR120A04002AA	RLY	N	09-41	10MOV-18	N	Y	CA	*	ESK-6MAF REV 13
16A-K36	GENERAL ELECTRIC	CR120A04002AA	RLY	N	09-41	12MOV-15	N	Y	CA	*	ESK-6MAF REV 13, 1.70-98 REV L, 1.70-109 REV G
16A-K37	GENERAL ELECTRIC	12HFA151A2H	RLY	N	09-42	12MOV-18	N	Y	CA	*	ESK-11AD REV 14
16A-K51	GENERAL ELECTRIC	12HFA151A2H	RLY	N	09-41	29SOV-80A2(OP2)	N	Y	CA	*	ESK-7A REV 9, 1.70-107 REV E
						29SOV-80B2(OP2)	N	Y	CA	*	ESK-7A REV 9, 1.70-107 REV E
						29SOV-80C2(OP2)	N	Y	CA	*	ESK-7A REV 9, 1.70-107 REV E
						29SOV-80D2(OP2)	N	Y	CA	*	ESK-7A REV 9, 1.70-107 REV E
16A-K52	GENERAL ELECTRIC	12HFA151A2H	RLY	N	09-42	29SOV-86A2(OP2)	N	Y	CA	*	ESK-7B REV 13, 1.70-108 REV F
						29SOV-86B2(OP2)	N	Y	CA	*	ESK-7B REV 13, 1.70-108 REV F
						29SOV-86C2(OP2)	N	Y	CA	*	ESK-7B REV 13, 1.70-108 REV F
						29SOV-86D2(OP2)	N	Y	CA	*	ESK-7B REV 13, 1.70-108 REV F
16A-K53	GENERAL ELECTRIC	CR120A04002AA	RLY	N	09-41	10MOV-18	N	Y	CA	*	ESK-6MAF REV 13

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
16A-K54	GENERAL ELECTRIC	CR120A04002AA	RLY	N	09-42	10MOV-17	N	Y	CA	*	ESK-11AE REV 10, 1.70-098 REV L, 1.70-109 REV G
16A-K56	GENERAL ELECTRIC	CR120A04002AA	RLY	N	09-41	29MOV-74	N	Y	CA	*	ESK-6MAQ REV 8, 1.70-104 REV G, 1.70-105 REV E
16A-K59	GENERAL ELECTRIC	CR120A06002AA	RLY	N	09-41	10SOV-263B	N	Y	CA	*	1.65-91 REV J, 1.70-98 REV L, 1.70-104 REV G
16A-K69	GENERAL ELECTRIC	12HFA151A2H	RLY	N	09-41	29SOV-80A2(OP2)	N	Y	CA	*	1.70-107 REV E, 1.70-102 REV E, 1.70-103 REV C
						29SOV-80B2(OP2)	N	Y	CA	*	1.70-107 REV E, 1.70-102 REV E, 1.70-103 REV C
						29SOV-80C2(OP2)	N	Y	CA	*	1.70-107 REV E, 1.70-102 REV E, 1.70-103 REV C
						29SOV-80D2(OP2)	N	Y	CA	*	1.70-107 REV E, 1.70-102 REV E, 1.70-103 REV C
16A-K70	GENERAL ELECTRIC	12HFA151A2H	RLY	N	09-42	29SOV-86A2(OP2)	N	Y	CA	*	1.70-108 REV F, 1.70-102 REV E
						29SOV-86B2(OP2)	N	Y	CA	*	1.70-108 REV F, 1.70-102 REV E
						29SOV-86C2(OP2)	N	Y	CA	*	1.70-108 REV F, 1.70-102 REV E
						29SOV-86D2(OP2)	N	Y	CA	*	1.70-108 REV F, 1.70-102 REV E
16A-K71	GENERAL ELECTRIC	12HFA151A9H	RLY	N	09-41	29SOV-80A2(OP1)	N	Y	CA	*	1.70-107 REV E, 1.70-102 REV E, 1.70-103 REV C
						29SOV-80B2(OP1)	N	Y	CA	*	1.70-107 REV E, 1.70-102 REV E, 1.70-103 REV C
						29SOV-80C2(OP1)	N	Y	CA	*	1.70-107 REV E, 1.70-102 REV E, 1.70-103 REV C
						29SOV-80D2(OP1)	N	Y	CA	*	1.70-107 REV E, 1.70-102 REV E, 1.70-103 REV C
16A-K72	GENERAL	12HFA151A9H	RLY	N	09-42	29SOV-86A2(OP1)	N	Y	CA	*	1.70-108 REV F,

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
	ELECTRIC										1.70-102 REV E, 1.70-103 REV C
						29SOV-86B2(OP1)	N	Y	CA	*	1.70-108 REV F, 1.70-102 REV E, 1.70-103 REV C
						29SOV-86C2(OP1)	N	Y	CA	*	1.70-108 REV F, 1.70-102 REV E, 1.70-103 REV C
						29SOV-86D2(OP1)	N	Y	CA	*	1.70-108 REV F, 1.70-102 REV E, 1.70-103 REV C
16A-K7A	GENERAL ELECTRIC	12HFA151A9F	RLY	N	09-15	29SOV-80A2(OP1)	N	Y	CA	*	1.70-108 REV F, 1.70-102 REV E
						29SOV-80B2(OP1)	N	Y	CA	*	1.70-108 REV F, 1.70-102 REV E
						29SOV-80C2(OP1)	N	Y	CA	*	1.70-108 REV F, 1.70-102 REV E
						29SOV-80D2(OP1)	N	Y	CA	*	1.70-108 REV F, 1.70-102 REV E
						29SOV-86A2(OP2)	N	Y	CA	*	1.70-108 REV F, 1.70-102 REV E
						29SOV-86B2(OP2)	N	Y	CA	*	1.70-108 REV F, 1.70-102 REV E
						29SOV-86C2(OP2)	N	Y	CA	*	1.70-108 REV F, 1.70-102 REV E
						29SOV-86D2(OP2)	N	Y	CA	*	1.70-108 REV F, 1.70-102 REV E
16A-K7B	GENERAL ELECTRIC	12HFA151A9F	RLY	N	09-17	29SOV-80A2(OP2)	N	Y	CA	*	1.70-108 REV F, 1.70-103 REV C
						29SOV-80B2(OP2)	N	Y	CA	*	1.70-108 REV F, 1.70-103 REV C
						29SOV-80C2(OP2)	N	Y	CA	*	1.70-108 REV F, 1.70-103 REV C
						29SOV-86A2(OP1)	N	Y	CA	*	1.70-108 REV F, 1.70-103 REV C
						29SOV-86B2(OP1)	N	Y	CA	*	1.70-108 REV F, 1.70-103 REV C
						29SOV-86C2(OP1)	N	Y	CA	*	1.70-108 REV F, 1.70-103 REV C
						29SOV-86D2(OP1)	N	Y	CA	*	1.70-108 REV F, 1.70-103 REV C
16A-K7C	GENERAL ELECTRIC	12HFA151A9F	RLY	N	09-15	29SOV-80A2(OP1)	N	Y	CA	*	1.70-108 REV F, 1.70-102 REV E
						29SOV-80B2(OP1)	N	Y	CA	*	1.70-108 REV F, 1.70-102 REV E

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer. Part\model. Number.	Relay. type.	Low. ruggedness. relay.	Rack/Panel:	Component. For equipment.	Essential.	Satisfactory	Reason. code.	Outlier	Reference drwg(s)
						29SOV-80C2(OP1)	N	Y	CA	*	1.70-108 REV F, 1.70-102 REV E
						29SOV-80D2(OP1)	N	Y	CA	*	1.70-108 REV F, 1.70-102 REV E
						29SOV-86A2(OP2)	N	Y	CA	*	1.70-108 REV F, 1.70-102 REV E
						29SOV-86B2(OP2)	N	Y	CA	*	1.70-108 REV F, 1.70-102 REV E
						29SOV-86C2(OP2)	N	Y	CA	*	1.70-108 REV F, 1.70-102 REV E
						29SOV-86D2(OP2)	N	Y	CA	*	1.70-108 REV F, 1.70-102 REV E
16A-K7D	GENERAL ELECTRIC	12HFA151A9F	RLY	N	09-17	29SOV-80A2(OP2)	N	Y	CA	*	1.70-108 REV F, 1.70-103 REV C
						29SOV-80B2(OP2)	N	Y	CA	*	1.70-108 REV F, 1.70-103 REV C
						29SOV-80C2(OP2)	N	Y	CA	*	1.70-108 REV F, 1.70-103 REV C
						29SOV-80D2(OP2)	N	Y	CA	*	1.70-108 REV F, 1.70-103 REV C
						29SOV-86A2(OP1)	N	Y	CA	*	1.70-108 REV F, 1.70-103 REV C
						29SOV-86B2(OP1)	N	Y	CA	*	1.70-108 REV F, 1.70-103 REV C
						29SOV-86C2(OP1)	N	Y	CA	*	1.70-108 REV F, 1.70-103 REV C
						29SOV-86D2(OP1)	N	Y	CA	*	1.70-108 REV F, 1.70-103 REV C
16A-S10	GENERAL ELECTRIC	SBM	CS	N	09-3	10MOV-17	N	Y	NV	*	ESK-11AE REV 10, 1.70-098 REV L, 1.70-109 REV G
16A-S15	GENERAL ELECTRIC	SBM	CS	N	09-4	12MOV-15	N	Y	NV	*	ESK-6MAF REV 13, 1.70-98 REV L
16A-S16	GENERAL ELECTRIC	SBM	CS	N	09-3	12MOV-18	N	Y	NV	*	ESK-11AD REV 14, 1.70-98 REV L
16A-S1A	GENERAL ELECTRIC	SBM	CS	N	09-4	29SOV-80A2(OP1)	N	Y	NV	*	ESK-7A REV 9, 1.70-107 REV E
						29SOV-80A2(OP2)	N	Y	NV	*	ESK-7A REV 9, 1.70-107 REV E
16A-S1B	GENERAL ELECTRIC	SBM	CS	N	09-4	29SOV-80A2(OP1)	N	Y	NV	*	ESK-7A REV 9, 1.70-107 REV E
						29SOV-80A2(OP2)	N	Y	NV	*	ESK-7A REV 9,

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
											1.70-107 REV E
16A-S1C	GENERAL ELECTRIC	SBM	CS	N	09-4	29SOV-80A2(OP1)	N	Y	NV	*	ESK-7A REV 9, 1.70-107 REV E
						29SOV-80A2(OP2)	N	Y	NV	*	ESK-7A REV 9, 1.70-107 REV E
16A-S1D	GENERAL ELECTRIC	SBM	CS	N	09-4	29SOV-80A2(OP1)	N	Y	NV	*	ESK-7A REV 9, 1.70-107 REV E
						29SOV-80A2(OP2)	N	Y	NV	*	ESK-7A REV 9, 1.70-107 REV E
16A-S2A	GENERAL ELECTRIC	SBM	CS	N	09-3	29SOV-86A2(OP1)	N	Y	NV	*	ESK-7B REV 13, 1.70-108 REV F
						29SOV-86A2(OP2)	N	Y	NV	*	ESK-7B REV 13, 1.70-108 REV F
16A-S2B	GENERAL ELECTRIC	SBM	CS	N	09-3	29SOV-86B2(OP1)	N	Y	NV	*	ESK-7B REV 13, 1.70-108 REV F
						29SOV-86B2(OP2)	N	Y	NV	*	ESK-7B REV 13, 1.70-108 REV F
16A-S2C	GENERAL ELECTRIC	SBM	CS	N	09-3	29SOV-86C2(OP1)	N	Y	NV	*	ESK-7B REV 13, 1.70-108 REV F
						29SOV-86C2(OP2)	N	Y	NV	*	ESK-7B REV 13, 1.70-108 REV F
16A-S2D	GENERAL ELECTRIC	SBM	CS	N	09-3	29SOV-86D2(OP1)	N	Y	NV	*	ESK-7B REV 13, 1.70-108 REV F
						29SOV-86D2(OP2)	N	Y	NV	*	ESK-7B REV 13, 1.70-108 REV F
16A-S46	GENERAL ELECTRIC	SBM	CS	N	09-4	02SOV-17	N	Y	NV	*	ESK-7F REV 5
16A-S47	GENERAL ELECTRIC	SBM	CS	N	09-4	02SOV-18	N	Y	NV	*	ESK-7F REV 5
16A-S5	GENERAL ELECTRIC	SBM	CS	N	09-4	29MOV-74	N	Y	NV	*	ESK-6MAQ REV 8, 1.70-105 REV E
16A-S9	GENERAL ELECTRIC	SBM	CS	N	09-4	10MOV-18	N	Y	NV	*	ESK-6MAF REV 13
23-18-1BPIB15*			RLY	N		23P-150	N	Y	CA	*	ESK-11CB REV 008
23-42X-1HPIB			RLY	N		23MOV-14	N	Y	CA	*	ESK-11AK REV 015

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
01*											
23-42X-1HPIB 02*			RLY	N		23MOV-16	N	Y	CA	*	ESK-11AK REV 015
23-42X-1HPIB 03*			RLY	N		23MOV-17	N	Y	CA	*	ESK-11AL REV 013
23-42X-1HPIB 04*			RLY	N		23MOV-19	N	Y	CA	*	ESK-11AL REV 013
23-42X-1HPIB 05*			RLY	N		23MOV-20	N	Y	CA	*	ESK-11AM REV 013
23-42X-1HPIB 06*			RLY	N		23MOV-21	N	Y	CA	*	ESK-11AM REV 013
23-42X-1HPIB 07*			RLY	N		23MOV-24	N	Y	CA	*	ESK-11AN REV 013
23-42X-1HPIB 08*			RLY	N		23MOV-25	N	Y	CA	*	ESK-11AN REV 013
23-42X-1HPIB 09*			RLY	N		23MOV-57	N	Y	CA	*	ESK-11AP REV 11
23-42X-1HPIB 10*			RLY	N		23MOV-58	N	Y	CA	*	ESK-11AP REV 11
23-42X-1HPIB 15*			RLY	N		23P-150	N	Y	CA	*	ESK-11CB REV 008
23-42X-1HPIB 34*			RLY	N		23MOV-60	N	Y	CA	*	ESK-11AAG REV 010
23-74-1HPIA0 1	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5A	23MOV-15	N	Y	CA	*	ESK-6MAV REV 011
23-74-1HPIB0 1	GENERAL ELECTRIC	IC2820	RLY	N	71BMCC-2	23MOV-14	N	Y	CA	*	ESK-11AK REV 015
23-74-1HPIB0 2	GENERAL ELECTRIC	IC2820	RLY	N	71BMCC-6	23MOV-16	N	Y	CA	*	ESK-11AK REV 015
23-74-1HPIB0 3	GENERAL ELECTRIC	IC2820	RLY	N	71BMCC-2	23MOV-17	N	Y	CA	*	ESK-11AL REV 013
23-74-1HPIB0	GENERAL	IC2820	RLY	N	71BMCC-6	23MOV-19	N	Y	CA	*	ESK-11AL REV 013

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
4	ELECTRIC										
23-74-1HP1B05	GENERAL ELECTRIC	IC2820	RLY	N	71BMCC-6	23MOV-20	N	Y	CA	*	ESK-11AM REV 013
23-74-1HP1B06	GENERAL ELECTRIC	IC2820	RLY	N	71BMCC-6	23MOV-21	N	Y	CA	*	ESK-11AM REV 013
23-74-1HP1B07	GENERAL ELECTRIC	IC2820	RLY	N	71BMCC-4	23MOV-24	N	Y	CA	*	ESK-11AN REV 013
23-74-1HP1B09	GENERAL ELECTRIC	IC2820	RLY	N	71BMCC-4	23MOV-57	N	Y	CA	*	ESK-11AP REV 11
23-74-1HP1B10	GENERAL ELECTRIC	IC2820	RLY	N	71BMCC-4	23MOV-58	N	Y	CA	*	ESK-11AP REV 11
23-74-1HP1B15*			RLY	N		23P-150	N	Y	CA	*	ESK-11CB REV 008
23-74-1HP1B34	GENERAL ELECTRIC	IC2820	RLY	N	71BMCC-2	23MOV-60	N	Y	CA	*	ESK-11AAG REV 010
23-74-1HP1B35	GENERAL ELECTRIC	CR2810	RLY	N	09AR-6B	23MOV-59	N	Y	CA	*	ESK-6MBF REV 002
23A-K10	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-39	23MOV-25	N	Y	CA	*	ESK-11AN REV 013
23A-K11	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-39	23HOV-1	N	Y	CA	*	1.61-148 REV D, 1.61-143 REV H, 1.61-142 REV G
23A-K111A	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-95	23MOV-15	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H
						23MOV-58	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H, 1.60-21 REV H
23A-K111B	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-96	23HOV-1	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H, 1.60-21 REV H
						23MOV-16	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H, 1.60-21 REV H
						23MOV-57	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H,

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
						23MOV-60	N	Y	CA	*	1.60-21 REV H 1.60-20 REV H, 1.60-21 REV H
23A-K112A	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-95	23MOV-15	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H
						23MOV-58	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H, 1.60-21 REV H
23A-K112B	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-96	23HOV-1	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H, 1.60-21 REV H
						23MOV-16	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H, 1.60-21 REV H
						23MOV-57	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H, 1.60-21 REV H
						23MOV-60	N	Y	CA	*	1.60-20 REV H, 1.60-21 REV H
23A-K119A	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-95	23MOV-15	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H
						23MOV-58	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H, 1.60-21 REV H
23A-K119B	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-96	23HOV-1	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H, 1.60-21 REV H
						23MOV-16	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H, 1.60-21 REV H
						23MOV-57	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H, 1.60-21 REV H
						23MOV-60	N	Y	CA	*	1.60-20 REV H, 1.60-21 REV H
23A-K12	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-39	23HOV-1	N	Y	CA	*	1.61-148 REV D, 1.61-143 REV H, 1.61-142 REV G
23A-K120A	AGASTAT RELAY CO	EGPBC20004003	RLY	N	09-95	23MOV-15	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
	(AMERACE)					23MOV-58	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H, 1.60-21 REV H
23A-K120B	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-96	23HOV-1	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H, 1.60-21 REV H
						23MOV-16	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H, 1.60-21 REV H
						23MOV-57	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H, 1.60-21 REV H
						23MOV-60	N	Y	CA	*	1.60-20 REV H, 1.60-21 REV H
23A-K129A	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-95	23MOV-15	N	Y	CA	*	1.61-143 REV H
						23MOV-58	N	Y	CA	*	1.60-21 REV H
23A-K129B	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-96	23HOV-1	N	Y	CA	*	1.60-21 REV H, 1.61-142 REV G, 1.61-143 REV H
						23MOV-16	N	Y	CA	*	1.60-21 REV H, 1.61-142 REV G, 1.61-143 REV H
						23MOV-57	N	Y	CA	*	1.60-21 REV H
						23MOV-60	N	Y	CA	*	1.60-21 REV H, 1.61-143 REV H
23A-K13	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-39	23HOV-1	N	Y	CA	*	1.61-148 REV D, 1.61-142 REV G
						23HOV-2	Y	Y	GERS	N	1.61-145 REV J
						23MOV-25	N	Y	CA	*	ESK-11AN REV 013, 1.61-140 REV L
23A-K130A	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-95	23MOV-15	N	Y	CA	*	1.61-143 REV H
						23MOV-58	N	Y	CA	*	1.60-21 REV H
23A-K130B	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-96	23HOV-1	N	Y	CA	*	1.60-21 REV H, 1.61-142 REV G, 1.61-143 REV H
						23MOV-16	N	Y	CA	*	1.60-21 REV H, 1.61-142 REV G,

Main.. ..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
											1.61-143 REV H
						23MOV-57	N	Y	CA	*	1.60-21 REV H
						23MOV-60	N	Y	CA	*	1.60-21 REV H, 1.61-143 REV H
23A-K131A	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-95	23MOV-15	N	Y	CA	*	1.61-143 REV H
						23MOV-58	N	Y	CA	*	1.60-21 REV H, 1.61-142 REV G, 1.61-143 REV H
23A-K131B	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-95	23HOV-1	N	Y	CA	*	1.60-21 REV H, 1.61-142 REV G, 1.61-143 REV H
						23MOV-16	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-57	N	Y	CA	*	1.60-21 REV H, 1.61-142 REV G, 1.61-143 REV H
						23MOV-60	N	Y	CA	*	1.60-21 REV H, 1.61-143 REV H
23A-K132A	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-95	23MOV-15	N	Y	CA	*	1.61-143 REV H
						23MOV-58	N	Y	CA	*	1.60-21 REV H, 1.61-142 REV G, 1.61-143 REV H
23A-K132B	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-96	23HOV-1	N	Y	CA	*	1.60-21 REV H, 1.61-142 REV G, 1.61-143 REV H
						23MOV-16	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-57	N	Y	CA	*	1.60-21 REV H, 1.61-142 REV G, 1.61-143 REV H
						23MOV-60	N	Y	CA	*	1.60-21 REV H, 1.61-143 REV H
23A-K135A	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-95	23MOV-15	N	Y	CA	*	1.85-14 REV F, 1.60-21 REV H
						23MOV-58	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H, 1.60-21 REV H

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
23A-K135B	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-96	23HOV-1	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H, 1.60-21 REV H
						23MOV-16	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H, 1.60-21 REV H
						23MOV-57	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H, 1.60-21 REV H
						23MOV-60	N	Y	CA	*	1.60-20 REV H, 1.60-21 REV H
23A-K136A	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-95	23MOV-15	N	Y	CA	*	1.85-14 REV F, 1.60-21 REV H
						23MOV-58	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H, 1.60-21 REV H
23A-K136B	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-96	23HOV-1	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H, 1.60-21 REV H
						23MOV-16	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H, 1.60-21 REV H
						23MOV-57	N	Y	CA	*	1.85-14 REV F, 1.60-20 REV H, 1.60-21 REV H
						23MOV-60	N	Y	CA	*	1.60-20 REV H, 1.60-21 REV H
23A-K15	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-39	23HOV-1	N	Y	CA	*	1.60-21 REV H, 1.61-142 REV G, 1.61-143 REV H
						23MOV-16	N	Y	CA	*	ESK-11AK REV 015, 1.61-140 REV L, 1.61-146 REV E, 1.61-143 REV H
						23MOV-57	N	Y	CA	*	ESK-11AP REV 11, 1.61-140 REV L, 1.61-143 REV H
						23MOV-60	N	Y	CA	*	ESK-11AAG REV 010, 1.61-140 REV L, 1.61-143 REV H
23A-K16	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-32	23MOV-15	N	Y	CA	*	ESK-6MAV REV 011, 1.61-140 REV L, 1.61-146 REV E,

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
						23MOV-58	N	Y	CA	*	1.61-143 REV H ESK-11AP REV 11, 1.61-140 REV L, 1.61-143 REV H
23A-K17	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-39	23MOV-57	N	Y	CA	*	ESK-11AP REV 11
						23MOV-58	N	Y	CA	*	ESK-11AP REV 11
23A-K18	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-39	23MOV-17	N	Y	CA	*	ESK-11AK REV 015, 1.61-140 REV L, ESK-11AL REV 013, ESK-11AM REV 013
						23MOV-21	N	Y	CA	*	ESK-11AK REV 015, 1.61-140 REV L, ESK-11AL REV 013, ESK-11AM REV 013
						23MOV-24	N	Y	CA	*	ESK-11AK REV 015, 1.61-140 REV L, ESK-11AL REV 013, ESK-11AM REV 013
23A-K19	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-39	23MOV-57	N	Y	CA	*	ESK-11AP REV 11
						23MOV-58	N	Y	CA	*	ESK-11AP REV 11
23A-K2	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-39	23MOV-14	Y	Y	GERS	N	ESK-11AK REV 015, 1.61-140 REV L, ESK-11AL REV 013, ESK-11AM REV 013
						23MOV-16	Y	Y	GERS	N	ESK-11AK REV 015, 1.61-140 REV L, 1.61-142 REV G
						23MOV-17	N	Y	CA	*	ESK-11AK REV 015, 1.61-140 REV L, ESK-11AL REV 013, ESK-11AM REV 013
						23MOV-19	N	Y	CA	*	ESK-11AK REV 015, 1.61-140 REV L, ESK-11AL REV 013, ESK-11AM REV 013
						23MOV-21	N	Y	CA	*	ESK-11AK REV 015, 1.61-140 REV L, ESK-11AL REV 013, ESK-11AM REV 013
						23MOV-24	N	Y	CA	*	ESK-11AK REV 015, 1.61-140 REV L, ESK-11AL REV 013,

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
											ESK-11AM REV 013
23A-K20	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-39	23MOV-17	N	Y	CA	*	ESK-11AK REV 015, 1.61-140 REV L, ESK-11AL REV 013, ESK-11AM REV 013
						23MOV-21	N	Y	CA	*	ESK-11AK REV 015, 1.61-140 REV L, ESK-11AL REV 013, ESK-11AM REV 013
						23MOV-24	N	Y	CA	*	ESK-11AK REV 015, 1.61-140 REV L, ESK-11AL REV 013, ESK-11AM REV 013
23A-K23	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-39	23HOV-2	N	Y	CA	*	1.61-142 REV G
23A-K26	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-39	23MOV-14	Y	Y	GERS	N	1.61-142 REV G, 1.61-143 REV H
						23MOV-15	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-16	Y	Y	GERS	N	ESK-11AK REV 015, 1.61-142 REV G, 1.61-143 REV H
						23MOV-17	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-19	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-20	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-21	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-24	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
23A-K27	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-39	23MOV-14	Y	Y	GERS	N	1.61-142 REV G, 1.61-143 REV H
						23MOV-15	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-16	Y	Y	GERS	N	ESK-11AK REV 015, 1.61-142 REV G, 1.61-143 REV H
						23MOV-17	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-19	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-20	N	Y	CA	*	1.61-142 REV G,

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer. Part\model. Number.	Relay. type.	Low. ruggedness. relay.	Rack/Panel:	Component. For equipment.	Essential.	Satisfactory	Reason. code.	Outlier	Reference drwg(s)
											1.61-143 REV H
						23MOV-21	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-24	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
23A-K3	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-39	23MOV-15	N	Y	CA	*	ESK-6MAV REV 011, 1.61-140 REV L, 1.61-146 REV E
						23MOV-16	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-20	N	Y	CA	*	ESK-11AM REV 013, 1.61-140 REV L
						23MOV-60	N	Y	CA	*	1.61-140 REV L, 1.61-142 REV G
23A-K30	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-39	23HOV-1	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-16	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-57	N	Y	CA	*	1.60-142 REV G, 1.61-143 REV H
						23MOV-60	N	Y	CA	*	1.61-143 REV H
23A-K33	GENERAL ELECTRIC	12HMA124A2	RLY	N	09-39	23HOV-1	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-16	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-57	N	Y	CA	*	1.60-142 REV G, 1.61-143 REV H
23A-K34	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-39	23MOV-16	N	Y	CA	*	ESK-11AK REV 015, 1.61-146 REV E
						23MOV-60	N	Y	CA	*	ESK-11AAG REV 010, 1.61-140 REV L
23A-K35	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-39	23HOV-1	N	Y	CA	*	1.61-148 REV D, 1.61-143 REV H, 1.61-142 REV G
						23MOV-16	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-57	N	Y	CA	*	ESK-11AP REV 11, 1.61-140 REV L
						23MOV-60	N	Y	CA	*	1.61-140 REV L, 1.61-142 REV G
23A-K39	GENERAL	12HFA151A2F	RLY	N	09-39	23MOV-25	N	Y	CA	*	ESK-11AN REV 013,

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer. Part\model. Number.	Relay. type.	Low. ruggedness. relay.	Rack/Panel:	Component. For equipment.	Essential.	Satisfactory	Reason. code.	Outlier	Reference drwg(s)
	ELECTRIC					23SOV-42	N	Y	CA	*	1.61-140 REV L ESK-11AX REV 001, 1.61-140 REV L, 1.61-142 REV G
23A-K4	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-39	23MOV-14	Y	Y	GERS	N	ESK-11AK REV 015, 1.61-140 REV L, ESK-11AL REV 013, ESK-11AM REV 013
						23MOV-16	Y	Y	GERS	N	ESK-11AK REV 015, 1.61-140 REV L
						23MOV-17	N	Y	CA	*	ESK-11AK REV 015, 1.61-140 REV L, ESK-11AL REV 013, ESK-11AM REV 013
						23MOV-19	N	Y	CA	*	ESK-11AK REV 015, 1.61-140 REV L, ESK-11AL REV 013, ESK-11AM REV 013
						23MOV-21	N	Y	CA	*	ESK-11AK REV 015, 1.61-140 REV L, ESK-11AL REV 013, ESK-11AM REV 013
23A-K43	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-32	23MOV-15	N	Y	CA	*	1.61-143 REV H
						23MOV-58	N	Y	CA	*	1.60-142 REV G, 1.61-143 REV H
23A-K44	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-32	23MOV-15	N	Y	CA	*	ESK-6MAV REV 011, 1.61-140 REV L, 1.61-146 REV E
						23MOV-58	N	Y	CA	*	ESK-11AP REV 11, 1.61-140 REV L
23A-K45	GENERAL ELECTRIC	12HMA124A9	RLY	N	09-32	23HOV-1	N	Y	*	*	1.60-20 REV H, 1.61-142 REV G, 1.61-143 REV H
23A-K46	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-32	23MOV-14	Y	Y	GERS	N	1.61-142 REV G, 1.61-143 REV H
						23MOV-15	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-16	Y	Y	GERS	N	1.61-142 REV G, 1.61-143 REV H
						23MOV-17	N	Y	NV	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-19	N	Y	CA	*	1.61-142 REV G,

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer Part\model Number	Relay. type	Low. ruggedness. relay	Rack/Panel:	Component. For equipment	Essential.	Satisfactory	Reason. code	Outlier	Reference drwg(s)
											1.61-143 REV H
						23MOV-20	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-21	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-24	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
23A-K47	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-32	23MOV-14	Y	Y	GERS	N	1.61-142 REV G, 1.61-143 REV H
						23MOV-15	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-16	Y	Y	GERS	N	ESK-11AK REV 015, 1.61-142 REV G, 1.61-143 REV H
						23MOV-17	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-19	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-20	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-21	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-24	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
23A-K49	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-32	23MOV-15	N	Y	CA	*	1.61-143 REV H
						23MOV-58	N	Y	CA	*	1.60-142 REV G, 1.61-143 REV H
23A-K5	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-39	23MOV-15	N	Y	CA	*	ESK-6MAV REV 011, 1.61-140 REV L, 1.61-146 REV E
						23MOV-16	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-20	N	Y	CA	*	ESK-11AM REV 013, 1.61-140 REV L, ESK-11AN REV 013
						23MOV-24	N	Y	CA	*	ESK-11AK REV 015, 1.61-140 REV L, ESK-11AL REV 013, ESK-11AM REV 013
						23MOV-60	N	Y	CA	*	1.61-140 REV L, 1.61-142 REV G
23A-K51	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-39	23MOV-57	N	Y	CA	*	ESK-11AP REV 11, 1.61-140 REV L

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer. Part\model Number.	Relay. type..	Low. ruggedness. relay.	Rack/Panel:	Component. For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
						23MOV-58	N	Y	CA	*	ESK-11AP REV 11, 1.61-140 REV L
23A-K54	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-39	23MOV-19	N	Y	CA	*	ESK-11AL REV 013, 1.61-140 REV L
23A-K56	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-39	23P-150	N	Y	CA	*	ESK-11CB REV 008, 1.61-142 REV G, 1.61-140 REV L, 1.61-143 REV H
23A-K57	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-39	23HOV-1	N	Y	CA	*	1.61-148 REV D
23A-K8	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-39	23HOV-1	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
23A-K9	GENERAL ELECTRIC	12HGA11A52F	RLY		09-39	23HOV-1	N	Y	CA	*	1.61-142 REV G
23A-S1	GENERAL ELECTRIC	SBM	CS	N	09-3	23MOV-15	N	Y	NV	*	ESK-6MAV REV 011, 1.61-140 REV L, 1.61-146 REV E
23A-S10	GENERAL ELECTRIC	SBM	CS	N	09-3	23MOV-57	N	Y	NV	*	ESK-11AP REV 11
23A-S11	GENERAL ELECTRIC	SBM	CS	N	09-3	23MOV-58	N	Y	NV	*	ESK-11AP REV 11, 1.61-140 REV L
23A-S12	GENERAL ELECTRIC	CR2940	CS	N	09-4	23SOV-42	N	Y	NV	*	ESK-11AX REV 001, 1.61-140 REV L
23A-S14	GENERAL ELECTRIC	CR2940	CS	N	09-3	23SOV-53	N	Y	NV	*	ESK-11AY REV 002
23A-S17	GENERAL ELECTRIC	CR2940	CS	N	09-3	23HOV-1	N	Y	NV	*	1.61-143 REV H
23A-S18A	GENERAL ELECTRIC	CR2940	CS	N	09-3	23MOV-15	N	Y	NV	*	1.61-143 REV H
						23MOV-58	N	Y	NV	*	1.61-142 REV G, 1.61-143 REV H
23A-S18B	GENERAL ELECTRIC	CR2940	CS	N	09-3	23HOV-1	N	Y	NV	*	1.61-148 REV D, 1.61-143 REV H, 1.61-142 REV G
						23MOV-57	N	Y	NV	*	1.61-142 REV G,

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
						23MOV-60	N	Y	NV	*	1.61-143 REV H 1.85-12 REV E, 1.61-140 REV L
23A-S19	GENERAL ELECTRIC	CR2940	CS	N	09-3	23HOV-1	N	Y	NV	*	1.61-143 REV H
23A-S1A	GENERAL ELECTRIC	CR2940V202	CS	N	09-3	23MOV-15	N	Y	NV	*	ESK-6MAV REV 011, 1.61-140 REV L, 1.61-146 REV E
23A-S2	GENERAL ELECTRIC	SBM	CS	N	09-3	23MOV-16	N	Y	NV	*	ESK-11AK REV 015, 1.61-146 REV E
23A-S20	GENERAL ELECTRIC	SBM	CS	N	09-3	23P-150	N	Y	NV	*	ESK-11CB REV 008, 1.61-140 REV L
23A-S25	GENERAL ELECTRIC	CR2940	CS	N	09-3	23HOV-1	N	Y	NV	*	1.61-148 REV D, 1.61-143 REV H, 1.61-142 REV G
23A-S26	GENERAL ELECTRIC	CR2940	CS	N	09-3	23MOV-16	N	Y	NV	*	1.61-142 REV G
						23MOV-60	N	Y	NV	*	1.61-140 REV L, 1.61-142 REV G
23A-S29	GENERAL ELECTRIC	SBM	CS	N	09-3	23MOV-60	N	Y	NV	*	ESK-11AAG REV 010, 1.61-140 REV L
23A-S2A	GENERAL ELECTRIC	CR294V202	CS	N	09-3	23MOV-16	N	Y	NV	*	ESK-11AK REV 015, 1.61-146 REV E
23A-S3	GENERAL ELECTRIC	SBM	CS	N	09-3	23MOV-14	N	Y	NV	*	ESK-11AK REV 015, 1.61-140 REV L
23A-S30	GENERAL ELECTRIC	SBM	CS	N	09-3	23MOV-59	N	Y	NV	*	1.61-146 REV E
23A-S31	GENERAL ELECTRIC	CR2940	CS	N	09-3	23MOV-57	N	Y	NV	*	ESK-11AP REV 11, 1.61-140 REV L
						23MOV-58	N	Y	NV	*	ESK-11AP REV 11, 1.61-140 REV L
23A-S4	GENERAL ELECTRIC	SBM	CS	N	09-3	23MOV-17	N	Y	NV	*	ESK-11AL REV 013, 1.61-140 REV L
23A-S5	GENERAL	SBM	CS	N	09-3	23MOV-19	N	Y	NV	*	ESK-11AL REV 013,

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
	ELECTRIC										1.61-140 REV L
23A-S6	GENERAL ELECTRIC	SBM	CS	N	09-3	23MOV-20	N	Y	NV	*	ESK-11AM REV 013, 1.61-140 REV L
23A-S7	GENERAL ELECTRIC	SBM	CS	N	09-3	23MOV-21	N	Y	NV	*	ESK-11AM REV 013
23A-S8	GENERAL ELECTRIC	SBM	CS	N	09-3	23MOV-25	N	Y	NV	*	ESK-11AN REV 013, 1.61-140 REV L
23A-S9	GENERAL ELECTRIC	SBM	CS	N	09-3	23MOV-24	N	Y	NV	*	ESK-11AN REV 013
23CS-1HPIB02	ELECTRO SWITCH CORP	SERIES 20P	CS	N	25RSP	23MOV-16	N	Y	NV	*	ESK-11AK REV 015
23CS-1HPIB08	ELECTRO SWITCH CORP	SERIES 20P	CS	N	25ASP-2	23MOV-25	N	Y	NV	*	ESK-11AN REV 013
23CS-1HPIB34	ELECTRO SWITCH CORP	SERIES 20P	CS	N	25ASP-2	23MOV-60	N	Y	NV	*	ESK-11AAG REV 010
23DPT-76	ROSEMOUNT INC	1153DB5RC	INST	N	25RK-1-02	23MOV-15	N	Y	NV	*	1.60-21 REV H
						23MOV-58	N	Y	NV	*	1.60-21 REV H
23DPT-77	ROSEMOUNT INC	1153DB5RC	INST	N	25RK-1-04	23HOV-1	N	Y	NV	*	1.60-21 REV H
						23MOV-16	N	Y	NV	*	1.60-21 REV H
						23MOV-57	N	Y	NV	*	1.60-21 REV H
						23MOV-60	N	Y	NV	*	1.60-21 REV H
23FS-78	BARTON INSTRUMENT CO (ITT)	289	INST	N	25-60	23MOV-25	N	Y	CA	*	ESK-11AN REV 013
23HOV-2	TERRY STEAM TURBINE CO	CCS	OP	N	23TU-2	23MOV-19	N	Y	NV	*	1.61-142 REV G
						23MOV-25	N	Y	NV	*	1.61-142 REV G
23IS-1HPIB02	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25RSP	23MOV-16	N	Y	NV	*	ESK-11AK REV 015
23IS-1HPIB08	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25ASP-2	23MOV-25	N	Y	NV	*	ESK-11AN REV 013
23IS-1HPIB34	ELECTRO	SERIES 20K	CS	N	25ASP-2	23MOV-60	N	Y	NV	*	ESK-11AAG REV 010

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer. Part\model. Number.	Relay. type.	Low. ruggedness. relay.	Rack/Panel:	Component. for equipment.	Essential.	Satisfactory	Reason. code.	Outlier	Reference drwg(s)
	SWITCH CORP										
23LS-74A	MAGNETROL INC	291MPG-S1MD4DC	INST	N	NA	23MOV-57	N	Y	CA	*	1.61-142 REV G
						23MOV-58	N	Y	CA	*	1.61-142 REV G
23LS-74B	MAGNETROL INC	291-MPG-S1MD4DC	INST	N	NA	23MOV-57	N	Y	CA	*	1.61-142 REV G
						23MOV-58	N	Y	CA	*	1.61-142 REV G
23LS-75A	MAGNETROL INC	291MPG-S1MD4DC	INST	N	NA	23MOV-57	N	Y	CA	*	1.61-142 REV G
						23MOV-58	N	Y	CA	*	1.61-142 REV G
23LS-75B	MAGNETROL INC	291-MPG-S1MD4DC	INST	N	NA	23MOV-57	N	Y	CA	*	1.61-142 REV G
						23MOV-58	N	Y	CA	*	1.61-142 REV G
23LS-90	ROBERTSHAW CONTROLS CO	SL-925-A2X-S11-C3X-1	INST	N	NA	23SOV-53	N	Y	CA	*	ESK-11AY REV 002
23LS-91A	MAGNETROL INC	291MPG-S1MD4DC	INST	N	NA	23MOV-57	N	Y	CA	*	1.61-142 REV G
						23MOV-58	N	Y	CA	*	1.61-142 REV G
23LS-91B	MAGNETROL INC	291MPG-S1MD4DC	INST	N	NA	23MOV-57	N	Y	CA	*	1.61-142 REV G
						23MOV-58	N	Y	CA	*	1.61-142 REV G
23MOV-14(OP)	LIMITORQUE CORP	SB-1	OP	N	NA	23MOV-14	N	Y	NV	*	ESK-11AK REV 015
						23MOV-19	N	Y	NV	*	1.61-142 REV G
						23MOV-25	N	Y	NV	*	1.61-142 REV G
23MOV-15(OP)	LIMITORQUE CORP	SB-1	OP	N	NA	23MOV-15	N	Y	NV	*	ESK-6MAV REV 011
23MOV-16(OP)	LIMITORQUE CORP	SB	OP	N	NA	23MOV-16	N	Y	NV	*	ESK-11AK REV 015, 1.61-146 REV E
23MOV-17(OP)	LIMITORQUE CORP	SMB-0	OP	N	NA	23MOV-17	N	Y	NV	*	ESK-11AL REV 013
23MOV-19(OP)	LIMITORQUE CORP	SMB-3	OP	N	NA	23MOV-19	N	Y	NV	*	ESK-11AL REV 013
23MOV-20(OP)	LIMITORQUE CORP	SMB-3	OP	N	NA	23MOV-20	N	Y	NV	*	ESK-11AM REV 013

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
23MOV-21(OP)	LIMITORQUE CORP	SMB-1	OP	N	NA	23MOV-21	N	Y	NV	*	ESK-11AM REV 013
23MOV-24(OP)	LIMITORQUE CORP	SMB-1	OP	N	NA	23MOV-24	N	Y	NV	*	ESK-11AN REV 013
23MOV-25(OP)	LIMITORQUE CORP	SMB-00	OP	N	NA	23MOV-25	N	Y	NV	*	ESK-11AN REV 013
23MOV-57(OP)	LIMITORQUE CORP	SMB-0	OP	N	NA	23MOV-17	N	Y	NV	*	1.61-142 REV G
						23MOV-21	N	Y	NV	*	1.61-142 REV G
						23MOV-24	N	Y	NV	*	1.61-142 REV G
						23MOV-57	N	Y	NV	*	ESK-11AP REV 11
23MOV-58(OP)	LIMITORQUE CORP	SMB-0	OP	N	NA	23MOV-17	N	Y	NV	*	1.61-142 REV G
						23MOV-21	N	Y	NV	*	1.61-142 REV G
						23MOV-24	N	Y	NV	*	1.61-142 REV G
						23MOV-58	N	Y	NV	*	ESK-11AP REV 11
23MOV-59(OP)	LIMITORQUE CORP	SMB-000-2	OP	N	NA	23MOV-59	N	Y	NV	*	1.61-146 REV E
23MOV-60(OP)	LIMITORQUE CORP	SMB-000	OP	N	NA	23MOV-60	N	Y	NV	*	ESK-11AAG REV 010
23MTU-201A	ROSEMOUNT INC	710DU	INST	N	09-95	23MOV-15	N	Y	NV	*	1.60-20 REV H
						23MOV-58	N	Y	NV	*	1.60-20 REV H
23MTU-201B	ROSEMOUNT INC	710DU	INST	N	09-96	23HOV-1	N	Y	NV	*	1.60-20 REV H
						23MOV-16	N	Y	NV	*	1.60-20 REV H
						23MOV-57	N	Y	NV	*	1.60-20 REV H
						23MOV-60	N	Y	NV	*	1.60-20 REV H
23MTU-202A	ROSEMOUNT INC	710DU	INST	N	09-95	23MOV-15	N	Y	NV	*	1.60-20 REV H
						23MOV-58	N	Y	NV	*	1.60-20 REV H
23MTU-202B	ROSEMOUNT INC	710DU	INST	N	09-96	23HOV-1	N	Y	NV	*	1.60-20 REV H
						23MOV-16	N	Y	NV	*	1.60-20 REV H
						23MOV-57	N	Y	NV	*	1.60-20 REV H
						23MOV-60	N	Y	NV	*	1.60-20 REV H
23MTU-203A	ROSEMOUNT	710DU	INST	N	09-95	23MOV-15	N	Y	NV	*	1.60-21 REV H

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
	INC										
						23MOV-58	N	Y	NV	*	1.60-21 REV H
23MTU-203B	ROSEMOUNT INC	710DU	INST	N	09-96	23HOV-1	N	Y	NV	*	1.60-21 REV H
						23MOV-16	N	Y	NV	*	1.60-21 REV H
						23MOV-57	N	Y	NV	*	1.60-21 REV H
						23MOV-60	N	Y	NV	*	1.60-21 REV H
23MTU-204A	ROSEMOUNT INC	710DU	INST	N	09-95	23MOV-15	N	Y	NV	*	1.60-21 REV H
						23MOV-58	N	Y	NV	*	1.60-21 REV H
23MTU-204B	ROSEMOUNT INC	710DU	INST	N	09-96	23HOV-1	N	Y	NV	*	1.60-21 REV H
						23MOV-16	N	Y	NV	*	1.60-21 REV H
						23MOV-57	N	Y	NV	*	1.60-21 REV H
						23MOV-60	N	Y	NV	*	1.60-21 REV H
23MTU-217A	ROSEMOUNT INC	510DU	INST	N	09-95	23MOV-15	N	Y	NV	*	1.60-20 REV H
						23MOV-58	N	Y	NV	*	1.60-20 REV H
23MTU-217B	ROSEMOUNT INC	710DU	INST	N	09-96	23HOV-1	N	Y	NV	*	1.60-20 REV H
						23MOV-16	N	Y	NV	*	1.60-20 REV H
						23MOV-57	N	Y	NV	*	1.60-20 REV H
						23MOV-60	N	Y	NV	*	1.60-20 REV H
23MTU-268A	ROSEMOUNT INC	510DU	INST	N	09-95	23MOV-15	N	Y	NV	*	1.60-21 REV H
						23MOV-58	N	Y	NV	*	1.60-21 REV H
23MTU-268B	ROSEMOUNT INC	510DU	INST	N	09-96	23HOV-1	N	Y	NV	*	1.60-21 REV H
						23MOV-16	N	Y	NV	*	1.60-21 REV H
						23MOV-57	N	Y	NV	*	1.60-21 REV H
						23MOV-60	N	Y	NV	*	1.60-21 REV H
23MTU-268C	ROSEMOUNT INC	510DU	INST	N	09-95	23MOV-15	N	Y	NV	*	1.60-21 REV H
						23MOV-58	N	Y	NV	*	1.60-21 REV H
23MTU-268D	ROSEMOUNT INC	510DU	INST	N	09-96	23HOV-1	N	Y	NV	*	1.60-21 REV H
						23MOV-16	N	Y	NV	*	1.60-21 REV H
						23MOV-57	N	Y	NV	*	1.60-21 REV H
						23MOV-60	N	Y	NV	*	1.60-21 REV H

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Par ::	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
23MTU-276	ROSEMOUNT INC	710DU	INST	N	09-95	23MOV-15	N	Y	NV	*	1.60-21 REV H
						23MOV-58	N	Y	NV	*	1.60-21 REV H
23MTU-277	ROSEMOUNT INC	510DU	INST	N	09-96	23HOV-1	N	Y	NV	*	1.60-21 REV H
						23MOV-16	N	Y	NV	*	1.60-21 REV H
						23MOV-57	N	Y	NV	*	1.60-21 REV H
						23MOV-60	N	Y	NV	*	1.60-21 REV H
23MTU-294A	ROSEMOUNT INC	710DU	INST	N	09-95	23MOV-15	N	Y	NV	*	1.60-20 REV H
						23MOV-58	N	Y	NV	*	1.60-20 REV H
23MTU-294B	ROSEMOUNT INC	710DU	INST	N	09-96	23HOV-1	N	Y	NV	*	1.60-20 REV H
						23MOV-16	N	Y	NV	*	1.60-20 REV H
						23MOV-57	N	Y	NV	*	1.60-20 REV H
						23MOV-60	N	Y	NV	*	1.60-20 REV H
23PS-1	SQUARE D CO	9012	INST	N	NA	23P-150	N	Y	CA	*	ESK-11CB REV 008
23PS-84B	STATIC-O-RING	54N6-B118-NX-C1 A-JJTTX6	INST	N	25-50	23HOV-1	N	Y	CA	*	1.61-142 REV G
23PS-85	STATIC-O-RING	6N6-B5-NX-C1A-J JTTX6	INST	N	25-50	23MOV-25	N	Y	CA	*	ESK-11AN REV 013
23PS-86A	STATIC-O-RING	4N6-B5-NX-C1A-J JTTX6	INST	N	25-50	23MOV-15	N	Y	CA	*	1.61-143 REV H
						23MOV-58	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
23PS-86B	STATIC-O-RING	4N6-B5-NX-C1A-J JTTX6	INST	N	25-50	23HOV-1	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-16	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-57	N	Y	CA	*	1.60-142 REV G, 1.61-143 REV H
						23MOV-60	N	Y	CA	*	1.61-143 REV H
23PS-86C	STATIC-O-RING	4N6-B5-NX-C1A-J JTTX6	INST	N	25-50	23MOV-15	N	Y	CA	*	1.61-143 REV H
						23MOV-58	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
23PS-86D	STATIC-O-RING	4N6-B5-NX-C1A-J JTTX6	INST	N	25-50	23HOV-1	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
						23MOV-16	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
						23MOV-57	N	Y	CA	*	1.60-142 REV G, 1.61-143 REV H
						23MOV-60	N	Y	CA	*	1.61-143 REV H
23PS-97A	STATIC-O-RIN G	6N6-B5-NX-C1A-J JTTX6	INST	N	25-50	23HOV-1	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
23PS-97B	STATIC-O-RIN G	6N6-B5-NX-C1A-J JTTX6	INST	N	25-50	23HOV-1	N	Y	CA	*	1.61-142 REV G, 1.61-143 REV H
23PT-68A	ROSEMOUNT INC	1153GB9RC	INST	N	25RK-1-02	23MOV-15	N	Y	NV	*	1.60-21 REV H
						23MOV-58	N	Y	NV	*	1.60-21 REV H
23PT-68B	ROSEMOUNT INC	1153GB9RC	INST	N	25RK-1-04	23HOV-1	N	Y	NV	*	1.60-21 REV H
						23MOV-16	N	Y	NV	*	1.60-21 REV H
						23MOV-57	N	Y	NV	*	1.60-21 REV H
						23MOV-60	N	Y	NV	*	1.60-21 REV H
23PT-68C	ROSEMOUNT INC	1153GB9RC	INST	N	25RK-1-02	23MOV-15	N	Y	NV	*	1.60-21 REV H
						23MOV-58	N	Y	NV	*	1.60-21 REV H
23PT-68D	ROSEMOUNT INC	1153GB9RC	INST	N	25RK-1-04	23HOV-1	N	Y	NV	*	1.60-21 REV H
						23MOV-16	N	Y	NV	*	1.60-21 REV H
						23MOV-57	N	Y	NV	*	1.60-21 REV H
						23MOV-60	N	Y	NV	*	1.60-21 REV H
23RTD-01A	WEED INSTRUMENT CO INC	N9017S-1B	INST	N	NA	23MOV-15	N	Y	NV	*	1.60-20 REV H
						23MOV-58	N	Y	NV	*	1.60-21 REV H
23RTD-01B	WEED INSTRUMENT CO INC	N9017S-1B	INST	N	NA	23HOV-1	N	Y	NV	*	1.60-20 REV H
						23MOV-16	N	Y	NV	*	1.60-20 REV H
						23MOV-57	N	Y	NV	*	1.60-21 REV H
						23MOV-60	N	Y	NV	*	1.60-20 REV H
23RTD-01C	WEED INSTRUMENT CO INC	N9017S-1B	INST	N	NA	23MOV-15	N	Y	NV	*	1.60-20 REV H
						23MOV-58	N	Y	NV	*	1.60-21 REV H

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer. Part\model Number	Relay. type	Low. ruggedness. relay	Rack/Panel:	Component. For equipment	Essential.	Satisfactory	Reason. code	Outlier	Reference drwg(s)
23RTD-01D	WEED INSTRUMENT CO INC	N9017S-1B	INST	N	NA	23HOV-1	N	Y	NV	*	1.60-20 REV H
						23MOV-16	N	Y	NV	*	1.60-20 REV H
						23MOV-57	N	Y	NV	*	1.60-21 REV H
						23MOV-60	N	Y	NV	*	1.60-20 REV H
23RTD-02A	WEED INSTRUMENT CO INC	N9017S-1B	INST	N	NA	23MOV-15	N	Y	NV	*	1.60-21 REV H
						23MOV-58	N	Y	NV	*	1.60-21 REV H
23RTD-02B	WEED INSTRUMENT CO INC	N9017S-1B	INST	N	NA	23HOV-1	N	Y	NV	*	1.60-21 REV H
						23MOV-16	N	Y	NV	*	1.60-21 REV H
						23MOV-57	N	Y	NV	*	1.60-21 REV H
						23MOV-60	N	Y	NV	*	1.60-21 REV H
23RTD-02C	WEED INSTRUMENT CO INC	N9017S-1B	INST	N	NA	23MOV-15	N	Y	NV	*	1.60-21 REV H
						23MOV-58	N	Y	NV	*	1.60-21 REV H
23RTD-02D	WEED INSTRUMENT CO INC	N9017S-1B	INST	N	NA	23HOV-1	N	Y	NV	*	1.60-21 REV H
						23MOV-16	N	Y	NV	*	1.60-21 REV H
						23MOV-57	N	Y	NV	*	1.60-21 REV H
						23MOV-60	N	Y	NV	*	1.60-21 REV H
23RTD-117A	WEED INSTRUMENT CO INC	611D-1B-C-6-C-2 -A2-0	INST	N	NA	23MOV-15	N	Y	NV	*	1.60-20 REV H
						23MOV-58	N	Y	NV	*	1.60-20 REV H
23RTD-117B	WEED INSTRUMENT CO INC	611D-1B-C-6-C-2 -A2-0	INST	N	NA	23HOV-1	N	Y	NV	*	1.60-20 REV H
						23MOV-16	N	Y	NV	*	1.60-20 REV H
						23MOV-57	N	Y	NV	*	1.60-20 REV H
						23MOV-60	N	Y	NV	*	1.60-20 REV H
23RTD-94A	WEED INSTRUMENT CO INC	611D-1B-C-6-C-2 -A2-0	INST	N	NA	23MOV-15	N	Y	NV	*	1.60-20 REV H
						23MOV-58	N	Y	NV	*	1.60-20 REV H

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
23RTD-94B	WEED INSTRUMENT CO INC	611D-1B-C-6-C-2 -A2-0	INST	N	NA	23HOV-1	N	Y	NV	*	1.60-20 REV H
						23MOV-16	N	Y	NV	*	1.60-20 REV H
						23MOV-57	N	Y	NV	*	1.60-20 REV H
						23MOV-60	N	Y	NV	*	1.60-20 REV H
23STU-27B	ROSEMOUNT INC	510DU	INST	N	09-95	23MOV-15	N	Y	NV	*	1.60-21 REV H
						23MOV-58	N	Y	NV	*	1.60-21 REV H
23STU-279	ROSEMOUNT INC	710DU	INST	N	09-96	23HOV-1	N	Y	NV	*	1.60-21 REV H
						23MOV-16	N	Y	NV	*	1.60-21 REV H
						23MOV-57	N	Y	NV	*	1.60-21 REV H
						23MOV-60	N	Y	NV	*	1.60-21 REV H
27-1-1CADA01	GENERAL ELECTRIC	CR2940	CS	N	27CAD	27SOV-127A	N	Y	NV	*	ESK-7CD REV 12
27-1-1CADA02	GENERAL ELECTRIC	CR2940	CS	N	27CAD	27SOV-126A	N	Y	NV	*	ESK-7CD REV 12
27-1-1CADA03	GENERAL ELECTRIC	CR2940	CS	N	27CAD	27SOV-128A	N	Y	NV	*	ESK-7CD REV 12
27-1-1CADA05	GENERAL ELECTRIC	CR2940	CS	N	27CAD	27SOV-129A	N	Y	NV	*	ESK-7CD REV 12
27-1-1CADA06	GENERAL ELECTRIC	CR2940	CS	N	27CAD	27SOV-131A	N	Y	NV	*	ESK-7CD REV 12
27-1-1CADA07	GENERAL ELECTRIC	CR2940	CS	N	27CAD	27SOV-132A	N	Y	NV	*	ESK-7CD REV 12
27-1-1CADA08	GENERAL ELECTRIC	CR2940	CS	N	27CAD	27SOV-145	N	Y	NV	*	ESK-7CD REV 12
27-1-1CADB01	GENERAL ELECTRIC	CR2940	CS	N	27CAD	27SOV-127B	N	Y	NV	*	ESK-7CE REV 11
27-1-1CADB02	GENERAL ELECTRIC	CR2940	CS	N	27CAD	27SOV-126B	N	Y	NV	*	ESK-7CE REV 11
27-1-1CADB03	GENERAL ELECTRIC	CR2940	CS	N	27CAD	27SOV-128B	N	Y	NV	*	ESK-7CE REV 11
27-1-1CADB05	GENERAL	CR2940	CS	N	27CAD	27SOV-129B	N	Y	NV	*	ESK-7CE REV 11

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
	ELECTRIC										
27-1-1CADB06	GENERAL ELECTRIC	CR2940	CS	N	27CAD	27SOV-131B	N	Y	NV	*	ESK-7CE REV 11
27-1-1CADB07	GENERAL ELECTRIC	CR2940	CS	N	27CAD	27SOV-132B	N	Y	NV	*	ESK-7CE REV 11
27-1-1CADB09	GENERAL ELECTRIC	CR2940	CS	N	27CAD	27SOV-141	N	Y	NV	*	ESK-7CE REV 11
27-1A-1CADA05	GENERAL ELECTRIC	CR2940	CS	N	27CAD	27SOV-129A	N	Y	NV	*	ESK-7CD REV 12
						27SOV-129B	N	Y	NV	*	ESK-7CD REV 12
27-3-1CADA01	STRUTHERS DUNN INC	219	RLY	N	27CAD	27SOV-127A	N	Y	CA	*	ESK-7CD REV 12
27-3-1CADA03	STRUTHERS DUNN INC	219	RLY	N	27CAD	27SOV-128A	N	Y	CA	*	ESK-7CD REV 12
27-3-1CADB01	STRUTHERS DUNN INC	219	RLY	N	27CAD	27SOV-127B	N	Y	CA	*	ESK-7CE REV 11
27-3-1CADB03	STRUTHERS DUNN INC	219	RLY	N	27CAD	27SOV-128B	N	Y	CA	*	ESK-7CE REV 11
27-3-1CADN02	GENERAL ELECTRIC	CR2810	RLY	N	27NS-CB	27SOV-127A	N	Y	CA	*	ESK-7AG REV 11, ESK-7CD REV 12
						27SOV-127B	N	Y	CA	*	ESK-7AG REV 11, ESK-7CD REV 12
27-3A-1CADA04	GENERAL ELECTRIC	CR2810	RLY	N	27CAD	27SOV-131A	N	Y	CA	*	ESK-7CD REV 12
						27SOV-132A	N	Y	CA	*	ESK-7CD REV 12
27-3A-1CADB04	GENERAL ELECTRIC	CR2810	RLY	N	27CAD	27SOV-131B	N	Y	CA	*	ESK-7CE REV 11
						27SOV-132B	N	Y	CA	*	ESK-7CE REV 11
27-3A-1CADN02	GENERAL ELECTRIC	CR2810	RLY	N	27CAD	27SOV-129A	N	Y	CA	*	ESK-7CD REV 12, ESK-7AG REV 11
						27SOV-129B	N	Y	CA	*	ESK-7CD REV 12, ESK-7AG REV 11
27-3B-1CADA04	GENERAL ELECTRIC	CR2810	RLY	N	27CAD	27SOV-131A	N	Y	CA	*	ESK-7CD REV 12
						27SOV-132A	N	Y	CA	*	ESK-7CD REV 12

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
27-3B-1CADB04	GENERAL ELECTRIC	CR2810	RLY	N	27CAD	27SOV-131B	N	Y	CA	*	ESK-7CE REV 11
						27SOV-132B	N	Y	CA	*	ESK-7CE REV 11
27-4-1CADA01	GENERAL ELECTRIC	CR2810	RLY	N	27CAD	27SOV-127A	N	Y	CA	*	ESK-7CD REV 12
27-4-1CADA05	GENERAL ELECTRIC	CR2810	RLY	N	27CAD	27SOV-129A	Y	Y	GERS	N	ESK-7CD REV 12
27-4-1CADA06	GENERAL ELECTRIC	CR2810	RLY	N	27CAD	27SOV-131A	N	Y	CA	*	ESK-7CD REV 12
27-4-1CADA07	GENERAL ELECTRIC	CR2810	RLY	N	27CAD	27SOV-132A	N	Y	CA	*	ESK-7CD REV 12
27-4-1CADB01	GENERAL ELECTRIC	CR2810	RLY	N	27CAD	27SOV-127B	N	Y	CA	*	ESK-7CE REV 11
27-4-1CADB05	GENERAL ELECTRIC	CR2810	RLY	N	27CAD	27SOV-129B	Y	Y	GERS	N	ESK-7CE REV 11
27-4-1CADB06	GENERAL ELECTRIC	CR2810	RLY	N	27CAD	27SOV-131B	N	Y	CA	*	ESK-7CE REV 11
27-4-1CADB07	GENERAL ELECTRIC	CR2810	RLY	N	27CAD	27SOV-132B	N	Y	CA	*	ESK-7CE REV 11
27CS-1CADB02	ELECTRO SWITCH CORP	SERIES 20P	CS	N	25RSP	27SOV-126B	N	Y	NV	*	ESK-7CE REV 11
27CS-1CADB05	ELECTRO SWITCH CORP	SERIES 20P	CS	N	25RSP	27SOV-129B	N	Y	NV	*	ESK-7CE REV 11
27IS-1CADB02	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25RSP	27SOV-126B	N	Y	NV	*	ESK-7CE REV 11
27IS-1CADB05	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25RSP	27SOV-129B	N	Y	NV	*	ESK-7CE REV 11
						27SOV-141	N	Y	NV	*	ESK-7CE REV 11
27LIS-127A	BARTON INSTRUMENT CO (ITT)	288A	INST	N	27NS-CA	27SOV-127A	N	Y	CA	*	ESK-7CD REV 12
27LIS-127B	BARTON INSTRUMENT CO (ITT)	288A	INST	N	27NS-CB	27SOV-127B	N	Y	CA	*	ESK-7CE REV 11

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
27TS-113A	ROCHESTER INSTRUMENT SYSS INC	ET-1214-323	INST	N	27CAD	27SOV-128A	N	Y	CA	*	ESK-7CD REV 12
27TS-113B	ROCHESTER INSTRUMENT SYSS INC	ET-1214-323	INST	N	27CAD	27SOV-128B	N	Y	CA	*	ESK-7CE REV 11
27TS-133	UNITED ELEC CONTROLS CO	E302-2BSA	INST	N	27NS-CA	27SOV-129A	N	Y	CA	*	ESK-7AG REV 11
						27SOV-129B	N	Y	CA	*	ESK-7AG REV 11
27TS-134	UNITED ELEC CONTROLS CO	E300-2BSA	INST	N	NA	27SOV-127A	N	Y	CA	*	ESK-7CD REV 12, ESK-7AG REV 11
						27SOV-127B	N	Y	CA	*	ESK-7CD REV 12, ESK-7AG REV 11
29-74-1PCIA04	GENERAL ELECTRIC	CR2810	RLY	N	09AR-5A	29MOV-74	N	Y	CA	*	ESK-6MAQ REV 8
29ISA-1PCIB01	ELECTRO SWITCH CORP	20P	CS	N	25ASP-4	29SOV-86A2(OP1)	N	Y	NV	*	ESK-7B REV 13, 1.70-108 REV F
						29SOV-86A2(OP2)	N	Y	NV	*	ESK-7B REV 13, 1.70-108 REV F
29ISB-1PCIB01	ELECTRO SWITCH CORP	20P	CS	N	25ASP-4	29SOV-86B2(OP1)	N	Y	NV	*	ESK-7B REV 13, 1.70-108 REV F
						29SOV-86B2(OP2)	N	Y	NV	*	ESK-7B REV 13, 1.70-108 REV F
29ISC-1PCIB01	ELECTRO SWITCH CORP	20P	CS	N	25ASP-4	29SOV-86C2(OP1)	N	Y	NV	*	ESK-7B REV 13, 1.70-108 REV F
						29SOV-86C2(OP2)	N	Y	NV	*	ESK-7B REV 13, 1.70-108 REV F
29ISD-1PCIB01	ELECTRO SWITCH CORP	20P	CS	N	25ASP-4	29SOV-86D2(OP1)	N	Y	NV	*	ESK-7B REV 13, 1.70-108 REV F
						29SOV-86D2(OP2)	N	Y	NV	*	ESK-7B REV 13, 1.70-108 REV F
29MOV-74(OP)	LIMITORQUE CORP	SB-000	OP	N	NA	29MOV-74	N	Y	NV	*	ESK-6MAQ REV 8
33LS-101	GENERAL ELECTRIC	TYPE 560	INST	N	09BOP-P/S-1	33LI-101A	N	Y	CA	*	LP-33-209 REV 002
						33LT-101	N	Y	CA	*	LP-33-209 REV 002
46-1-1ESWA01	GENERAL	SBM	CS	N	09-6	46P-[illegible]	N	Y	NV	*	ESK-6AF REV 011,

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
	ELECTRIC										ESK-11AC REV 007, ESK-3A REV 011
46-1-1ESWA02	GENERAL ELECTRIC	CR2940	CS	N	09-6	46MOV-101A	N	Y	NV	*	ESK-6HQ REV 012
46-1-1ESWA03	GENERAL ELECTRIC	CR2940	CS	N	09-6	46MOV-102A	N	Y	NV	*	ESK-6HS REV 010
46-1-1ESWB01	GENERAL ELECTRIC	SBM	CS	N	09-6	46P-2B	N	Y	NV	*	ESK-6AL REV 6, ESK-3A REV 011
46-1-1ESWB02	GENERAL ELECTRIC	CR2940	CS	N	09-6	46MOV-101B	N	Y	NV	*	ESK-6HQ REV 012
46-1-1ESWB03	GENERAL ELECTRIC	CR2940	CS	N	09-6	46MOV-102B	N	Y	NV	*	ESK-6HS REV 010
46-1A-1ESWA04	GENERAL ELECTRIC	CR2940	CS	N	09-6	46P-2A	N	Y	NV	*	ESK-11AC REV 007
46-1A-1ESWB04	GENERAL ELECTRIC	CR2940	CS	N	09-6	46P-2B	N	Y	NV	*	ESK-11AC REV 007
46-1B-1ESWA04	GENERAL ELECTRIC	CR2940	CS	N	09-6	46P-2A	N	Y	NV	*	ESK-11AC REV 007
46-1B-1ESWB04	GENERAL ELECTRIC	CR2940	CS	N	09-6	46P-2B	N	Y	NV	*	ESK-11AC REV 007
46-63A-1ESWA04	GENERAL ELECTRIC	HFA	RLY	N	09AR-5A	46MOV-101A	N	Y	CA	*	ESK-6HQ REV 012, ESK-11AC REV 007
						46MOV-102A	N	Y	CA	*	ESK-6HS REV 010, ESK-11AC REV 007
46-63A-1ESWB04	GENERAL ELECTRIC	HFA	RLY	N	09AR-5B	46MOV-101B	N	Y	CA	*	ESK-6HQ REV 012, ESK-11AC REV 007
						46MOV-102B	N	Y	CA	*	ESK-6HS REV 010, ESK-11AC REV 007
46-63B-1ESWA04	GENERAL ELECTRIC	12HFA154E22H	RLY	N	09AR-5A	46P-2A	Y	Y	GERS	N	ESK-6AF REV 011, ESK-11AC REV 007
46-63B-1ESWB04	GENERAL ELECTRIC	12HFA154E22H	RLY	N	09AR-5B	46P-2B	Y	Y	GERS	N	ESK-6AL REV 006, ESK-11AC REV 007
46-63X-1ESWA04	GENERAL ELECTRIC	CR2811	RLY	N	09AR-5A	46P-2A	Y	*	CR	Y	ESK-11AC REV 007

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
						46P-2B	Y	*	CR	Y	ESK-11AC REV 007
46-63X-1ESWB 04	GENERAL ELECTRIC	CR2811	RLY	N	09AR-5B	46P-2A	Y	*	CR	Y	ESK-11AC REV 007
						46P-2B	Y	*	CR	Y	ESK-11AC REV 007
46-63Y-1ESWA 04	GENERAL ELECTRIC	CR2811	RLY	N	09AR-5A	46P-2A	Y	*	CR	Y	ESK-11AC REV 007
						46P-2B	Y	*	CR	Y	ESK-11AC REV 007
46-63Y-1ESWB 04	GENERAL ELECTRIC	CR2811	RLY	N	09AR-5B	46P-2A	Y	*	CR	Y	ESK-11AC REV 007
						46P-2B	Y	*	CR	Y	ESK-11AC REV 007
46-74-1ESWA0 1	GENERAL ELECTRIC	CR2810	RLY	N	09AR-6A	46P-2A	N	Y	CA	*	ESK-6AF REV 011
46-74-1ESWA0 2	GENERAL ELECTRIC	CR2810	RLY	N	09AR-6A	46MOV-101A	N	Y	CA	*	ESK-6HQ REV 012
46-74-1ESWA0 3	GENERAL ELECTRIC	CR2810	RLY	N	09AR-6A	46MOV-102A	N	Y	CA	*	ESK-6HS REV 010
46-74-1ESWB0 1	GENERAL ELECTRIC	CR2810	RLY	N	09AR-6B	46P-2B	N	Y	CA	*	ESK-6AL REV 006
46-74-1ESWB0 2	GENERAL ELECTRIC	CR2810	RLY	N	09AR-6B	46MOV-101B	N	Y	CA	*	ESK-6HQ REV 012
46-74-1ESWB0 3	GENERAL ELECTRIC	CR2810	RLY	N	09AR-6B	46MOV-102B	N	Y	CA	*	ESK-6HS REV 010
46CS-1ESWB01	ELECTRO SWITCH CORP	SERIES 20P	CS	N	25ASP-3	46P-2B	N	Y	NV	*	ESK-6AL REV 006
46CS-1ESWB02	ELECTRO SWITCH CORP	SERIES 20P	CS	N	25ASP-3	46MOV-101B	N	Y	NV	*	ESK-6HQ REV 012
46IS-1ESWB01	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25ASP-3	46P-2B	N	Y	NV	*	ESK-6AL REV 006
46IS-1ESWB02	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25ASP-3	46MOV-101B	N	Y	NV	*	ESK-6HQ REV 012
46IS-1ESWB03	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25ASP-3	46MOV-102B	N	Y	NV	*	ESK-6HS REV 010
46MOV-101A(O	LIMITORQUE	SMB-00-10	OP	N	NA	46MOV-101A	N	Y	NV	*	ESK-6HQ REV 012

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
P)	CORP										
46MOV-101B(OP)	LIMITORQUE CORP	SMB-00-10	OP	N	NA	46MOV-101B	N	Y	NV	*	ESK-6HQ REV 012
46MOV-102A(OP)	LIMITORQUE CORP	SMB-00-10	OP	N	NA	46MOV-102A	N	Y	NV	*	ESK-6HS REV 010
46MOV-102B(OP)	LIMITORQUE CORP	SMB-00-10	OP	N	NA	46MOV-102B	N	Y	NV	*	ESK-6HS REV 010
66-1A-1RNVB14	GENERAL ELECTRIC	SMB	CS	N	09-75	66UC-22B	N	Y	NV	*	ESK-6EAC REV 3
66-1A-1RNVC14	GENERAL ELECTRIC	SMB	CS	N	09-75	66UC-22C	N	Y	NV	*	ESK-6EAC REV 3
66-1A-1RNVD14	GENERAL ELECTRIC	SMB	CS	N	09-75	66UC-22D	N	Y	NV	*	ESK-6EAC REV 3
66-1A-1RNVE14	GENERAL ELECTRIC	SMB	CS	N	09-75	66UC-22E	N	Y	NV	*	ESK-6EG REV 11
66-1A-1RNVF14	GENERAL ELECTRIC	SMB	CS	N	09-75	66UC-22F	N	Y	NV	*	ESK-6EG REV 11
66-1A-1RNVG14	GENERAL ELECTRIC	SMB	CS	N	09-75	66UC-22G	N	Y	NV	*	ESK-6EAC REV 3
66-1A-1RNVH14	GENERAL ELECTRIC	SMB	CS	N	09-75	66UC-22H	N	Y	NV	*	ESK-6EAC REV 3
66-1A-1RNVJ14	GENERAL ELECTRIC	SMB	CS	N	09-75	66UC-22J	N	Y	NV	*	ESK-6EAC REV 3
66-1A-1RNVK14	GENERAL ELECTRIC	SMB	CS	N	09-75	66UC-22K	N	Y	NV	*	ESK-6EAC REV 3
66-74-1RNVB14*			RLY	N		66UC-22B	N	Y	CA	*	ESK-6EAC REV 3
66-74-1RNVC14*			RLY	N		66UC-22C	N	Y	CA	*	ESK-6EAC REV 3
66-74-1RNVD14*			RLY	N		66UC-22D	N	Y	CA	*	ESK-6EAC REV 3
66-74-1RNVE1			RLY	N		66UC-22E	N	Y	CA	*	ESK-6EG REV 11

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer. Part\model. Number.	Relay. type..	Low. ruggedness. relay.	Rack/Panel:	Component. For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
4*											
66-74-1RNVF1 4*			RLY	N		66UC-22F	N	Y	CA	*	ESK-6EG REV 11
66-74-1RNVG1 4*			RLY	N		66UC-22G	N	Y	CA	*	ESK-6EAC REV 3
66-74-1RNVH1 4*			RLY	N		66UC-22H	N	Y	CA	*	ESK-6EAC REV 3
66-74-1RNVJ1 4*			RLY	N		66UC-22J	N	Y	CA	*	ESK-6EAC REV 3
66-74-1RNVK1 4*			RLY	N		66UC-22K	N	Y	CA	*	ESK-6EAC REV 3
66IS-1RNVB14	ELECTRO SWITCH CORP	SERIES 20K	CS	N	66HV-3B	66UC-22B	N	Y	NV	*	ESK-6EG REV 11, ESK-6EAC REV 3
						66UC-22D	N	Y	NV	*	ESK-6EG REV 11, ESK-6EAC REV 3
						66UC-22F	N	Y	NV	*	ESK-6EG REV 11, ESK-6EAC REV 3
66IS-1RNVH14	ELECTRO SWITCH CORP	SERIES 20K	CS	N	66HV-3B	66UC-22H	N	Y	NV	*	ESK-6EAC REV 3
						66UC-22K	N	Y	NV	*	ESK-6EAC REV 3
66TS-106B	STATIC-O-RING	201TA-BB125-JJT TX6	INST	N	NA	66UC-22B	N	Y	CA	*	ESK-6EAC REV 3
66TS-106C	STATIC-O-RING	201TA-BB125-JJT TX6	INST	N	NA	66UC-22C	N	Y	CA	*	ESK-6EAC REV 3
66TS-106D	STATIC-O-RING	201TA-BB125-JJT TX6	INST	N	NA	66UC-22D	N	Y	CA	*	ESK-6EAC REV 3
66TS-106G	STATIC-O-RING	201TA-BB125-JJT TX6	INST	N	NA	66UC-22G	N	Y	CA	*	ESK-6EAC REV 3
66TS-106H	STATIC-O-RING	201TA-BB125-JJT TX6	INST	N	NA	66UC-22H	N	Y	CA	*	ESK-6EAC REV 3
66TS-106J	STATIC-O-RING	201TA-BB125-JJT TX6	INST	N	NA	66UC-22J	N	Y	CA	*	ESK-6EAC REV 3
66TS-106K	STATIC-O-RING	201TA-BB125-JJT TX6	INST	N	NA	66UC-22K	N	Y	CA	*	ESK-6EAC REV 3

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
67-1A-1TBVA06*	GENERAL ELECTRIC	SBM	CS	N		67MOD-16A1	N	Y	NV	*	ESK-6EQ REV 7
						67UC-16A1(M)	N	Y	NV	*	ESK-6EQ REV 7
67-1A-1TBVA07*	GENERAL ELECTRIC	SBM	CS	N		67MOD-16A2	N	Y	NV	*	ESK-6EQ REV 7
						67UC-16A2(M)	N	Y	NV	*	ESK-6EQ REV 7
67-1B-1TBVB06	GENERAL ELECTRIC	SBM	CS	N	67HV-2B	67MOD-16B1	N	Y	NV	*	ESK-6EQ REV 7
						67UC-16B1(M)	N	Y	NV	*	ESK-6EQ REV 7
67-1B-1TBVB07	GENERAL ELECTRIC	SBM	CS	N	67HV-2B	67MOD-16B2	N	Y	NV	*	ESK-6EQ REV 7
						67UC-16B2(M)	N	Y	NV	*	ESK-6EQ REV 7
67-74-1TBVB06*			RLY	N		67MOD-16B1	N	Y	CA	*	ESK-6EQ REV 7
						67UC-16B1(M)	N	Y	CA	*	ESK-6EQ REV 7
67-74-1TBVB07*			RLY	N		67MOD-16B2	N	Y	CA	*	ESK-6EQ REV 7
						67UC-16B2(M)	N	Y	CA	*	ESK-6EQ REV 7
70-1-1CRVA01	GENERAL ELECTRIC	SBM	CS	N	09-75	70AHU-12A	N	Y	NV	*	ESK-6FK REV 5
						70AHU-12B	N	Y	NV	*	ESK-6FK REV 5
						70MOD-101A	N	Y	NV	*	ESK-6FK REV 5
						70MOD-101B	N	Y	NV	*	ESK-6FK REV 5
70-1-1CRVA02	GENERAL ELECTRIC	SBM	CS	N	09-75	70FN-13A	N	Y	NV	*	ESK-6FL REV 7
						70FN-13B	N	Y	NV	*	ESK-6FL REV 7
						70MOD-102A	N	Y	NV	*	ESK-6FL REV 7
						70MOD-102B	N	Y	NV	*	ESK-6FL REV 7
70-1-1CRVA03	GENERAL ELECTRIC	SBM	CS	N	09-75	70AHU-3A	N	Y	NV	*	ESK-6FP REV 6
						70AHU-3B	N	Y	NV	*	ESK-6FP REV 6
						70MOD-106A	N	Y	NV	*	ESK-6FP REV 6
						70MOD-106B	N	Y	NV	*	ESK-6FP REV 6
70-1-1CRVA04	GENERAL ELECTRIC	SBM	CS	N	09-75	70FN-4A	N	Y	NV	*	ESK-6FN REV. 6
						70FN-4B	N	Y	NV	*	ESK-6FN REV. 6
						70MOD-108A	N	Y	NV	*	ESK-6FN REV. 6
						70MOD-108B	N	Y	NV	*	ESK-6FN REV. 6

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer. Part\model. Number.	Relay. type.	Low. ruggedness. relay.	Rack/Panel:	Component. For equipment.	Essential.	Satisfactory	Reason. code.	Outlier	Reference drwg(s)
70-1-1CRVA13	GENERAL ELECTRIC	SBM-10BK369	CS	N	70HV-5A	70AHU-19A	N	Y	NV	*	ESK-6FAH REV 2
70-1-1CRVB01	GENERAL ELECTRIC	SBM	CS	N	09-75	70AHU-12A	N	Y	NV	*	ESK-6FK REV 5
						70AHU-12B	N	Y	NV	*	ESK-6FK REV 5
						70MOD-101A	N	Y	NV	*	ESK-6FK REV 5
						70MOD-101B	N	Y	NV	*	ESK-6FK REV 5
70-1-1CRVB02	GENERAL ELECTRIC	SBM	CS	N	09-75	70FN-13A	N	Y	NV	*	ESK-6FL REV 7
						70FN-13B	N	Y	NV	*	ESK-6FL REV 7
						70MOD-102A	N	Y	NV	*	ESK-6FL REV 7
						70MOD-102B	N	Y	NV	*	ESK-6FL REV 7
70-1-1CRVB03	GENERAL ELECTRIC	SBM	CS	N	09-75	70AHU-3A	N	Y	NV	*	ESK-6FP REV 6
						70AHU-3B	N	Y	NV	*	ESK-6FP REV 6
						70MOD-106A	N	Y	NV	*	ESK-6FP REV 6
						70MOD-106B	N	Y	NV	*	ESK-6FP REV 6
70-1-1CRVB04	GENERAL ELECTRIC	SBM	CS	N	09-75	70FN-4A	N	Y	NV	*	ESK-6FN REV 6
						70FN-4B	N	Y	NV	*	ESK-6FN REV 6
						70MOD-108A	N	Y	NV	*	ESK-6FN REV 6
						70MOD-108B	N	Y	NV	*	ESK-6FN REV 6
70-1-1CRVB13	GENERAL ELECTRIC	SBM	CS	N	70HV-5B	70AHU-19B	N	Y	NV	*	ESK-6FAH REV 2
70-23A-1CRVA 07*			RLY	N		70AHU-12A	N	Y	CA	*	ESK-6FK REV 5, ESK-6FT REV 8
						70FN-13A	N	Y	CA	*	ESK-6FL REV 7, ESK-6FT REV 8
						70MOD-101A	N	Y	CA	*	ESK-6FK REV 5, ESK-6FT REV 8
						70MOD-102A	N	Y	CA	*	ESK-6FL REV 7, ESK-6FT REV 8
						70MOD-104A	N	Y	CA	*	ESK-6FT REV 8
70-23A-1CRVA 11*			RLY	N		70AHU-3A	N	Y	CA	*	ESK-6FP REV 6, ESK-6FAB REV 9
						70FN-4A	N	Y	CA	*	ESK-6FN REV 6, ESK-6FAA REV 9
						70MOD-106A	N	Y	CA	*	ESK-6FP REV 6, ESK-6FAA REV 9
						70MOD-108A	N	Y	CA	*	ESK-6FN REV 6, ESK-6FAA REV 9

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
						70MOD-110A	N	Y	CA	*	ESK-6FN REV 6, ESK-6FAA REV 9
70-23B-1CRVA 11*			RLY	N		70AHU-19A	N	Y	CA	*	ESK-6FAH REV 2, ESK-6FAA REV 9
						70TCV-123A	N	Y	CA	*	ESK-6FAH REV 2, ESK-6FAA REV 9
70-23B-1CRVB 07*			RLY	N		70AHU-12B	N	Y	CA	*	ESK-6FK REV 5, ESK-6FU REV 8
						70FN-13B	N	Y	CA	*	ESK-6FL REV 7, ESK-6FU REV 8
						70MOD-101B	N	Y	CA	*	ESK-6FK REV 5, ESK-6FU REV 8
						70MOD-102B	N	Y	CA	*	ESK-6FL REV 7, ESK-6FU REV 8
						70MOD-104B	N	Y	CA	*	ESK-6FU REV 8
70-23B-1CRVB 11*			RLY	N		70AHU-3B	N	Y	CA	*	ESK-6FP REV 6, ESK-6FAB REV 9
						70FN-4B	N	Y	CA	*	ESK-6FN REV 6, ESK-6FAB REV 9
						70MOD-106B	N	Y	CA	*	ESK-6FAB REV 9, ESK-6FP REV 6
						70MOD-108B	N	Y	CA	*	ESK-6FN REV 6, ESK-6FAB REV 9
						70MOD-110B	N	Y	CA	*	ESK-6FN REV 6, ESK-6FAB REV 9
70-23C-1CRVB 11*			RLY	N		70AHU-19B	N	Y	CA	*	ESK-6FAH REV 2, ESK-6FAB REV 9
						70TCV-123B	N	Y	CA	*	ESK-6FAH REV 2, ESK-6FAB REV 9
70-42X-1CRVA 01*			RLY	N		70AHU-12A	N	Y	CA	*	ESK-6FK REV 5, ESK-6FR REV 5, ESK-6FT REV 8, ESK-6FS REV 5
						70MOD-101A	N	Y	CA	*	ESK-6FK REV 5
70-42X-1CRVA 02*			RLY	N		70FN-13A	N	Y	CA	*	ESK-6FL REV 7, ESK-6FT REV 8
						70MOD-102A	N	Y	CA	*	ESK-6FL REV 7, ESK-6FT REV 8
70-42X-1CRVA 03*			RLY	N		70AHU-3A	N	Y	CA	*	ESK-6FP REV 6, ESK-6FAA REV 9
						70MOD-106A	N	Y	CA	*	ESK-6FP REV 6

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... for equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
70-42X-1CRVA 04*			RLY	N		70FN-4A	N	Y	CA	*	ESK-6FN REV 6
						70MOD-108A	N	Y	CA	*	ESK-6FN REV 6, ESK-6FAA REV 9
70-42X-1CRVB 01*			RLY	N		70AHU-12B	N	Y	CA	*	ESK-6FK REV 5, ESK-6FR REV 5, ESK-6FU REV 8, ESK-6FS REV 5
						70MOD-101B	N	Y	CA	*	ESK-6FK REV 5, ESK-6FR REV 5, ESK-6FU REV 8, ESK-6FS REV 5
70-42X-1CRVB 02*			RLY	N		70FN-13B	N	Y	CA	*	ESK-6FL REV 7, ESK-6FU REV 8
						70MOD-102B	N	Y	CA	*	ESK-6FL REV 7, ESK-6FU REV 8
70-42X-1CRVB 03*			RLY	N		70AHU-3B	N	Y	CA	*	ESK-6FP REV 6
						70MOD-106B	N	Y	CA	*	ESK-6FP REV 6
70-42X-1CRVB 04*			RLY	N		70FN-4B	N	Y	CA	*	ESK-6FN REV 6
						70MOD-108B	N	Y	CA	*	ESK-6FN REV 6
70-62-1CRVA0 2*			RLY	N		70FN-13A	N	Y	CA	*	ESK-6FL REV 7
						70MOD-102A	N	Y	CA	*	ESK-6FL REV 7
70-62-1CRVA0 4*			RLY	N		70FN-4A	N	Y	CA	*	ESK-6FN REV 6
						70MOD-108A	N	Y	CA	*	ESK-6FN REV 6
70-62-1CRVA1 3*			RLY	N		70AHU-19A	N	Y	CA	*	ESK-6FAH REV 2
70-62-1CRVB0 2*			RLY	N		70FN-13B	N	Y	CA	*	ESK-6FL REV 7
						70MOD-102B	N	Y	CA	*	ESK-6FL REV 7
70-62-1CRVB0 4*			RLY	N		70FN-4B	N	Y	CA	*	ESK-6FN REV 6
						70MOD-108B	N	Y	CA	*	ESK-6FN REV 6
70-62-1CRVB1 3*			RLY	N		70AHU-19B	N	Y	CA	*	ESK-6FAH REV 2

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
70-63X-1CRVA 01*			RLY	N		70AHU-12A	N	Y	CA	*	ESK-6FK REV 5
						70MOD-101A	N	Y	CA	*	ESK-6FK REV 5
70-63X-1CRVA 02*			RLY	N		70FN-13A	N	Y	CA	*	ESK-6FL REV 7
						70MOD-102A	N	Y	CA	*	ESK-6FL REV 7
70-63X-1CRVA 03*			RLY	N		70AHU-3A	N	Y	CA	*	ESK-6FP REV 6
						70MOD-106A	N	Y	CA	*	ESK-6FP REV 6
70-63X-1CRVA 04*			RLY	N		70FN-4A	N	Y	CA	*	ESK-6FN REV 6
						70MOD-108A	N	Y	CA	*	ESK-6FN REV 6
70-63X-1CRVB 01*			RLY	N		70AHU-12B	N	Y	CA	*	ESK-6FK REV 5
						70MOD-101B	N	Y	CA	*	ESK-6FK REV 5
70-63X-1CRVB 02*			RLY	N		70FN-13B	N	Y	CA	*	ESK-6FL REV 7
						70MOD-102B	N	Y	CA	*	ESK-6FL REV 7
70-63X-1CRVB 03*			RLY	N		70AHU-3B	N	Y	CA	*	ESK-6FP REV 6
						70MOD-106B	N	Y	CA	*	ESK-6FP REV 6
70-63X-1CRVB 04*			RLY	N		70FN-4B	N	Y	CA	*	ESK-6FN REV 6
						70MOD-108B	N	Y	CA	*	ESK-6FN REV 6
70-69-1CRVA0 7*			RLY	N		70MOD-104A	N	Y	CA	*	ESK-6FT REV 8
70-69-1CRVA1 1*			RLY	N		70MOD-110A	N	Y	CA	*	ESK-6FAA REV 9
70-69-1CRVB0 7*			RLY	N		70MOD-104B	N	Y	CA	*	ESK-6FU REV 8
70-69-1CRVB1 1*			RLY	N		70MOD-110B	N	Y	CA	*	ESK-6FAB REV 9
70-74-1CRVA0 1*			RLY	N		70AHU-12A	N	Y	CA	*	ESK-6FK REV 5
						70MOD-101A	N	Y	CA	*	ESK-6FK REV 5

Main Equipment Designation.	Manufacturer Designation.	Manufacturer Part\model Number	Relay type	Low ruggedness relay	Rack/Panel:	Component for equipment	Essential	Satisfactory	Reason code	Outlier	Reference drwg(s)
70-74-1CRVA02*			RLY	N		70FN-13A	N	Y	CA	*	ESK-6FL REV 7
						70MOD-102A	N	Y	CA	*	ESK-6FL REV 7
70-74-1CRVA03*			RLY	N		70AHU-3A	N	Y	CA	*	ESK-6FP REV 6
						70MOD-106A	N	Y	CA	*	ESK-6FAA REV 9, ESK-6FP REV 6
70-74-1CRVA04*			RLY	N		70FN-4A	N	Y	CA	*	ESK-6FN REV 6, ESK-6FAA REV 9
						70MOD-108A	N	Y	CA	*	ESK-6FN REV 6, ESK-6FAA REV 9
70-74-1CRVA13*			RLY	N		70AHU-19A	N	Y	CA	*	ESK-6FAH REV 2
70-74-1CRVB01*			RLY	N		70AHU-12B	N	Y	CA	*	ESK-6FK REV 5
						70MOD-101B	N	Y	CA	*	ESK-6FK REV 5
70-74-1CRVB02*			RLY	N		70FN-13B	N	Y	CA	*	ESK-6FL REV 7
						70MOD-102B	N	Y	CA	*	ESK-6FL REV 7, ESK-6FU REV 8
70-74-1CRVB03*			RLY	N		70AHU-3B	N	Y	CA	*	ESK-6FAB REV 9, ESK-6FP REV 6
						70MOD-106B	N	Y	CA	*	ESK-6FAB REV 9, ESK-6FP REV 6
70-74-1CRVB04*			RLY	N		70FN-4B	N	Y	CA	*	ESK-6FN REV 6, ESK-6FAB REV 9
						70MOD-108B	N	Y	CA	*	ESK-6FN REV 6
70-74-1CRVB13*			RLY	N		70AHU-19B	N	Y	CA	*	ESK-6FAH REV 2
70DPS-103A	DWYER INSTRUMENTS INC	1637.25	INST	N	NA	70FN-13A	N	Y	CA	*	ESK-6FL REV 7
						70MOD-102A	N	Y	CA	*	ESK-6FL REV 7
70DPS-103B	DWYER INSTRUMENTS INC	1637.25	INST	N	NA	70FN-13B	N	Y	CA	*	ESK-6FL REV 7
						70MOD-102B	N	Y	CA	*	ESK-6FL REV 7

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
70DPS-110A	DWYER INSTRUMENTS INC	1637.25	INST	N	NA	70AHU-12A	N	Y	CA	*	ESK-6FK REV 5
						70MOD-101A	N	Y	CA	*	ESK-6FK REV 5
70DPS-110B	DWYER INSTRUMENTS INC	1637.25	INST	N	NA	70AHU-12B	N	Y	CA	*	ESK-6FK REV 5
						70MOD-101B	N	Y	CA	*	ESK-6FK REV 5
70DPS-111A	DWYER INSTRUMENTS INC	1637.25	INST	N	NA	70FN-4A	N	Y	CA	*	ESK-6FN REV 6
						70MOD-108A	N	Y	CA	*	ESK-6FN REV 6
70DPS-111B	DWYER INSTRUMENTS INC	1637.25	INST	N	NA	70FN-4B	N	Y	CA	*	ESK-6FN REV 6
						70MOD-108B	N	Y	CA	*	ESK-6FN REV 6
70DPS-112A	DWYER INSTRUMENTS INC	1637.25	INST	N	NA	70AHU-3A	N	Y	CA	*	ESK-6FP REV 6
						70MOD-106A	N	Y	CA	*	ESK-6FP REV 6
70DPS-112B	DWYER INSTRUMENTS INC	1637.25	INST	N	NA	70AHU-3B	N	Y	CA	*	ESK-6FP REV 6
						70MOD-106B	N	Y	CA	*	ESK-6FP REV 6
70MOD-102A(OP)	HONEYWELL CORP	M845A1027	OP	N	NA	70FN-13A	N	Y	NV	*	ESK-6FL REV 7, ESK-6FT REV 8
						70MOD-102A	N	Y	NV	*	ESK-6FL REV 7, ESK-6FT REV 8
70MOD-102B(OP)	HONEYWELL CORP	M845A1027	OP	N	NA	70FN-13B	N	Y	NV	*	ESK-6FL REV 7, ESK-6FU REV 8
						70MOD-102B	N	Y	NV	*	ESK-6FL REV 7, ESK-6FU REV 8
70MOD-108A(OP)	HONEYWELL CORP	M845A1027	OP	N	NA	70FN-4A	N	Y	NV	*	ESK-6FN REV 6
						70MOD-108A	N	Y	NV	*	ESK-6FN REV 6
70MOD-108B(OP)	HONEYWELL CORP	M845A1027	OP	N	NA	70FN-4B	N	Y	NV	*	ESK-6FN REV 6
						70MOD-108B	N	Y	NV	*	ESK-6FN REV 6, ESK-6FAB REV 9

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer .. Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
70TCV-123A(OP)	BARTON INSTRUMENT CO (ITT)	AH92	OP	N	NA	70AHU-19A	N	Y	NV	*	ESK-6FAH REV 2, ESK-6FAA REV 9
70TCV-123B(OP)	BARTON INSTRUMENT CO (ITT)	AH92	OP	N	NA	70AHU-19B	N	Y	NV	*	ESK-6FAH REV 2, ESK-6FAB REV 9
70TS-109A	MERCOID CORP	DR-7038-804L	INST	N	NA	70AHU-3A	N	Y	CA	*	ESK-6FAA REV 9
						70FN-4A	N	Y	CA	*	ESK-6FAA REV 9
						70MOD-106A	N	Y	CA	*	ESK-6FAA REV 9
						70MOD-108A	N	Y	CA	*	ESK-6FN REV 6, ESK-6FAA REV 9
						70MOD-110A	N	Y	CA	*	ESK-6FAA REV 9
70TS-109B	MERCOID CORP	DR-7038-804L	INST	N	NA	70AHU-3B	N	Y	CA	*	ESK-6FAB REV 9
						70FN-4B	N	Y	CA	*	ESK-6FN REV 6, ESK-6FAB REV 9
						70MOD-106B	N	Y	CA	*	ESK-6FAB REV 9, ESK-6FP REV 6
						70MOD-108B	N	Y	CA	*	ESK-6FAB REV 9
						70MOD-110B	N	Y	CA	*	ESK-6FAA REV 9
70TS-110A	MERCOID CORP	DR-7038-804L	INST	N	NA	70AHU-12A	N	Y	CA	*	ESK-6FT REV 8
						70FN-13A	N	Y	CA	*	ESK-6FT REV 8
						70MOD-101A	N	Y	CA	*	ESK-6FT REV 8
						70MOD-102A	N	Y	CA	*	ESK-6FT REV 8
						70MOD-104A	N	Y	CA	*	ESK-6FT REV 8
70TS-110B	MERCOID CORP	DR-7038-804L	INST	N	NA	70AHU-12B	N	Y	CA	*	ESK-6FU REV 8
						70FN-13B	N	Y	CA	*	ESK-6FU REV 8
						70MOD-101B	N	Y	CA	*	ESK-6FU REV 8
						70MOD-102B	N	Y	CA	*	ESK-6FU REV 8
						70MOD-104B	N	Y	CA	*	ESK-6FU REV 8
70TS-124A	MERCOID CORP	DR-7038-804L	INST	N	NA	70TCV-123A	N	Y	CA	*	ESK-6FAA REV 9
70TS-124B	MERCOID CORP	DR-7038-804L	INST	N	NA	70TCV-123B	N	Y	CA	*	ESK-6FAB REV 9
70VD-12A	CALCON	E1900-0	INST	N	NA	70AHU-12A	N	Y	CA	*	ESK-6FK REV 5
70VD-12B	CALCON	E1900-0	INST	N	NA	70AHU-12B	N	Y	CA	*	ESK-6FK REV 5
70VD-13A	CALCON	E1900-0	INST	N	NA	70FN-13A	N	Y	CA	*	ESK-6FL REV 7
70VD-13B	CALCON	E1900-0	INST	N	NA	70FN-13B	N	Y	CA	*	ESK-6FL REV 7
70VD-3A	CALCON	E1900-0	INST	N	NA	70AHU-3A	N	Y	CA	*	ESK-6FP REV 6

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer. Part\model. Number.	Relay. type.	Low. ruggedness. relay.	Rack/Panel:	Component. For equipment.	Essential.	Satisfactory	Reason. code.	Outlier	Reference drwg(s)
						70MOD-106A	N	Y	CA	*	ESK-6FP REV 6
70VD-3B	CALCON	E1900-0	INST	N	NA	70AHU-3B	N	Y	CA	*	ESK-6FP REV 6
						70MOD-106B	N	Y	CA	*	ESK-6FP REV 6
70VD-4A	CALCON	E1900-0	INST	N	NA	70FN-4A	N	Y	CA	*	ESK-6FN REV 6
						70MOD-108A	N	Y	CA	*	ESK-6FN REV 6
70VD-4B	CALCON	E1900-0	INST	N	NA	70FN-4B	N	Y	CA	*	ESK-6FN REV 6
						70MOD-108B	N	Y	CA	*	ESK-6FN REV 6
71-1-1HOEA01 *			CS	N		71-10514	N	Y	NV	*	ESK-5BA REV 18
71-1-1HOEA02 *			CS	N		71-10560	N	Y	NV	*	ESK-5BE REV 11
71-1-1HOEA03	GENERAL ELECTRIC	*	CS	N	09-8	10P-3A	N	Y	NV	*	ESK-5BU REV 21
						10P-3B	N	Y	NV	*	ESK-5BV REV 19
						71H05	N	Y	NV	*	ESK-5BU REV 21, ESK-5BS REV 18, ESK-5BV REV 19
71-1-1HOEB01 *			CS	N		71-10614	N	Y	NV	*	ESK-5BJ REV 21
71-1-1HOEB02 *			CS	N		71-10660	N	Y	NV	*	ESK-5BN REV 13
71-1-1HOEB03	GENERAL ELECTRIC	*	CS	N	09-8	10P-3C	N	Y	NV	*	ESK-5BW REV 18
						10P-3D	N	Y	NV	*	ESK-5BX REV 21
						71H06	N	Y	NV	*	ESK-5BT REV 19, ESK-5BW REV 18, ESK-5BX REV 21
71-1-1L1EA01 *			CS	N		71-11502	N	Y	NV	*	ESK-6G REV 8
71-1-1L1EB01 *			CS	N		71-11602	N	Y	NV	*	ESK-6H REV 11
71-1-1L2EA01 *			CS	N		71-12502	N	Y	NV	*	ESK-6G REV 8
71-1-1L2EB01 *			CS	N		71-12602	N	Y	NV	*	ESK-6H REV 11

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
71-1A-1IPSA02*			CS	N		71INV-3A	N	Y	NV	*	ESK-6K REV 2
						71MCC-155	N	Y	NV	*	ESK-6J REV 6
71-1A-1IPSB02*			CS	N		71INV-3B	N	Y	NV	*	ESK-6K REV 2
						71MCC-165	N	Y	NV	*	ESK-6J REV 6
71-25-1HOEA04	GENERAL ELECTRIC	SBM	CS	N	09-8	71H05	N	Y	NV	*	ESK-8GB REV 5
71-25-1HOEA04*			CS	N		71-10514	N	Y	NV	*	ESK-5BA REV 18
71-25-1HOEB04	GENERAL ELECTRIC	SBM	CS	N	09-8	71H06	N	Y	NV	*	ESK-8GC REV 6
71-25-1HOEB04*			CS	N		71-10614	N	Y	NV	*	ESK-5BJ REV 21, ESK-8GC REV 6
71-25/27-1HOEA04*			RLY	N		71-10514	N	Y	CA	*	ESK-5BA REV 18
71-25/27-1HOEB04	GENERAL ELECTRIC	IJS52D	RLY	N	71-10614	71-10614	N	Y	CA	*	ESK-5BJ REV 21, ESK-8GC REV 6
71-27-1HOEA01*			RLY	N		71-10514	N	Y	CA	*	ESK-5BA REV 18
71-27-1HOEA02*			RLY	N		71-10560	N	Y	CA	*	ESK-5BE REV 11
71-27-1HOEA05*			RLY	N		71-10560	N	Y	CA	*	ESK-5BE REV 11
71-27-1HOEB01*			RLY	N		71-10614	N	Y	CA	*	ESK-5BJ REV 21
71-27-1HOEB02*			RLY	N		71-10660	N	Y	CA	*	ESK-5BN REV 13
71-27-1HOEB05*			RLY	N		71-10660	N	Y	CA	*	ESK-5BN REV 13
71-27-L15-1*			RLY	N		71-11502	N	Y	CA	*	ESK-6G REV 8
71-27-L16-1*			RLY	N		71-11602	N	Y	CA	*	ESK-6H REV 11

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer. Part\model Number.	Relay. type..	Low. ruggedness. relay.	Rack/Panel:	Component. For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
71-27-L25-1*			RLY	N		71-12502	N	Y	CA	*	ESK-6G REV 8
71-27-L26-1*			RLY	N		71-12602	N	Y	CA	*	ESK-6H REV 11
71-271AB-1HO EA04	GENERAL ELECTRIC	NGV13A	RLY	N	71H05	71H05	Y	Y	GERS	N	ESK-8J REV 8, ESK-5BS REV 18
71-271AB-1HO EB04	GENERAL ELECTRIC	NGV13A	RLY	N	71H06	71H06	Y	Y	GERS	N	ESK-8J REV 8, ESK-5BT REV 19
71-272BC-1HO EA04	GENERAL ELECTRIC	NGV13A	RLY	N	71H05	71H05	Y	Y	GERS	N	ESK-8J REV 8, ESK-5BS REV 18
71-272BC-1HO EB04	GENERAL ELECTRIC	NGV13A	RLY	N	71H06	71H06	Y	Y	GERS	N	ESK-8J REV 8, ESK-5BT REV 19
71-273AB-1HO EA04	BROWN BOVERI	ITE-27N	RLY	N	93AURP-01	71H05	Y	Y	GERS	N	ESK-8J REV 8, ESK-5BY REV 5
71-273AB-1HO EB04	BROWN BOVERI	ITE-27N	RLY	N	93AURP-02	71H06	Y	Y	GERS	N	ESK-8J REV 8, ESK-5BZ REV 5
71-274BC-1HO EA04	BROWN BOVERI	ITE-27N	RLY	N	93AURP-01	71H05	Y	Y	GERS	N	ESK-8J REV 8, ESK-5BY REV 5
71-274BC-1HO EB04	BROWN BOVERI	ITE-27N	RLY	N	93AURP-02	71H06	Y	Y	GERS	N	ESK-8J REV 8, ESK-5BZ REV 5
71-27A-1HOEA 03*			RLY	N		71H05	N	Y	CA	*	ESK-5BS REV 18
71-27A-1HOEB 03*			RLY	N		71H06	N	Y	CA	*	ESK-5BT REV 19
71-27T1-1HOE A03	GENERAL ELECTRIC	SAM17A	RLY	N	71H05	71H05	Y	*	CR	Y	ESK-5BS REV 18
71-27T1-1HOE B03	GENERAL ELECTRIC	SAM17A	RLY	N	71H06	71H06	Y	*	CR	Y	ESK-5BT REV 19
71-27T1X-1HO EA03	GENERAL ELECTRIC	HLA11B	RLY	N	71H05	71H05	Y	Y	GERS	N	ESK-5BS REV 18
71-27T1X-1HO EB03	GENERAL ELECTRIC	HLA11B	RLY	N	71H06	71H06	Y	Y	GERS	N	ESK-5BT REV 19
71-27T2-1HOE A03	AMERACE CORP (AGASTAT)	E7012PC002	RLY	N	93AURP-01	71H05	N	Y	CA	*	ESK-5BY REV 5

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
71-27T2-1HOE B03	AMERACE CORP (AGASTAT)	E7012PC002	RLY	N	93AURP-02	71H06	N	Y	CA	*	ESK-5BZ REV 5
71-27T2X-1HO EA03	GENERAL ELECTRIC	12HFA151A2F	RLY	N	93AURP-01	71H05	Y	N	CR	Y	ESK-5BS REV 18, ESK-5BY REV 5
71-27T2X-1HO EB03	GENERAL ELECTRIC	12HFA151A2F	RLY	N	93AURP-02	71H06	Y	N	CR	Y	ESK-5BZ REV 5, ESK-5BT REV 19
71-27T3-1HOE A03	AMERACE CORP (AGASTAT)	E7012PD	RLY	N	93AURP-01	71H05	Y	Y	GERS	N	ESK-5BY REV 5
71-27T3-1HOE B03	AMERACE CORP (AGASTAT)	E7012PD	RLY	N	93AURP-02	71H06	Y	Y	GERS	N	ESK-5BZ REV 5
71-27XA-1HOE A03	GENERAL ELECTRIC	HLA11B	RLY	N	71H05	71H05	Y	Y	GERS	N	ESK-5BS REV 18, ESK-5BB REV 21
71-27XB-1HOE B03	GENERAL ELECTRIC	HLA11B	RLY	N	71H06	71H06	Y	Y	GERS	N	ESK-5BT REV 19, ESK-5BK REV 23
71-27XC-1HOE A03	GENERAL ELECTRIC	HLA11B	RLY	N	71H05	71H05	Y	Y	GERS	N	ESK-5BC REV 21
71-27XD-1HOE B03	GENERAL ELECTRIC	HLA11B	RLY	N	71H06	71H06	Y	Y	GERS	N	ESK-5BT REV 19, ESK-5BL REV 23
71-27Y-1HOEA 03	GENERAL ELECTRIC	HFA-100	RLY	N	93AURP-01	71H05	N	Y	CA	*	ESK-5BY REV 5
71-27Y-1HOEB 03	GENERAL ELECTRIC	HFA-100	RLY	N	93AURP-02	71H06	N	Y	CA	*	ESK-5BZ REV 5
71-42-3-1IPS A01*			CONT	N		71MCC-155	N	Y	CA	*	ESK-6J REV 6
71-42-3-1IPS B01*			CONT	N		71MCC-165	N	Y	CA	*	ESK-6J REV 6
71-42C-1IPSA 02*			CONT	N		71INV-3A	N	Y	CA	*	ESK-6K REV 2
71-42D-1IPSB 02*			RLY	N		71INV-3B	N	Y	CA	*	ESK-6K REV 2
71-42X-1IPSA 02*			RLY	N		71INV-3A	N	Y	CA	*	ESK-6K REV 2

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
71-42X-1IPSB 02*			RLY	N		71INV-3B	N	Y	CA	*	ESK-6K REV 2
71-43-1IPSA0 1*			CS	N		71MCC-155	N	Y	NV	*	ESK-6J REV 6
71-43-1IPSB0 1*			CS	N		71MCC-165	N	Y	NV	*	ESK-6J REV 6
71-50/51-A-1 HOEA02	GENERAL ELECTRIC	IAC51B	RLY	N	71H05	71-10560	Y	Y	GERS	N	ESK-5BE REV 11
71-50/51-A-1 HOEB02	GENERAL ELECTRIC	IAC51B	RLY	N	71H06	71-10660	Y	Y	GERS	N	ESK-5BN REV 13
71-50/51-A-1 RHRA01	GENERAL ELECTRIC	12IAC66K8A	RLY	N	71H05	10P-3A	Y	Y	GERS	N	ESK-5BU REV 21
71-50/51-A-1 RHRA02	GENERAL ELECTRIC	12IAC66K8A	RLY	N	71H05	10P-1A	Y	Y	GERS	N	ESK-5BG REV 12
71-50/51-A-1 RHRB01	GENERAL ELECTRIC	12IAC66K8A	RLY	N	71H05	10P-3B	Y	Y	GERS	N	ESK-5BV REV 19
71-50/51-A-1 RHRC01	GENERAL ELECTRIC	12IAC66K8A	RLY	N	71H06	10P-3C	Y	Y	GERS	N	ESK-5BW REV 18
71-50/51-A-1 RHRC02	GENERAL ELECTRIC	12IAC66K8A	RLY	N	71H05	10P-1C	Y	Y	GERS	N	ESK-5BQ REV 11
71-50/51-A-1 RHRD01	GENERAL ELECTRIC	12IAC66K8A	RLY	N	71H06	10P-3D	Y	Y	GERS	N	ESK-5BX REV 21
71-50/51-A-1 RHRD02	GENERAL ELECTRIC	12IAC66K8A	RLY	N	71H06	10P-1D	Y	Y	GERS	N	ESK-5BR REV 12
71-50/51A-1R HRB02	GENERAL ELECTRIC	12IAC66K8A	RLY	N	71H06	10P-1B	Y	Y	GERS	N	ESK-5BH REV 16
71-50GS-1HOE A02	GENERAL ELECTRIC	12PJC11AV1A	RLY	N	71H05	71-10560	Y	Y	GERS	N	ESK-5BE REV 11
71-50GS-1HOE B02	GENERAL ELECTRIC	12PJC11AV1A	RLY	N	71H06	71-10660	Y	Y	GERS	N	ESK-5BN REV 13
71-50GS-1RHR A02	GENERAL ELECTRIC	12PJC11AV1A	RLY	N	71H05	10P-1A	Y	Y	GERS	N	ESK-5BG REV 12

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer. Part\model. Number.	Relay. type.	Low. ruggedness. relay.	Rack/Panel:	Component. For equipment.	Essential.	Satisfactory	Reason. code.	Outlier	Reference drwg(s)
71-50GS-1RHR B01	GENERAL ELECTRIC	12PJC11AV1A	RLY	N	71H05	10P-3B	Y	Y	GERS	N	ESK-5BV REV 19
71-50GS-1RHR B02	GENERAL ELECTRIC	12PJC11AV1A	RLY	N	71H06	10P-1B	Y	Y	GERS	N	ESK-5BH REV 16
71-50GS-1RHR C02	GENERAL ELECTRIC	12PJC11AV1A	RLY	N	71H05	10P-1C	Y	Y	GERS	N	ESK-5BQ REV 11
71-50GS-1RHR D01	GENERAL ELECTRIC	12PJC11AV1A	RLY	N	71H06	10P-3D	Y	Y	GERS	N	ESK-5BX REV 21
71-50GS-1RHR D02	GENERAL ELECTRIC	12PJC11AV1A	RLY	N	71H06	10P-1D	Y	Y	GERS	N	ESK-5BR REV 12
71-51-A-1HOE A01	GENERAL ELECTRIC	12IAC51A2A	RLY	N	71H05	71-10514	Y	Y	GERS	N	ESK-5BA REV 18
71-51-A-1HOE A22	GENERAL ELECTRIC	IAC51A	RLY	N	71H05	71-10514	Y	Y	GERS	N	ESK-5BA REV 18
71-51-A-1HOE B01	GENERAL ELECTRIC	12IAC51A2A	RLY	N	71H06	71-10614	Y	Y	GERS	N	ESK-5BJ REV 21
71-51-A-1HOE B22	GENERAL ELECTRIC	IAC51A	RLY	N	71H06	71-10614	Y	Y	GERS	N	ESK-5BJ REV 21
71-51GS-1HOE A01	GENERAL ELECTRIC	12IAC51A3A	RLY	N	71H05	71-10514	Y	Y	GERS	N	ESK-5BA REV 18
71-51GS-1HOE B01	GENERAL ELECTRIC	12IAC53A3A	RLY	N	71H06	71-10614	Y	Y	GERS	N	ESK-5BJ REV 21
71-62-1IPSA02*			RLY	N		71INV-3A	N	Y	CA	*	ESK-6K REV 2
71-62-1IPSB02*			RLY	N		71INV-3B	N	Y	CA	*	ESK-6K REV 2
71-62-3-1HOE A03	AMERACE CORP (AGASTAT)	E7012PB	RLY	N	71H05	10P-3A	N	Y	CA	*	ESK-5BS REV 18, ESK-5BU REV 21
						71H05	Y	Y	GERS	N	ESK-5BS REV 18, ESK-5BU REV 21
71-62-3-1HOE B03	AMERACE CORP (AGASTAT)	E7012PB	RLY	N	71H06	10P-3D	N	Y	CA	*	ESK-5BT REV 19, ESK-5BX REV 21
						71H06	Y	Y	GERS	N	ESK-5BT REV 19, ESK-5BX REV 21

Main Equipment Designation.	Manufacturer Designation.	Manufacturer Part\model Number	Relay type	Low ruggedness relay	Rack/Panel:	Component For equipment	Essential	Satisfactory	Reason code	Outlier	Reference drwg(s)
71-62-4-1HOE A03	AMERACE CORP (AGASTAT)	E7012PC	RLY	N	71H05	10P-3B	N	Y	CA	*	ESK-5BV REV 19, ESK-5BS REV 18, ESK-5BU REV 21
						71H05	Y	Y	GERS	N	ESK-5BS REV 18, ESK-5BU REV 21
71-62-4-1HOE B03	AMERACE CORP (AGASTAT)	E7012PC	RLY	N	71H06	10P-3C	N	Y	CA	*	ESK-5BW REV 18, ESK-5BT REV 19
						71H06	Y	Y	GERS	N	ESK-5BW REV 18, ESK-5BT REV 19
71-67-1HOEA2 0-A	GENERAL ELECTRIC	12CJC15E3A	RLY	N	71H05	71-10514	Y	Y	GERS	N	ESK-5BA REV 18
71-67-1HOEB2 0-A	GENERAL ELECTRIC	12CJC15E3A	RLY	N	71H06	71-10614	Y	Y	GERS	N	ESK-5BJ REV 021
71-86-1HOEA0 1	GENERAL ELECTRIC	12HEA61A223	RLY	N	71H05	71-10514	Y	Y	GERS	N	ESK-5BA REV 18
71-86-1HOEA0 2	GENERAL ELECTRIC	12HEA61A236	RLY	N	71H05	71-10560	Y	Y	GERS	N	ESK-5BN REV 011
71-86-1HOEB0 1	GENERAL ELECTRIC	12HEA61A223	RLY	N	71H06	71-10614	Y	Y	GERS	N	ESK-5BJ REV 021
71-86-1HOEB0 2	GENERAL ELECTRIC	12HEA61A223	RLY	N	71H06	71-10660	Y	Y	GERS	N	ESK-5BN REV 013
71-86A-1HOEA 01	GENERAL ELECTRIC	12HEA61A223	RLY	N	71H05	71-10514	Y	Y	GERS	N	ESK-5BA REV 18
71-86A-1HOEB 01	GENERAL ELECTRIC	12HEA61A223	RLY	N	71H06	71-10614	Y	Y	GERS	N	ESK-5BJ REV 021
71-86D-1HOEA 01	GENERAL ELECTRIC	12HEA61A223	RLY	N	71H05	71-10514	Y	Y	GERS	N	ESK-5BA REV 18
71-86D-1HOEB 01	GENERAL ELECTRIC	12HEA61A223	RLY	N	71H06	71-10614	Y	Y	GERS	N	ESK-5BJ REV 21
71-87-A-1HOE A01	GENERAL ELECTRIC	12IAC53B2A	RLY	N	71H05	71-10514	Y	Y	GERS	N	ESK-5BA REV 18
71-87-A-1HOE B01	GENERAL ELECTRIC	12IAC53B2A	RLY	N	71H06	71-10614	Y	Y	GERS	N	ESK-5BJ REV 21
71-94-1HOEA0	GENERAL	HLA11B	RLY	N	71H05	71-10514	Y	Y	GERS	N	ESK-5BA REV 18

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
3	ELECTRIC										
						71H05	Y	Y	GERS	N	ESK-5BS REV 18, ESK-5BB REV 21, ESK-5BC REV 22
71-94-1HOEB0 3	GENERAL ELECTRIC	HLA11B	RLY	N	71H06	71-10614	Y	Y	GERS	N	ESK-5BJ REV 21
						71H06	Y	Y	GERS	N	ESK-5BT REV 19, ESK-5BK REV 23, ESK-5BL REV 23
71-94LS-1HOE A03	GENERAL ELECTRIC	HLA11B	RLY	N	71H05	10P-1A	N	Y	CA	*	ESK-5BG REV 12
						10P-1C	N	Y	CA	*	ESK-5BQ REV 11
						10P-3A	N	Y	CA	*	ESK-5BS REV 18, ESK-5BU REV 21, ESK-5BV REV 19, ESK-5BG REV 12, ESK-5BQ REV 11
						10P-3B	N	Y	CA	*	ESK-5BS REV 18, ESK-5BU REV 21, ESK-5BV REV 19, ESK-5BG REV 12, ESK-5BQ REV 11
						71H05	Y	Y	GERS	N	ESK-5BS REV 18, ESK-5BU REV 21, ESK-5BV REV 19, ESK-5BG REV 12, ESK-5BQ REV 11
71-94LS-1HOE B03	GENERAL ELECTRIC	HLA11B	RLY	N	71H06	10P-1B	N	Y	CA	*	ESK-5BH REV 16
						10P-1D	N	Y	CA	*	ESK-5BR REV 12
						10P-3C	N	Y	CA	*	ESK-5BT REV 19. ESK-5BW REV 18, ESK-5BX REV 21, ESK-5BH REV 16, ESK-5BR REV 12
						10P-3D	N	Y	CA	*	ESK-5BT REV 19, ESK-5BW REV 18, ESK-5BX REV 21, ESK-5BH REV 16, ESK-5BR REV 12
						71H06	Y	Y	GERS	N	ESK-5BT REV 19, ESK-5BW REV 18, ESK-5BX REV 21, ESK-5BH REV 16, ESK-5BR REV 12

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
71BCB-2A-C03	GENERAL ELECTRIC	THKM	CONT	N	71BCB-2A	71UPS-1	N	Y	CA	*	FE-1AB REV 15
71BMCC-1-OA1 (MC)	GENERAL ELECTRIC	*	CONT	N	71BMCC-1	13MOV-16	N	Y	CA	*	ESK-11AQ REV 016
71BMCC-2-OA2 (MC)	GENERAL ELECTRIC	*	CONT	N	71BMCC-2	23MOV-14	N	Y	CA	*	ESK-11AK REV 015
71BMCC-2-OB1 (MC)	GENERAL ELECTRIC	*	CONT	N	71BMCC-2	23MOV-17	N	Y	CA	*	1.61-146 REV E, ESK-11AL REV 013, FE-1AJ REV 015
71BMCC-2-OE2 (MC)	GENERAL ELECTRIC	IC28001607	CONT	N	71BMCC-2	23MOV-60	Y	Y	GERS	N	1.61-146 REV E, ESK-11AAG REV 010, FE-1AJ REV 015
71BMCC-4-OA2 (MC)	GENERAL ELECTRIC	IC2800	CONT	N	71BMCC-4	23MOV-24	N	Y	CA	*	ESK-11AN REV 013, 1.61-147 REV F, FE-1AJ REV 015
71BMCC-4-OB1 (MC)	GENERAL ELECTRIC	IC2800	CONT	N	71BMCC-4	23MOV-25	Y	Y	GERS	N	1.61-147 REV F, ESK-11AN REV 013, FE-1AJ REV 015
71BMCC-4-OB2 (MC)	GENERAL ELECTRIC	IC2800	CONT	N	71BMCC-4	12MOV-18	Y	Y	GERS	N	ESK-11AD REV 14
71BMCC-4-OC1 (MC)	GENERAL ELECTRIC	IC2800	CONT	N	71BMCC-4	23MOV-57	N	Y	CA	*	ESK-11AP REV 11, FE-1AJ REV 15
71BMCC-4-OC2 (MC)	GENERAL ELECTRIC	IC2800	CONT	N	71BMCC-4	23MOV-58	N	Y	CA	*	ESK-11AP REV 11, FE-1AJ REV 15
71BMCC-4-OD2 (MC)	GENERAL ELECTRIC	IC2800	CONT	N	71BMCC-4	10MOV-17	Y	Y	GERS	N	ESK-11AE REV 10
71BMCC-4-OE2 (MC)	GENERAL ELECTRIC	IC2800	CONT	N	71BMCC-4	23P-150	N	Y	CA	*	ESK-11CB REV 008, FE-1AJ REV 015
71BMCC-6-OA1 (MC)	GENERAL ELECTRIC	IC2820A200	CONT	N	71BMCC-6	23MOV-16	Y	Y	GERS	N	1.61-146 REV E, ESK-11AK REV 015
71BMCC-6-OA2 (MC)	GENERAL ELECTRIC	*	CONT	N	71BMCC-6	23MOV-19	N	Y	CA	*	ESK-11AL REV 013, FE-1AJ REV 015, 1.61-146 REV E

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel.	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
71BMCC-6-OB1 (MC)	GENERAL ELECTRIC	*	CONT	N	71BMCC-6	23MOV-21	N	Y	CA	*	ESK-11AM REV 013, 1.61-147 REV F, FE-1AJ REV 015
71BMCC-6-OB2 (MC)	GENERAL ELECTRIC	IC2800A200	CONT	N	71BMCC-6	23MOV-20	Y	Y	GERS	N	ESK-11AM REV 013, 1.61-147 REV F, FE-1AJ REV 015
71CS-1HOEB01	ELECTRO SWITCH CORP	SERIES 20P	CS	N	25ASP-3	71-10614	N	Y	NV	*	ESK-5BJ REV 21
71CS-1HOEB02	ELECTRO SWITCH CORP	SERIES 20P	CS	N	25ASP-3	71-10660	N	Y	NV	*	ESK-5BN REV 13
71CS-1HOEB04	ELECTRO SWITCH CORP	SERIES 20P	CS	N	25ASP-3	71H06	N	Y	NV	*	ESK-8GC REV 6
71CS-1L1EB01	ELECTRO SWITCH CORP	SERIES 20P	CS	N	25RSP	71-11602	N	Y	NV	*	ESK-6H REV 11
71CS-1L2EB01	ELECTRO SWITCH CORP	SERIES 20P	CS	N	25ASP-3	71-12602	N	Y	NV	*	ESK-6H REV 11
71CST-1HOEA01*			CS	N		71-10514	N	Y	NV	*	ESK-5BA REV 18
71CST-1HOEA02*			CS	N		71-10560	N	Y	NV	*	ESK-5BE REV 11
71CST-1HOEB01*			CS	N		71-10614	N	Y	NV	*	ESK-5BJ REV 21
71CST-1HOEB02*			CS	N		71-10660	N	Y	NV	*	ESK-5BN REV 13
71GD-31	GENERAL ELECTRIC	AB-18	RLY	N	71UPP	71UPS-1	N	Y	CA	*	FE-1AB REV 15
71GD-32	GENERAL ELECTRIC	AB-18	RLY	N	71UPP	71UPS-1	N	Y	CA	*	FE-1AB REV 15
71IS-1HOEB01	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25ASP-3	71-10614	N	Y	NV	*	ESK-5BJ REV 21
71IS-1HOEB02	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25ASP-3	71-10660	N	Y	NV	*	ESK-5BN REV 13
71IS-1HOEB04	ELECTRO	SERIES 20K	CS	N	25ASP-3	71H06	N	Y	NV	*	ESK-8GC REV 6

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
	SWITCH CORP										
71IS-1L1EB01	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25RSP	71-11602	N	Y	NV	*	ESK-6H REV 11
71IS-1L2EB01	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25ASP-3	71-12602	N	Y	NV	*	ESK-6H REV 11
71ISX-1HOEB01*			RLY	N		71-10614	N	Y	CA	*	ESK-5BJ REV 21
71ISX-1HOEB02*			RLY	N		71-10660	N	Y	CA	*	ESK-5BN REV 13
71ISX-1L1EB01*			RLY	N		71-11602	N	Y	CA	*	ESK-6H REV 11
71ISX-1L2EB01*			RLY	N		71-12602	N	Y	CA	*	ESK-6H REV 11
71K1C-1IPSA02*			RLY	N		71INV-3A	N	Y	CA	*	ESK-6K REV 2
71K1D-1IPSB02*			RLY	N		71INV-3B	N	Y	CA	*	ESK-6K REV 2
71K50-1IPSA02*			RLY	N		71INV-3A	N	Y	CA	*	ESK-6K REV 2, 1 26-A14 REV 0, 1 26-A15 REV 0
71K50-1IPSB02*			RLY	N		71INV-3B	N	Y	CA	*	ESK-6K REV 2, 1.26-A14 REV 0, 1.26-A15 REV 0
71MCC-151-OC1(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-151	10MOV-166A	N	Y	CA	*	ESK-6MD REV 11
71MCC-151-OD1(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-151	10MOV-12A	N	Y	CA	*	ESK-6MF REV 12
71MCC-151-OD2(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-151	10MOV-89A	N	Y	CA	*	ESK-6MZ REV 13
71MCC-151-OD3(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-151	10MOV-148A	N	Y	CA	*	ESK-6MM REV 9
71MCC-151-OE2(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-151	10MOV-70A	N	Y	CA	*	ESK-6MAE REV 10

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
71MCC-152-0B 4(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-152	29MOV-74	Y	Y	GERS	N	ESK-6MAQ REV 8
71MCC-152-0D 1(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-152	11EV-14A	N	Y	CA	*	1.72-7 REV T
						11P-2A	N	Y	CA	*	1.72-7 REV T
71MCC-152-0E 1(CB)	GENERAL ELECTRIC	TFJ	CONT	N	71MCC-152	71INV-3A	N	Y	CA	*	ESK-6K REV 2
71MCC-152-0F 1(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-152	10MOV-26A	Y	Y	GERS	N	ESK-6MQ REV 11, 1.65-82 REV E
71MCC-152-0F 3(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-152	14MOV-12A	N	Y	CA	*	ESK-6MAJ REV 009
71MCC-152-0G 2(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-152	12MOV-15	Y	Y	GERS	N	ESK-6MAF REV 13
71MCC-153-G2 A(MC)	GENERAL ELECTRIC	CR109F	CONT	N	71MCC-153	71MCC-155	N	Y	CA	*	ESK-6J REV 6
71MCC-153-G2 B(MC)	GENERAL ELECTRIC	CR109F	CONT	N	71MCC-153	71MCC-155	N	Y	CA	*	ESK-6J REV 6
71MCC-153-0A 4(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-153	10MOV-13A	N	Y	CA	*	ESK-6MG REV 9
71MCC-153-0A 5(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-153	10MOV-13C	N	Y	CA	*	ESK-6MG REV 9
71MCC-153-0B 3(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-153	10MOV-16A	Y	Y	GERS	N	ESK-6ML REV 12
71MCC-153-0B 4(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-153	10MOV-21A	Y	Y	GERS	N	ESK-6MN REV 11, 1.65-87 REV F
71MCC-153-0C 1(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-153	10MOV-34A	N	Y	CA	*	ESK-6MT REV 10, 1.65-112 REV J
71MCC-153-0C 3(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-153	10MOV-38A	N	Y	CA	*	ESK-6MV REV 9
71MCC-153-0C 4(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-153	10MOV-15A	N	Y	CA	*	ESK-6MJ REV 8
71MCC-153-0D 1(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-153	10MOV-39A	N	Y	CA	*	ESK-6MW REV 17

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
71MCC-153-0D 2(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-153	10MOV-65A	N	Y	CA	*	ESK-6MX REV 10
71MCC-153-0E 3(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-153	66UC-22C	N	Y	CA	*	ESK-6EAC REV 3, FE-1L REV 23
71MCC-153-0E 4(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-153	66UC-22E	N	Y	CA	*	ESK-6EG REV 11
71MCC-153-0E 5(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-153	66UC-22G	N	Y	CA	*	ESK-6EAC REV 3, FE-1L REV 23
71MCC-153-0E 6(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-153	66UC-22J	N	Y	CA	*	ESK-6EAC REV 3, FE-1L REV 23
71MCC-153-0F 1(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-153	10MOV-15C	N	Y	CA	*	ESK-6MJ REV 8
71MCC-153-0F 3(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-153	23MOV-15	N	Y	CA	*	ESK-6MAV REV 011, 1.61-146 REV E
71MCC-155-0H 1(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-155	10MOV-66A	N	Y	CA	*	ESK-6MY REV 15
71MCC-155-0H 2(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-155	10MOV-27A	N	Y	CA	*	ESK-6MR REV 14
71MCC-155-0J 4(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-155	10MOV-25A	N	Y	CA	*	ESK-6MP REV 19
71MCC-156-0D 2(MC)	GENERAL ELECTRIC	CR209	CONT	N	71MCC-156	10MOV-18	N	Y	CA	*	ESK-6MAF REV 13, FE-1BH REV 8
71MCC-161-0A 2(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-161	10MOV-70B	Y	Y	GERS	N	ESK-6MAE REV 10
71MCC-161-0B 1(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-161	10MOV-12B	N	Y	CA	*	ESK-6MF REV 12
71MCC-161-0B 2(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-161	10MOV-89B	N	Y	CA	*	ESK-6MZ REV 13
71MCC-161-0B 3(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-161	10MOV-148B	N	Y	CA	*	ESK-6MM REV 9
71MCC-161-0C 1(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-161	10MOV-166B	N	Y	CA	*	ESK-6MD REV 11

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
71MCC-161-OC 3(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-161	10MOV-26B	Y	Y	GERS	N	ESK-6MQ REV 11, 1.65-132 REV L
71MCC-162-OB 2(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-162	11TK-1	N	Y	CA	*	1.72-7 REV T
71MCC-162-OD 1(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-162	11EV-14B	N	Y	CA	*	1.72-7 REV T
						11P-2B	N	Y	CA	*	1.72-7 REV T
71MCC-162-OE 1(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-162	71INV-3B	N	Y	CA	*	ESK-6K REV 2
71MCC-162-OG 2(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-162	14MOV-12B	N	Y	CA	*	ESK-6MAJ REV 009
71MCC-163-C2 A(MC)	GENERAL ELECTRIC	CR109F	CONT	N	71MCC-163	71MCC-165	N	Y	CA	*	ESK-6J REV 6
71MCC-163-C2 B(MC)	GENERAL ELECTRIC	CR109F	CONT	N	71MCC-163	71MCC-165	N	Y	CA	*	ESK-6J REV 6
71MCC-163-OD 1(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-163	10MOV-15B	N	Y	CA	*	ESK-6MK REV 11
71MCC-163-OD 2(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-163	13MOV-15	N	Y	CA	*	ESK-6MAZ REV 009
71MCC-163-OD 3(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-163	23MOV-59	Y	Y	GERS	N	1.61-146 REV E
71MCC-163-OE 2(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-163	66UC-22B	N	Y	CA	*	ESK-6EAC REV 3, FE-1L REV 23
71MCC-163-OE 3(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-163	66UC-22D	N	Y	CA	*	ESK-6EAC REV 3, FE-1L REV 23
71MCC-163-OE 4(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-163	66UC-22F	N	Y	CA	*	ESK-6EG REV 11
71MCC-163-OE 5(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-163	66UC-22H	N	Y	CA	*	ESK-6EAC REV 3, FE-1L REV 23
71MCC-163-OE 6(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-163	66UC-22K	N	Y	CA	*	ESK-6EAC REV 3, FE-1L REV 23
71MCC-163-OF 1(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-163	10MOV-39B	N	Y	CA	*	ESK-6MW REV 17

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer Part\model Number	Relay. type	Low. ruggedness. relay	Rack/Panel:	Component. For equipment	Essential.	Satisfactory	Reason. code	Outlier	Reference drwg(s)
71MCC-163-OF 2(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-163	10MOV-65B	N	Y	CA	*	ESK-6MX REV 10
71MCC-163-OG 1(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-163	10MOV-34B	N	Y	CA		ESK-6MT REV 10, 1.65-89 REV Q
71MCC-163-OG 3(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-163	10MOV-38B	N	Y	CA	*	ESK-6MV REV 9
71MCC-163-OG 4(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-163	10MOV-15D	N	Y	CA	*	ESK-6MK REV 11
71MCC-163-OH 3(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-163	10MOV-16B	Y	Y	GERS	N	ESK-6ML REV 12
71MCC-163-OH 4(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-163	10MOV-21B	Y	Y	GERS	N	ESK-6MN REV 11, 1.65-87 REV F
71MCC-163-OJ 4(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-163	10MOV-13B	N	Y	CA	*	ESK-6MH REV 12
71MCC-163-OJ 5(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-163	10MOV-13D	N	Y	CA	*	ESK-6MH REV 12
71MCC-165-OA 4(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-165	10MOV-25B	N	Y	CA	*	ESK-6MP REV 19
71MCC-165-OB 1(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-165	10MOV-66B	N	Y	CA	*	ESK-6MY REV 15
71MCC-165-OB 2(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-165	10MOV-27B	N	Y	CA	N	ESK-6MR REV 14
71MCC-251-OD 1(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-251	67MOD-16A1	N	Y	CA	*	ESK-6EQ REV 7
						67UC-16A1(M)	N	Y	CA	*	ESK-6EQ REV 7
71MCC-251-OD 2(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-251	67MOD-16A2	N	Y	CA	*	ESK-6EQ REV 7
						67UC-16A2(M)	N	Y	CA	*	ESK-6EQ REV 7
71MCC-252-OA 1(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-252	46MOV-101A	N	Y	CA	*	ESK-6HQ REV 012
71MCC-252-OA 2(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-252	46MOV-102A	N	Y	CA	*	ESK-6HS REV 010
71MCC-252-OA	GENERAL	CR106	CONT	N	71MCC-252	73FN-3A	N	Y	CA	*	ESK-6FZ REV 007

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer. Part\model. Number.	Relay. type.	Low. ruggedness. relay.	Rack/Panel:	Component. For equipment.	Essential.	Satisfactory	Reason. code.	Outlier	Reference drwg(s)
3(MC)	ELECTRIC										
71MCC-252-0D 2	GENERAL ELECTRIC	TFJ	CONT	N	71MCC-252	71UPS-1	N	Y	CA	*	FE-1AB REV 15
71MCC-253-0A 3(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-253	70FN-4A	N	Y	CA	*	ESK-6FN REV 6, FE-1Z REV 10
						70FN-4B	N	Y	CA	*	ESK-6FN REV 6
						70MOD-108A	N	Y	CA	*	ESK-6FN REV 6, ESK-6FAA REV 9, FE-1Z REV 10
						70MOD-108B	N	Y	CA	*	ESK-6FN REV 6, ESK-6FAB REV 9, FE-1Z REV 10
71MCC-253-0A 4(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-253	72FN-31A	N	Y	CA	*	ESK-6JD REV 6
						72MOD-102A	N	Y	CA	*	ESK-6JD REV 6
71MCC-253-0B 3(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-253	72FN-46A	N	Y	CA	*	ESK-6JE REV 7
						72FN-46C	N	Y	CA	*	ESK-6JE REV 7
						72MOD-103A	N	Y	CA	*	ESK-6JE REV 7
						72MOD-103C	N	Y	CA	*	ESK-6JE REV 7
71MCC-253-0C 1(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-253	70AHU-3A	N	Y	CA	*	ESK-6FP REV 6
						70AHU-3B	N	Y	CA	*	ESK-6FP REV 6
						70MOD-106A	N	Y	CA	*	ESK-6FAA REV 9, ESK-6FP REV 6, FE-1Z REV 10
						70MOD-106B	N	Y	CA	*	ESK-6FAB REV 9, ESK-6FP REV 6, FE-1Z REV 10
71MCC-253-0C 2(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-253	72FN-46A	N	Y	CA	*	ESK-6JE REV 7
						72FN-46C	N	Y	CA	*	ESK-6JE REV 7
						72MOD-103A	N	Y	CA	*	ESK-6JE REV 7
						72MOD-103C	N	Y	CA	*	ESK-6JE REV 7
71MCC-253-0C 4(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-253	72AHU-30A	N	Y	CA	*	ESK-6JF REV 7, FE-1Z REV 10
						72MOD-100A	N	Y	CA	*	ESK-6JF REV 7, FE-1Z REV 10
						72MOD-101A	N	Y	CA	*	ESK-6JF REV 7, FE-1Z REV 10
						72MOD-104A	N	Y	CA	*	ESK-6JF REV 7,

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
											FE-1Z REV 10
71MCC-253-OC 5(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-253	70AHU-12A	N	Y	CA	*	ESK-6FK REV 5, FE-1Z REV 10
						70AHU-12B	N	Y	CA	*	ESK-6FK REV 5
						70MOD-101A	N	Y	CA	*	ESK-6FK REV 5, ESK-6FT REV 8
						70MOD-101B	N	Y	CA	*	ESK-6FK REV 5
71MCC-253-OC 6(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-253	70AHU-19A	N	Y	CA	*	ESK-6FAH REV 2, FE-1Z REV 10
71MCC-253-OD 2(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-253	70FN-13A	N	Y	CA	*	ESK-6FL REV 7, FE-1Z REV 10
						70FN-13B	N	Y	CA	*	ESK-6FK REV 5
						70MOD-102A	N	Y	CA	*	ESK-6FL REV 7, ESK-6FT REV 8
						70MOD-102B	N	Y	CA	*	ESK-6FL REV 7
71MCC-254-OA 1(MC)	GENERAL ELECTRIC	*	CONT	N	71MCC-254	92FN-1A	N	Y	CA	*	ESK-6JX REV 010, 1.79-88 REV B
						92MOD-143A	N	Y	CA	*	ESK-6JX REV 010, 1.79-88 REV B
						92MOD-148A	N	Y	CA	*	ESK-6JX REV 010, 1.79-88 REV B
						92MOD-149A	N	Y	CA	*	ESK-6JX REV 010, 1.79-88 REV B
						92MOD-150A	N	Y	CA	*	ESK-6JX REV 010
						92RTD-101A	N	Y	CA	*	ESK-6JX REV 010, 1.79-88 REV B
71MCC-254-OA 2(MC)	GENERAL ELECTRIC	*	CONT	N	71MCC-254	92FN-1C	N	Y	CA	*	ESK-6JX REV 010, 1.79-88 REV B
						92MOD-143C	N	Y	CA	*	ESK-6JX REV 010, 1.79-88 REV B
						92MOD-148C	N	Y	CA	*	ESK-6JX REV 010, 1.79-88 REV B
						92MOD-149C	N	Y	CA	*	ESK-6JX REV 010, 1.79-88 REV B
						92MOD-150C	N	Y	CA	*	ESK-6JX REV 010
						92RTD-101C	N	Y	CA	*	ESK-6JX REV 010, 1.79-88 REV B
71MCC-254-OC 1(MC)	GENERAL ELECTRIC	*	CONT	N	71MCC-254	93P1-A1	N	Y	CA	*	ESK-6VA REV 9
71MCC-254-OC 2(MC)	GENERAL ELECTRIC	*	CONT	N	71MCC-254	93P1-A2	N	Y	CA	*	ESK-6VA REV 9

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
71MCC-254-OC 4(MC)	GENERAL ELECTRIC	*	CONT	N	71MCC-254	93P1-C1	N	Y	CA	*	ESK-6VA REV 9
71MCC-254-OC 5(MC)	GENERAL ELECTRIC	*	CONT	N	71MCC-254	93P1-C2	N	Y	CA	*	ESK-6VA REV 9
71MCC-254-OD 3(MC)	GENERAL ELECTRIC	CR106CO	CONT	N	71MCC-254	93P-2A	Y	Y	GERS	N	ESK-6VB REV 10
71MCC-254-OD 4(MC)	GENERAL ELECTRIC	CR106CO	CONT	N	71MCC-254	93P-2C	Y	Y	GERS	N	ESK-6VB REV 10
71MCC-254-OD 5(MC)	GENERAL ELECTRIC	CR106CO	CONT	N	71MCC-254	93P-3A	Y	Y	GERS	N	ESK-6VB REV 10
71MCC-254-OD 6(MC)	GENERAL ELECTRIC	CR106CO	CONT	N	71MCC-254	93P-3C	Y	Y	GERS	N	ESK-6VB REV 10
71MCC-262-OA 3	GENERAL ELECTRIC	TFJ	CONT	N	71MCC-262	71UPS-1	N	Y	CA	*	FE-1AB REV 15
71MCC-262-OD 1(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-262	46MOV-101B	N	Y	CA	*	ESK-11AC REV 007, ESK-6HQ REV 012
71MCC-262-OD 2(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-262	46MOV-102B	N	Y	CA	*	ESK-6HS REV 010
71MCC-262-OD 3(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-262	73FN-3B	N	Y	CA	*	ESK-6FZ REV 007
71MCC-262-OD 4(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-262	67MOD-16B1	N	Y	CA	*	ESK-6EQ REV 7
						67UC-16B1(M)	N	Y	CA	*	ESK-6EQ REV 7
71MCC-262-OD 5(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-262	67MOD-16B2	N	Y	CA	*	ESK-6EQ REV 7
						67UC-16B2(M)	N	Y	CA	*	ESK-6EQ REV 7
71MCC-263-OA 3(MC)	GENERAL ELECTRIC	*	CONT	N	71MCC-263	70FN-4A	N	Y	CA	*	ESK-6FN REV 6, FE-1Z REV 10
						70FN-4B	N	Y	CA	*	ESK-6FN REV 6
						70MOD-108A	N	Y	CA	*	ESK-6FN REV 6, ESK-6FAA REV 9, FE-1Z REV 10
						70MOD-108B	N	Y	CA	*	ESK-6FN REV 6, ESK-6FAB REV 9, FE-1Z REV 10

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer. Part\model. Number.	Relay. type.	Low. ruggedness. relay.	Rack/Panel:	Component. For equipment.	Essential.	Satisfactory	Reason. code.	Outlier	Reference drwg(s)
71MCC-263-0A 4(MC)	GENERAL ELECTRIC	*	CONT	N	71MCC-263	72FN-31B	N	Y	CA	*	ESK-6JD REV 6
						72MOD-102B	N	Y	CA	*	ESK-6JD REV 6
71MCC-263-0B 3(MC)	GENERAL ELECTRIC	*	CONT	N	71MCC-263	72FN-46B	N	Y	CA	*	ESK-6JG REV 4
						72FN-46D	N	Y	CA	*	ESK-6JG REV 4
						72MOD-103B	N	Y	CA	*	ESK-6JG REV 4
						72MOD-103D	N	Y	CA	*	ESK-6JG REV 4
71MCC-263-0B 4(MC)	GENERAL ELECTRIC	*	CONT	N	71MCC-263	70AHU-3A	N	Y	CA	*	ESK-6FP REV 6
						70AHU-3B	N	Y	CA	*	ESK-6FP REV 6
						70MOD-106A	N	Y	CA	*	ESK-6FAA REV 9, ESK-6FP REV 6, FE-1Z REV 10
						70MOD-106B	N	Y	CA	*	ESK-6FAB REV 9, ESK-6FP REV 6, FE-1Z REV 10
71MCC-263-0C 2(MC)	GENERAL ELECTRIC	*	CONT	N	71MCC-263	72FN-46B	N	Y	CA	*	ESK-6JG REV 4
						72FN-46D	N	Y	CA	*	ESK-6JG REV 4
						72MOD-103B	N	Y	CA	*	ESK-6JG REV 4
						72MOD-103D	N	Y	CA	*	ESK-6JG REV 4
71MCC-263-0C 4(MC)	GENERAL ELECTRIC	*	CONT	N	71MCC-263	72AHU-30B	N	Y	CA	*	ESK-6JD REV 6
						72MOD-100B	N	Y	CA	*	ESK-6JD REV 6
						72MOD-101B	N	Y	CA	*	ESK-6JD REV 6
						72MOD-104B	N	Y	CA	*	ESK-6JD REV 6
71MCC-263-0C 5(MC)	GENERAL ELECTRIC	*	CONT	N	71MCC-263	70AHU-12A	N	Y	CA	*	ESK-6FK REV 5
						70AHU-12B	N	Y	CA	*	ESK-6FK REV 5, FE-1Z REV 10
						70MOD-101A	N	Y	CA	*	ESK-6FK REV 5, ESK-6FU REV 8
						70MOD-101B	N	Y	CA	*	ESK-6FK REV 5
71MCC-263-0C 6(MC)	GENERAL ELECTRIC	*	CONT	N	71MCC-263	70AHU-19B	N	Y	CA	*	ESK-6FAH REV 2, FE-1Z REV 10
71MCC-263-0D 2(MC)	GENERAL ELECTRIC	*	CONT	N	71MCC-263	70FN-13A	N	Y	CA	*	ESK-6FK REV 5
						70FN-13B	N	Y	CA	*	ESK-6FL REV 7, FE-1Z REV 10
						70MOD-102A	N	Y	CA	*	ESK-6FL REV 7,

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer. Part\model. Number	Relay. type.	Low. ruggedness. relay	Rack/Panel:	Component. For equipment.	Essential.	Satisfactory	Reason. code	Outlier	Reference drwg(s)
											ESK-6FT REV 8
						70MOD-102B	N	Y	CA	*	ESK-6FK REV 7
71MCC-264-0A 1(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-264	92FN-1B	N	Y	CA	*	ESK-6JY REV 012, 1.79-88 REV B
						92MOD-143B	N	Y	CA	*	ESK-6JY REV 012, 1.79-88 REV B
						92MOD-148B	N	Y	CA	*	ESK-6JY REV 012, 1.79-88 REV B
						92MOD-149B	N	Y	CA	*	ESK-6JY REV 012, 1.79-88 REV B
						92MOD-150B	N	Y	CA	*	ESK-6JY REV 012
						92RTD-101B	N	Y	CA	*	ESK-6JY REV 012, 1.79-88 REV B
71MCC-264-0A 2(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-264	92FN-1D	N	Y	CA	*	ESK-6JY REV 012, 1.79-88 REV B
						92MOD-143D	N	Y	CA	*	ESK-6JY REV 012, 1.79-88 REV B
						92MOD-148D	N	Y	CA	*	ESK-6JY REV 012, 1.79-88 REV B
						92MOD-149D	N	Y	CA	*	ESK-6JY REV 012, 1.79-88 REV B
						92MOD-150D	N	Y	CA	*	ESK-6JY REV 012
						92RTD-101D	N	Y	CA	*	ESK-6JY REV 012, 1.79-88 REV B
71MCC-264-0B 1(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-264	93P1-B1	N	Y	CA	*	ESK-6VA REV 9
71MCC-264-0B 2(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-264	93P1-B2	N	Y	CA	*	ESK-6VA REV 9
71MCC-264-0B 3(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-264	93P1-D1	N	Y	CA	*	ESK-6VA REV 9
71MCC-264-0B 4(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-264	93P1-D2	N	Y	CA	*	ESK-6VA REV 9
71MCC-264-0D 3(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-264	93P-2B	Y	Y	GERS	N	ESK-6VB REV 10
71MCC-264-0D 4(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-264	93P-2D	Y	Y	GERS	N	ESK-6VB REV 10
71MCC-264-0D 5(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-264	93P-3B	Y	Y	GERS	N	ESK-6VB REV 10

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer. Part\model. Number.	Relay. type.	Low. ruggedness. relay.	Rack/Panel:	Component. For equipment.	Essential.	Satisfactory	Reason. code.	Outlier	Reference drwg(s)
71MCC-264-OD 6(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-264	93P-3D	Y	Y	GERS	N	ESK-6VB REV 10
71PB1-11502*			CS	N		71-11502	N	Y	NV	*	ESK-6G REV 8
71PB1-11602*			CS	N		71-11602	N	Y	NV	*	ESK-6H REV 11
71PB1-12502*			CS	N		71-12502	N	Y	NV	*	ESK-6G REV 8
71PB1-12602*			CS	N		71-12602	N	Y	NV	*	ESK-6H REV 11
71PB2-11502*			CS	N		71-11502	N	Y	NV	*	ESK-6G REV 8
71PB2-11602*			CS	N		71-11602	N	Y	NV	*	ESK-6H REV 11
71PB2-12502*			CS	N		71-12502	N	Y	NV	*	ESK-6G REV 8
71PB2-12602*			CS	N		71-12602	N	Y	NV	*	ESK-6H REV 11
71SYN-31	GENERAL ELECTRIC	AB-40	RLY	N	71UPP	71UPS-1	N	Y	CA	*	FE-1AB REV 15
71TS-271AB-1 H0EA04	ELECTRO SWITCH CORP	SERIES 24	CS	N	93AURP-01	71H05	N	Y	NV	*	ESK-8J REV 8, ESK-5BS REV 18
71TS-271AB-1 H0EB04	ELECTRO SWITCH CORP	SERIES 24	CS	N	93AURP-02	71H06	N	Y	NV	*	ESK-8J REV 8, ESK-5BT REV 19
71TS-272BC-1 H0EA04	ELECTRO SWITCH CORP	SERIES 24	CS	N	93AURP-01	71H05	N	Y	NV	*	ESK-8J REV 8, ESK-5BS REV 18
71TS-272BC-1 H0EB04	ELECTRO SWITCH CORP	SERIES 24	CS	N	93AURP-02	71H06	N	Y	NV	*	ESK-8J REV 8, ESK-5BT REV 19
71TS-273AB-1 H0EA04	ELECTRO SWITCH CORP	SERIES 24	CS	N	93AURP-01	71H05	N	Y	NV	*	ESK-8J REV 8, ESK-5BY REV 5
71TS-273AB-1 H0EB04	ELECTRO SWITCH CORP	SERIES 24	CS	N	93AURP-02	71H06	N	Y	NV	*	ESK-8J REV 8, ESK-5BZ REV 5
71TS-274BC-1 H0EA04	ELECTRO SWITCH CORP	SERIES 24	CS	N	93AURP-01	71H05	N	Y	NV	*	ESK-8J REV 8, ESK-5BY REV 5
71TS-274BC-1 H0EB04	ELECTRO SWITCH CORP	SERIES 24	CS	N	93AURP-02	71H06	N	Y	NV	*	ESK-8J REV 8, ESK-5BZ REV 5
71UPS-1UVR	AUTOMATIC SWITCH CO	214A105	RLY	N	71UPP	71UPS-1	N	Y	CA	*	FE-1AB REV 15

Main..... Equipment... Designation.	Manufacturer Designation. (ASCO)	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
71UPS-2UVR	UNKNOWN	*	RLY	N	71UPP	71UPS-1	N	Y	CA	*	FE-1AB REV 15
71UPS-3UVR	UNKNOWN	*	RLY	N	71UPP	71UPS-1	N	Y	CA	*	FE-1AB REV 15
71UPS-4UVR	UNKNOWN	*	RLY	N	71UPP	71UPS-1	N	Y	CA	*	FE-1AB REV 15
71VS-L15-1	UNKNOWN	*	CS	N	71L15	71-11502	N	Y	NV	*	ESK-6G REV 8
71VS-L16-1	UNKNOWN	*	CS	N	71L16	71-11602	N	Y	NV	*	ESK-6H REV 11
71VS-L25-1	UNKNOWN	*	CS	N	71L25	71-12502	N	Y	NV	*	ESK-6G REV 8
71VS-L26-1	UNKNOWN	*	CS	N	71L26	71-12602	N	Y	NV	*	ESK-6H REV 11
72-1-1ABVA07	GENERAL ELECTRIC	SBM	CS	N	09-75	72FN-31A	N	Y	NV	*	ESK-6JD REV 6
						72MOD-102A	N	Y	NV	*	ESK-6JD REV 6
72-1-1ABVA08	GENERAL ELECTRIC	SBM	CS	N	09-75	72FN-46A	N	Y	NV	*	ESK-6JE REV 7
						72FN-46C	N	Y	NV	*	ESK-6JE REV 7
						72MOD-103A	N	Y	NV	*	ESK-6JE REV 7
						72MOD-103C	N	Y	NV	*	ESK-6JE REV 7
72-1-1ABVA11	GENERAL ELECTRIC	SBM	CS	N	09-75	72AHU-30A	N	Y	NV	*	ESK-6JF REV 7
						72MOD-100A	N	Y	NV	*	ESK-6JF REV 7
						72MOD-101A	N	Y	NV	*	ESK-6JF REV 7
						72MOD-104A	N	Y	NV	*	ESK-6JF REV 7
72-1-1ABVB09	GENERAL ELECTRIC	SBM	CS	N	09-75	72FN-31B	N	Y	NV	*	ESK-6JD REV 6
						72MOD-102B	N	Y	NV	*	ESK-6JD REV 6
72-1-1ABVB10	GENERAL ELECTRIC	SBM	CS	N	09-75	72FN-46B	N	Y	NV	*	ESK-6JG REV 4
						72FN-46D	N	Y	NV	*	ESK-6JG REV 4
						72MOD-103B	N	Y	NV	*	ESK-6JG REV 4
						72MOD-103D	N	Y	NV	*	ESK-6JG REV 4
72-1-1ABVB11	GENERAL ELECTRIC	SBM	CS	N	09-75	72AHU-30B	N	Y	NV	*	ESK-6JD REV 6
						72MOD-100B	N	Y	NV	*	ESK-6JD REV 6
						72MOD-101B	N	Y	NV	*	ESK-6JD REV 6
						72MOD-104B	N	Y	NV	*	ESK-6JD REV 6

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
72-1-1ABVC08	GENERAL ELECTRIC	SBM	CS	N	09-75	72FN-46A	N	Y	NV	*	ESK-6JE REV 7
						72FN-46C	N	Y	NV	*	ESK-6JE REV 7
						72MOD-103A	N	Y	NV	*	ESK-6JE REV 7
						72MOD-103C	N	Y	NV	*	ESK-6JE REV 7
72-1-1ABVD10	GENERAL ELECTRIC	SBM	CS	N	09-75	72FN-46B	N	Y	NV	*	ESK-6JG REV 4
						72FN-46D	N	Y	NV	*	ESK-6JG REV 4
						72MOD-103B	N	Y	NV	*	ESK-6JG REV 4
						72MOD-103D	N	Y	NV	*	ESK-6JG REV 4
72-23X-1ABVA 13	GENERAL ELECTRIC	CR2810	RLY	N	72HV-7A	72AHU-30A	N	Y	CA	*	ESK-6JF REV 7, ESK-6FAL REV 5, ESK-6JD REV 6, ESK-6JE REV 7
						72FN-31A	N	Y	CA	*	ESK-6JF REV 7, ESK-6FAL REV 5, ESK-6JD REV 6, ESK-6JE REV 7
						72FN-46A	N	Y	CA	*	ESK-6JF REV 7, ESK-6FAL REV 5, ESK-6JD REV 6, ESK-6JE REV 7
						72FN-46C	N	Y	CA	*	ESK-6JF REV 7, ESK-6FAL REV 5, ESK-6JD REV 6, ESK-6JE REV 7
						72MOD-100A	N	Y	CA	*	ESK-6JF REV 7, ESK-6FAL REV 5, ESK-6JD REV 6, ESK-6JE REV 7
						72MOD-101A	N	Y	CA	*	ESK-6JF REV 7, ESK-6FAL REV 5, ESK-6JD REV 6, ESK-6JE REV 7
						72MOD-102A	N	Y	CA	*	ESK-6JF REV 7, ESK-6FAL REV 5, ESK-6JD REV 6, ESK-6JE REV 7
						72MOD-103A	N	Y	CA	*	ESK-6JF REV 7, ESK-6FAL REV 5, ESK-6JD REV 6, ESK-6JE REV 7
						72MOD-103C	N	Y	CA	*	ESK-6JF REV 7, ESK-6FAL REV 5, ESK-6JD REV 6, ESK-6JE REV 7

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
						72MOD-104A	N	Y	CA	*	ESK-6JF REV 7, ESK-6FAL REV 5, ESK-6JD REV 6, ESK-6JE REV 7
72-23X-1ABVB 13	GENERAL ELECTRIC	CR2810	RLY	N	72HV-7B	72AHU-30B	N	Y	CA	*	ESK-6JD REV 6, ESK-6FAM REV 4
						72FN-31B	N	Y	CA	*	ESK-6JD REV 6, ESK-6FAM REV 4
						72FN-46B	N	Y	CA	*	ESK-6JD REV 6, ESK-6FAM REV 4
						72FN-46D	N	Y	CA	*	ESK-6JD REV 6, ESK-6FAM REV 4
						72MOD-100B	N	Y	CA	*	ESK-6JD REV 6, ESK-6FAM REV 4
						72MOD-101B	N	Y	CA	*	ESK-6JD REV 6, ESK-6FAM REV 4
						72MOD-102B	N	Y	CA	*	ESK-6JD REV 6, ESK-6FAM REV 4
						72MOD-103B	N	Y	CA	*	ESK-6JD REV 6, ESK-6FAM REV 4
						72MOD-103D	N	Y	CA	*	ESK-6JD REV 6, ESK-6FAM REV 4
						72MOD-104B	N	Y	CA	*	ESK-6JD REV 6, ESK-6FAM REV 4
72-42X-1ABVA 08*			RLY	N		72FN-46A	N	Y	CA	*	ESK-6JE REV 7, ESK-6FAL REV 5
						72MOD-103A	N	Y	CA	*	ESK-6JE REV 7, ESK-6FAL REV 5
72-42X-1ABVA 11	GENERAL ELECTRIC	CR2810	RLY	N	72HV-7A	72AHU-30A	N	Y	CA	*	ESK-6JF REV 7, ESK-6FAL REV 5
						72MOD-100A	N	Y	CA	*	ESK-6JF REV 7, ESK-6FAL REV 5
						72MOD-101A	N	Y	CA	*	ESK-6JF REV 7, ESK-6FAL REV 5
						72MOD-104A	N	Y	CA	*	ESK-6JF REV 7, ESK-6FAL REV 5
72-42X-1ABVB 10*			RLY	N		72FN-46B	N	Y	CA	*	ESK-6JG REV 4, ESK-6FAM REV 4
						72MOD-[illegible]	N	Y	CA	*	ESK-6JG REV 4, ESK-6FAM REV 4
72-42X-1ABVB 11	GENERAL ELECTRIC	CR2810	RLY	N	72HV-7B	72AHU-30B	N	Y	CA	*	ESK-6JD REV 6, ESK-6FAM REV 4
						72MOD-100B	N	Y	CA	*	ESK-6JD REV 6,

Main Equipment Designation	Manufacturer Designation	Manufacturer Part\model Number	Relay type	Low ruggedness relay	Rack/Panel	Component For equipment	Essential	Satisfactory	Reason code	Outlier	Reference drwg(s)
						72MOD-101B	N	Y	CA	*	ESK-6FAM REV 4 ESK-6JD REV 6,
						72MOD-104B	N	Y	CA	*	ESK-6FAM REV 4 ESK-6JD REV 6, ESK-6FAM REV 4
72-42X-1ABVC08*			RLY	N		72FN-46C	N	Y	CA	*	ESK-6JE REV 7
						72MOD-103C	N	Y	CA	*	ESK-6JE REV 7
72-42X-1ABVD10*			RLY	N		72FN-46D	N	Y	CA	*	ESK-6JG REV 4
						72MOD-103D	N	Y	CA	*	ESK-6JG REV 4
72-63X-1ABVA08*			RLY	N		72FN-46A	N	Y	CA	*	ESK-6JE REV 7
						72MOD-103A	N	Y	CA	*	ESK-6JE REV 7
72-63X-1ABVB10*			RLY	N		72FN-46B	N	Y	CA	*	ESK-6JG REV 4
						72MOD-103B	N	Y	CA	*	ESK-6JG REV 4
72-63X-1ABVC08*			RLY	N		72FN-46C	N	Y	CA	*	ESK-6JE REV 7
						72MOD-103C	N	Y	CA	*	ESK-6JE REV 7
72-63X-1ABVD10*			RLY	N		72FN-46D	N	Y	CA	*	ESK-6JG REV 4
						72MOD-103D	N	Y	CA	*	ESK-6JG REV 4
72-74-1ABVA07*			RLY	N		72FN-31A	N	Y	CA	*	ESK-6JD REV 6
						72MOD-102A	N	Y	CA	*	ESK-6JD REV 6
72-74-1ABVA08*			RLY	N		72FN-46A	N	Y	CA	*	ESK-6JE REV 7
						72MOD-103A	N	Y	CA	*	ESK-6JE REV 7
72-74-1ABVA11*			RLY	N		72AHU-30A	N	Y	CA	*	ESK-6JF REV 7, ESK-6FAL REV 5
						72MOD-100A	N	Y	CA	*	ESK-6JF REV 7, ESK-6FAL REV 5
						72MOD-101A	N	Y	CA	*	ESK-6JF REV 7, ESK-6FAL REV 5
						72MOD-104A	N	Y	CA	*	ESK-6JF REV 7, ESK-6FAL REV 5
72-74-1ABVB0			RLY	N		72FN-31B	N	Y	CA	*	ESK-6JD REV 6

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
9*											
						72MOD-102B	N	Y	CA	*	ESK-6JD REV 6
72-74-1ABVB10*			RLY	N		72FN-46B	N	Y	CA	*	ESK-6JG REV 4
						72MOD-103B	N	Y	CA	*	ESK-6JG REV 4
72-74-1ABVB11*			RLY	N		72AHU-30B	N	Y	CA	*	ESK-6JD REV 6
						72MOD-100B	N	Y	CA	*	ESK-6JD REV 6
						72MOD-101B	N	Y	CA	*	ESK-6JD REV 6
						72MOD-104B	N	Y	CA	*	ESK-6JD REV 6
72-74-1ABVC08*			RLY	N		72FN-46C	N	Y	CA	*	ESK-6JE REV 7
						72MOD-103C	N	Y	CA	*	ESK-6JE REV 7
72-74-1ABVD10*			RLY	N		72FN-46D	N	Y	CA	*	ESK-6JG REV 4
						72MOD-103D	N	Y	CA	*	ESK-6JG REV 4
72DPS-105A	DWYER INSTRUMENTS INC	1635.25	INST	N	NA	72FN-46A	N	Y	CA	*	ESK-6JE REV 7
						72MOD-103A	N	Y	CA	*	ESK-6JE REV 7
72DPS-105B	DWYER INSTRUMENTS INC	1635.25	INST	N	NA	72FN-46B	N	Y	CA	*	ESK-6JG REV 4
						72MOD-103B	N	Y	CA	*	ESK-6JG REV 4
72DPS-105C	DWYER INSTRUMENTS INC	1635.25	INST	N	NA	72FN-46C	N	Y	CA	*	ESK-6JE REV 7
						72MOD-103C	N	Y	CA	*	ESK-6JE REV 7
72DPS-105D	DWYER INSTRUMENTS INC	1635.25	INST	N	NA	72FN-46D	N	Y	CA	*	ESK-6JG REV 4
						72MOD-103D	N	Y	CA	*	ESK-6JG REV 4
72HSS-100A	TAYLOR INSTRUMENT COMPANIES	1320N	INST	N	72HV-7A	72MOD-100A	N	Y	NA	*	ESK-6FAL REV 5
72HSS-100B	TAYLOR INSTRUMENT COMPANIES	1320N	INST	N	72HV-7B	72MOD-100B	N	Y	NA	*	ESK-6FAM REV 4

Main. Equipment Designation.	Manufacturer Designation.	Manufacturer Part\model Number	Relay. type..	Low ruggedness. relay	Rack/Panel:	Component For equipment..	Essential.	Satisfactory	Reason. code	Outlier	Reference drwg(s)
72TS-128A	MERCOID CORP	DR-7038-804L	INST	N	NA	72AHU-30A	N	Y	CA	*	ESK-6FAL REV 5
						72FN-31A	N	Y	CA	*	ESK-6FAL REV 5
						72FN-46A	N	Y	CA	*	ESK-6FAL REV 5
						72FN-46C	N	Y	CA	*	ESK-6FAL REV 5
						72MOD-100A	N	Y	CA	*	ESK-6FAL REV 5
						72MOD-101A	N	Y	CA	*	ESK-6FAL REV 5
						72MOD-102A	N	Y	CA	*	ESK-6FAL REV 5
						72MOD-103A	N	Y	CA	*	ESK-6FAL REV 5
						72MOD-103C	N	Y	CA	*	ESK-6FAL REV 5
						72MOD-104A	N	Y	CA	*	ESK-6FAL REV 5
72TS-128B	MERCOID CORP	DR-7038-804L	INST	N	NA	72AHU-30B	N	Y	CA	*	ESK-6FAM REV 4
						72FN-31B	N	Y	CA	*	ESK-6FAM REV 4
						72FN-46B	N	Y	CA	*	ESK-6FAM REV 4
						72FN-46D	N	Y	CA	*	ESK-6FAM REV 4
						72MOD-100B	N	Y	CA	*	ESK-6FAM REV 4
						72MOD-101B	N	Y	CA	*	ESK-6FAM REV 4
						72MOD-102B	N	Y	CA	*	ESK-6FAM REV 4
						72MOD-103B	N	Y	CA	*	ESK-6FAM REV 4
						72MOD-103D	N	Y	CA	*	ESK-6FAM REV 4
						72MOD-104B	N	Y	CA	*	ESK-6FAM REV 4
72VD-30A	CALCON	E1900-0	INST	N	NA	72AHU-30A	N	Y	CA	*	ESK-6JF REV 7
						72MOD-100A	N	Y	CA	*	ESK-6JF REV 7
						72MOD-101A	N	Y	CA	*	ESK-6JF REV 7
						72MOD-104A	N	Y	CA	*	ESK-6JF REV 7
72VD-30B	CALCON	E1900-0	INST	N	NA	72AHU-30B	N	Y	CA	*	ESK-6JD REV 6
						72MOD-100B	N	Y	CA	*	ESK-6JD REV 6
						72MOD-101B	N	Y	CA	*	ESK-6JD REV 6
						72MOD-104B	N	Y	CA	*	ESK-6JD REV 6
72VD-31A	CALCON	E1900-0	INST	N	NA	72FN-31A	N	Y	CA	*	ESK-6JD REV 6
						72MOD-102A	N	Y	CA	*	ESK-6JD REV 6
72VD-31B	CALCON	E1900-0	INST	N	NA	72FN-31B	N	Y	CA	*	ESK-6JD REV 6
						72MOD-102B	N	Y	CA	*	ESK-6JD REV 6
72VD-46A	CALCON	E1900-0	INST	N	NA	72FN-46A	N	Y	CA	*	ESK-6JE REV 7
						72MOD-103A	N	Y	CA	*	ESK-6JE REV 7
72VD-46B	CALCON	E1900-0	INST	N	NA	72FN-46B	N	Y	CA	*	ESK-6JG REV 4
						72MOD-103B	N	Y	CA	*	ESK-6JG REV 4
72VD-46C	CALCON	E1900-0	INST	N	NA	72FN-46C	N	Y	CA	*	ESK-6JE REV 7
						72MOD-103C	N	Y	CA	*	ESK-6JE REV 7
72VD-46D	CALCON	E1900-0	INST	N	NA	72FN-46D	N	Y	CA	*	ESK-6JG REV 4

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
						72MOD-103D	N	Y	CA	*	ESK-6JG REV 4
73-1-1SWVA02	GENERAL ELECTRIC	SBM	CS	N	73HV-11A	73FN-3A	N	Y	NV	*	ESK-6FZ REV 007
73-1-1SWVB02	GENERAL ELECTRIC	SBM	CS	N	73HV-11B	73FN-3B	N	Y	NV	*	ESK-6FZ REV 007
73-62-1SWVA02	AGASTAT RELAY CO (AMERACE)	2422AF	RLY	N	73HV-11A	73FN-3A	N	Y	CA	*	ESK-6FZ REV 007
73-62-1SWVB02	AGASTAT RELAY CO (AMERACE)	2422AF	RLY	N	73HV-11B	73FN-3B	N	Y	CA	*	ESK-6FZ REV 007
73-74-1SWVA02	GENERAL ELECTRIC	CR2810	RLY	N	73HV-11A	73FN-3A	N	Y	CA	*	ESK-6FZ REV 007
73-74-1SWVB02	GENERAL ELECTRIC	CR2810	RLY	N	73HV-11B	73FN-3B	N	Y	CA	*	ESK-6FZ REV 007
73TIS-110A	PENN CONTROLS INC	T26	INST	N	NA	73FN-3A	N	Y	CA	*	ESK-6FZ REV 007
73TIS-110B	PENN CONTROLS INC	T26	INST	N	NA	73FN-3B	N	Y	CA	*	ESK-6FZ REV 007
76-CO2-PNL-4-43*			CS	N		70AHU-12A	N	Y	NV	*	1.81-45 REV E
						70AHU-12B	N	Y	NV	*	1.81-45 REV E
						70FN-13A	N	Y	NV	*	1.81-45 REV E
						70FN-13B	N	Y	NV	*	1.81-45 REV E
						70MOD-101A	N	Y	NV	*	1.81-45 REV E
						70MOD-101B	N	Y	NV	*	1.81-45 REV E
						70MOD-102A	N	Y	NV	*	1.81-45 REV E
						70MOD-102B	N	Y	NV	*	1.81-45 REV E
76-CO2-PNL-4-FPPPB*			CS	N		70AHU-12A	N	Y	NV	*	1.81-45 REV E
						70AHU-12B	N	Y	NV	*	1.81-45 REV E
						70FN-13A	N	Y	NV	*	1.81-45 REV E
						70FN-13B	N	Y	NV	*	1.81-45 REV E
						70MOD-101A	N	Y	NV	*	1.81-45 REV E
						70MOD-101B	N	Y	NV	*	1.81-45 REV E
						70MOD-102A	N	Y	NV	*	1.81-45 REV E
						70MOD-102B	N	Y	NV	*	1.81-45 REV E

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
76-CO2-PNL-4 -PBM*			CS	N		70AHU-12A	N	Y	NV	*	1.81-45 REV E
						70AHU-12B	N	Y	NV	*	1.81-45 REV E
						70FN-13A	N	Y	NV	*	1.81-45 REV E
						70FN-13B	N	Y	NV	*	1.81-45 REV E
						70MOD-101A	N	Y	NV	*	1.81-45 REV E
						70MOD-101B	N	Y	NV	*	1.81-45 REV E
						70MOD-102A	N	Y	NV	*	1.81-45 REV E
						70MOD-102B	N	Y	NV	*	1.81-45 REV E
76-CO2-PNL-4 -PE1*			RLY	N		70AHU-12A	N	Y	CA	*	1.81-45 REV E, ESK-6FK REV 5
						70AHU-12B	N	Y	CA	*	1.81-45 REV E, ESK-6FK REV 5
						70FN-13A	N	Y	CA	*	1.81-45 REV E, ESK-6FL REV 7
						70FN-13B	N	Y	CA	*	1.81-45 REV E, ESK-6FL REV 7
						70MOD-101A	N	Y	CA	*	1.81-45 REV E, ESK-6FK REV 5
						70MOD-101B	N	Y	CA	*	1.81-45 REV E, ESK-6FK REV 5
						70MOD-102A	N	Y	CA	*	1.81-45 REV E, ESK-6FL REV 7
						70MOD-102B	N	Y	CA	*	1.81-45 REV E, ESK-6FL REV 7
76-CO2-PNL-4 -PS*			INST	N		70FN-13B	N	Y	CA	*	1.81-45 REV E, ESK-6FU REV 8
						70MOD-102B	N	Y	CA	*	1.81-45 REV E, ESK-6FU REV 8
76-CO2-PNL-4 -RH*			RLY	N		70AHU-12A	N	Y	CA	*	1.81-45 REV E
						70AHU-12B	N	Y	CA	*	1.81-45 REV E
						70FN-13A	N	Y	CA	*	1.81-45 REV E
						70FN-13B	N	Y	CA	*	1.81-45 REV E
						70MOD-101A	N	Y	CA	*	1.81-45 REV E
						70MOD-101B	N	Y	CA	*	1.81-45 REV E
						70MOD-102A	N	Y	CA	*	1.81-45 REV E
						70MOD-102B	N	Y	CA	*	1.81-45 REV E
76-CO2-PNL-4 -THAR*			RLY	N		70AHU-12A	N	Y	CA	*	1.81-45 REV E
						70AHU-12B	N	Y	CA	*	1.81-45 REV E
						70FN-13A	N	Y	CA	*	1.81-45 REV E
						70FN-13B	N	Y	CA	*	1.81-45 REV E
						70MOD-101A	N	Y	CA	*	1.81-45 REV E

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
						70MOD-101B	N	Y	CA	*	1.81-45 REV E
						70MOD-102A	N	Y	CA	*	1.81-45 REV E
						70MOD-102B	N	Y	CA	*	1.81-45 REV E
76-CO2-PNL-4 -TM*			RLY	N		70AHU-12A	N	Y	CA	*	1.81-45 REV E
						70AHU-12B	N	Y	CA	*	1.81-45 REV E
						70FN-13A	N	Y	CA	*	1.81-45 REV E
						70FN-13B	N	Y	CA	*	1.81-45 REV E
						70MOD-101A	N	Y	CA	*	1.81-45 REV E
						70MOD-101B	N	Y	CA	*	1.81-45 REV E
						70MOD-102A	N	Y	CA	*	1.81-45 REV E
						70MOD-102B	N	Y	CA	*	1.81-45 REV E
76-CO2-PNL-4 X-PE2*			RLY	N		70AHU-12A	N	Y	CA	*	ESK-6FK REV 5, 1.81-45 REV E
						70FN-13A	N	Y	CA	*	ESK-6FT REV 8, 1.81-45 REV E
						70MOD-101A	N	Y	CA	*	ESK-6FK REV 5, 1.81-45 REV E
						70MOD-102A	N	Y	CA	*	ESK-6FL REV 7, ESK-6FT REV 8, 1.81-45 REV E
92-1-1DGRA01	GENERAL ELECTRIC	SBM	CS	N	92HV-9A	92FN-1A	N	Y	NV	*	ESK-6JX REV 10
						92MOD-143A	N	Y	NV	*	ESK-6JX REV 10
						92MOD-148A	N	Y	NV	*	ESK-6JX REV 10
						92MOD-149A	N	Y	NV	*	ESK-6JX REV 10
						92MOD-150A	N	Y	NV	*	ESK-6JX REV 10
						92RTD-101A	N	Y	NV	*	ESK-6JX REV 10
92-1-1DGRB01	GENERAL ELECTRIC	SBM	CS	N	92HV-9B	92FN-1B	N	Y	NV	*	ESK-6JY REV 12
						92MOD-143B	N	Y	NV	*	ESK-6JY REV 12
						92MOD-148B	N	Y	NV	*	ESK-6JY REV 12
						92MOD-149B	N	Y	NV	*	ESK-6JY REV 12
						92MOD-150B	N	Y	NV	*	ESK-6JY REV 12
						92RTD-101B	N	Y	NV	*	ESK-6JY REV 12
92-1-1DGRC01	GENERAL ELECTRIC	SMB	CS	N	92HV-9A	92FN-1C	N	Y	NV	*	ESK-6JX REV 10
						92MOD-143C	N	Y	NV	*	ESK-6JX REV 10
						92MOD-148C	N	Y	NV	*	ESK-6JX REV 10
						92MOD-149C	N	Y	NV	*	ESK-6JX REV 10
						92MOD-150C	N	Y	NV	*	ESK-6JX REV 10
						92RTD-101C	N	Y	NV	*	ESK-6JX REV 10

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
92-1-1DGRD01	GENERAL ELECTRIC	SBM	CS	N	92HV-9B	92FN-1D	N	Y	NV	*	ESK-6JY REV 12
						92MOD-143D	N	Y	NV	*	ESK-6JY REV 12
						92MOD-148D	N	Y	NV	*	ESK-6JY REV 12
						92MOD-149D	N	Y	NV	*	ESK-6JY REV 12
						92MOD-150D	N	Y	NV	*	ESK-6JY REV 12
						92RTD-101D	N	Y	NV	*	ESK-6JY REV 12
92-1A-1DGRA0 1*	GENERAL ELECTRIC	CR2940	CS	N		92FN-1A	N	Y	NV	*	ESK-6JX REV 10
						92MOD-143A	N	Y	NV	*	ESK-6JX REV 10
						92MOD-148A	N	Y	NV	*	ESK-6JX REV 10
						92MOD-149A	N	Y	NV	*	ESK-6JX REV 10
						92MOD-150A	N	Y	NV	*	ESK-6JX REV 10
						92RTD-101A	N	Y	NV	*	ESK-6JX REV 10
92-1A-1DGRB0 1*	GENERAL ELECTRIC	CR2940	CS	N		92FN-1B	N	Y	NV	*	ESK-6JY REV 12
						92MOD-143B	N	Y	NV	*	ESK-6JY REV 12
						92MOD-148B	N	Y	NV	*	ESK-6JY REV 12
						92MOD-149B	N	Y	NV	*	ESK-6JY REV 12
						92MOD-150B	N	Y	NV	*	ESK-6JY REV 12
						92RTD-101B	N	Y	NV	*	ESK-6JY REV 12
92-1A-1DGRC0 1*	GENERAL ELECTRIC	CR2940	CS	N		92FN-1C	N	Y	NV	*	ESK-6JX REV 10
						92MOD-143C	N	Y	NV	*	ESK-6JX REV 10
						92MOD-148C	N	Y	NV	*	ESK-6JX REV 10
						92MOD-149C	N	Y	NV	*	ESK-6JX REV 10
						92MOD-150C	N	Y	NV	*	ESK-6JX REV 10
						92RTD-101C	N	Y	NV	*	ESK-6JX REV 10
92-1A-1DGRD0 1*	GENERAL ELECTRIC	CR2940	CS	N		92FN-1D	N	Y	NV	*	ESK-6JY REV 12
						92MOD-143D	N	Y	NV	*	ESK-6JY REV 12
						92MOD-148D	N	Y	NV	*	ESK-6JY REV 12
						92MOD-149D	N	Y	NV	*	ESK-6JY REV 12
						92MOD-150D	N	Y	NV	*	ESK-6JY REV 12
						92RTD-101D	N	Y	NV	*	ESK-6JY REV 12
92-74-1DGRA0 1*			RLY	N		92FN-1A	N	Y	CA	*	ESK-6JX REV 10
						92MOD-143A	N	Y	CA	*	ESK-6JX REV 10
						92MOD-148A	N	Y	CA	*	ESK-6JX REV 10
						92MOD-149A	N	Y	CA	*	ESK-6JX REV 10
						92MOD-150A	N	Y	CA	*	ESK-6JX REV 10
						92RTD-101A	N	Y	CA	*	ESK-6JX REV 10

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
92-74-1DGRB0 1*			RLY	N		92FN-1B	N	Y	CA	*	ESK-6JY REV 12
						92MOD-143B	N	Y	CA	*	ESK-6JY REV 12
						92MOD-148B	N	Y	CA	*	ESK-6JY REV 12
						92MOD-149B	N	Y	CA	*	ESK-6JY REV 12
						92MOD-150B	N	Y	CA	*	ESK-6JY REV 12
						92RTD-101B	N	Y	CA	*	ESK-6JY REV 12
92-74-1DGRC0 1*			RLY	N		92FN-1C	N	Y	CA	*	ESK-6JX REV 10
						92MOD-143C	N	Y	CA	*	ESK-6JX REV 10
						92MOD-148C	N	Y	CA	*	ESK-6JX REV 10
						92MOD-149C	N	Y	CA	*	ESK-6JX REV 10
						92MOD-150C	N	Y	CA	*	ESK-6JX REV 10
						92RTD-101C	N	Y	CA	*	ESK-6JX REV 10
92-74-1DGRD0 1*			RLY	N		92FN-1D	N	Y	CA	*	ESK-6JY REV 12
						92MOD-143D	N	Y	CA	*	ESK-6JY REV 12
						92MOD-148D	N	Y	CA	*	ESK-6JY REV 12
						92MOD-149D	N	Y	CA	*	ESK-6JY REV 12
						92MOD-150D	N	Y	CA	*	ESK-6JY REV 12
						92RTD-101D	N	Y	CA	*	ESK-6JY REV 12
92DPS-1A	DWYER INSTRUMENTS INC	1638-5	INST	N	NA	92FN-1A	N	Y	CA	*	ESK-6JX REV 10
						92MOD-143A	N	Y	CA	*	ESK-6JX REV 10
						92MOD-148A	N	Y	CA	*	ESK-6JX REV 10
						92MOD-149A	N	Y	CA	*	ESK-6JX REV 10
						92MOD-150A	N	Y	CA	*	ESK-6JX REV 10
						92RTD-101A	N	Y	CA	*	ESK-6JX REV 10
92DPS-1B	DWYER INSTRUMENTS INC	1638-5	INST	N	NA	92FN-1B	N	Y	CA	*	ESK-6JY REV 12
						92MOD-143B	N	Y	CA	*	ESK-6JY REV 12
						92MOD-148B	N	Y	CA	*	ESK-6JY REV 12
						92MOD-149B	N	Y	CA	*	ESK-6JY REV 12
						92MOD-150B	N	Y	CA	*	ESK-6JY REV 12
						92RTD-101B	N	Y	CA	*	ESK-6JY REV 12
92DPS-1C	DWYER INSTRUMENTS INC	1638-5	INST	N	NA	92FN-1C	N	Y	CA	*	ESK-6JX REV 10
						92MOD-143C	N	Y	CA	*	ESK-6JX REV 10
						92MOD-148C	N	Y	CA	*	ESK-6JX REV 10
						92MOD-149C	N	Y	CA	*	ESK-6JX REV 10

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
						92MOD-150C	N	Y	CA	*	ESK-6JX REV 10
						92RTD-101C	N	Y	CA	*	ESK-6JX REV 10
92DPS-1D	DWYER INSTRUMENTS INC	1638-5	INST	N	NA	92FN-1D	N	Y	CA	*	ESK-6JY REV 12
						92MOD-143D	N	Y	CA	*	ESK-6JY REV 12
						92MOD-148D	N	Y	CA	*	ESK-6JY REV 12
						92MOD-149D	N	Y	CA	*	ESK-6JY REV 12
						92MOD-150D	N	Y	CA	*	ESK-6JY REV 12
						92RTD-101D	N	Y	CA	*	ESK-6JY REV 12
92MOD-150A(OP)	PENN CONTROLS INC	M81ACA-3	OP	N	NA	92FN-1A	N	Y	NA	*	ESK-6JX REV 10
						92MOD-143A	N	Y	NA	*	ESK-6JX REV 10
						92MOD-148A	N	Y	NA	*	ESK-6JX REV 10
						92MOD-149A	N	Y	NA	*	ESK-6JX REV 10
						92RTD-101A	N	Y	NA	*	ESK-6JX REV 10
92MOD-150B(OP)	PENN CONTROLS INC	M81ACA-3	OP	N	NA	92FN-1B	N	Y	NA	*	ESK-6JY REV 12
						92MOD-143B	N	Y	NA	*	ESK-6JY REV 12
						92MOD-148B	N	Y	NA	*	ESK-6JY REV 12
						92MOD-149B	N	Y	NA	*	ESK-6JY REV 12
						92RTD-101B	N	Y	NA	*	ESK-6JY REV 12
92MOD-150C(OP)	PENN CONTROLS INC	M81ACA-3	OP	N	NA	92FN-1C	N	Y	NA	*	ESK-6JX REV 10
						92MOD-143C	N	Y	NA	*	ESK-6JX REV 10
						92MOD-148C	N	Y	NA	*	ESK-6JX REV 10
						92MOD-149C	N	Y	NA	*	ESK-6JX REV 10
						92RTD-101C	N	Y	NA	*	ESK-6JX REV 10
92MOD-150D(OP)	PENN CONTROLS INC	M81ACA-3	OP	N	NA	92FN-1D	N	Y	NA	*	ESK-6JY REV 12
						92MOD-143D	N	Y	NA	*	ESK-6JY REV 12
						92MOD-148D	N	Y	NA	*	ESK-6JY REV 12
						92MOD-149D	N	Y	NA	*	ESK-6JY REV 12
						92RTD-101D	N	Y	NA	*	ESK-6JY REV 12
92VD-1A	CALCON	E1900	INST	N	NA	92FN-1A	N	Y	CA	*	ESK-6JX REV 10
						92MOD-143A	N	Y	CA	*	ESK-6JX REV 10
						92MOD-148A	N	Y	CA	*	ESK-6JX REV 10
						92MOD-149A	N	Y	CA	*	ESK-6JX REV 10
						92MOD-150A	N	Y	CA	*	ESK-6JX REV 10
						92RTD-101A	N	Y	CA	*	ESK-6JX REV 10
92VD-1B	CALCON	E1900	INST	N	NA	92FN-1B	N	Y	CA	*	ESK-6JY REV 12

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
						92MOD-143B	N	Y	CA	*	ESK-6JY REV 12
						92MOD-148B	N	Y	CA	*	ESK-6JY REV 12
						92MOD-149B	N	Y	CA	*	ESK-6JY REV 12
						92MOD-150B	N	Y	CA	*	ESK-6JY REV 12
						92RTD-101B	N	Y	CA	*	ESK-6JY REV 12
92VD-1C	CALCON	E1900	INST	N	NA	92FN-1C	N	Y	CA	*	ESK-6JX REV 10
						92MOD-143C	N	Y	CA	*	ESK-6JX REV 10
						92MOD-148C	N	Y	CA	*	ESK-6JX REV 10
						92MOD-149C	N	Y	CA	*	ESK-6JX REV 10
						92MOD-150C	N	Y	CA	*	ESK-6JX REV 10
						92RTD-101C	N	Y	CA	*	ESK-6JX REV 10
92VD-1D	CALCON	E1900	INST	N	NA	92FN-1D	N	Y	CA	*	ESK-6JY REV 12
						92MOD-143D	N	Y	CA	*	ESK-6JY REV 12
						92MOD-148D	N	Y	CA	*	ESK-6JY REV 12
						92MOD-149D	N	Y	CA	*	ESK-6JY REV 12
						92MOD-150D	N	Y	CA	*	ESK-6JY REV 12
						92RTD-101D	N	Y	CA	*	ESK-6JY REV 12
93-1-1EDGA02	GENERAL ELECTRIC	SBM	CS	N	09-8	71-10504	N	Y	NV	*	ESK-5BD REV 14
93-1-1EDGA12	GENERAL ELECTRIC	SBM	CS	N	09-8	93EDG-A	N	Y	NV	*	ESK-11BA REV 18
93-1-1EDGA27	GENERAL ELECTRIC	CR2940	CS	N	71MCC-254	93P-3A	N	Y	NV	*	ESK-6VB REV 10
93-1-1EDGB02	GENERAL ELECTRIC	SBM	CS	N	09-8	71-10604	N	Y	NV	*	ESK-5BM REV 17
93-1-1EDGB12	GENERAL ELECTRIC	SBM	CS	N	09-8	93EDG-B	N	Y	NV	*	ESK-11BK REV 20
93-1-1EDGB27	GENERAL ELECTRIC	CR2940	CS	N	71MCC-264	93P-3B	N	Y	NV	*	ESK-6VB REV 10
93-1-1EDGC12	GENERAL ELECTRIC	SBM	CS	N	09-8	93EDG-C	N	Y	NV	*	ESK-11BF REV 17
93-1-1EDGC27	GENERAL ELECTRIC	CR2940	CS	N	71MCC-254	93P-3C	N	Y	NV	*	ESK-6VB REV 10
93-1-1EDGD12	GENERAL ELECTRIC	SBM	CS	N	09-8	93EDG-D	N	Y	NV	*	ESK-11BQ REV 21
93-1-1EDGD27	GENERAL	CR2940	CS	N	71MCC-264	93P-3D	N	Y	NV	*	ESK-6VB REV 10

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
	ELECTRIC										
93-1A-1EDGA0 1	GENERAL ELECTRIC	SBM	CS	N	09-8	71-10502	N	Y	NV	*	ESK-5BB REV 21
93-1A-1EDGA1 1	GENERAL ELECTRIC	SBM	CS	N	09-8	93EDG-A	N	Y	NV	*	ESK-8HF REV 11
93-1A-1EDGB0 1	GENERAL ELECTRIC	SBM	CS	N	09-8	71-10602	N	Y	NV	*	ESK-5BK REV 23
93-1A-1EDGB1 1	GENERAL ELECTRIC	SBM	CS	N	09-8	93EDG-B	N	Y	NV	*	ESK-8HE REV 11
93-1A-1EDGC0 1	GENERAL ELECTRIC	SBM	CS	N	09-8	71-10512	N	Y	NV	*	ESK-5BC REV 22
93-1A-1EDGC1 1	GENERAL ELECTRIC	SBM	CS	N	09-8	93EDG-C	N	Y	NV	*	ESK-8HE REV 11
93-1A-1EDGD0 1	GENERAL ELECTRIC	SBM	CS	N	09-8	71-10612	N	Y	NV	*	ESK-5BL REV 23
93-1A-1EDGD1 1	GENERAL ELECTRIC	SBM	CS	N	09-8	93EDG-D	N	Y	NV	*	ESK-8HE REV 11
93-1B-1EDGA0 1	GENERAL ELECTRIC	SBM	CS	N	93EGP-A	71-10502	N	Y	NV	*	ESK-5BB REV 21
93-1B-1EDGA1 1	GENERAL ELECTRIC	SBM	CS	N	93EGP-A	93EDG-A	N	Y	NV	*	ESK-8HE REV 11
93-1B-1EDGB0 1	GENERAL ELECTRIC	SBM	CS	N	93EGP-B	71-10602	N	Y	NV	*	ESK-5BK REV 23
93-1B-1EDGB1 1	GENERAL ELECTRIC	SBM	CS	N	93EGP-B	93EDG-B	N	Y	NV	*	ESK-8HE REV 11
93-1B-1EDGC0 1	GENERAL ELECTRIC	SBM	CS	N	93EGP-C	71-10512	N	Y	NV	*	ESK-5BC REV 22
93-1B-1EDGC1 1	GENERAL ELECTRIC	SBM	CS	N	93EGP-C	93EDG-C	N	Y	NV	*	ESK-8HE REV 11
93-1B-1EDGD0 1	GENERAL ELECTRIC	SBM	CS	N	93EGP-D	71-10612	N	Y	NV	*	ESK-5BL REV 23
93-1B-1EDGD1	GENERAL	SBM	CS	N	93EGP-D	93EDG-D	N	Y	NV	*	ESK-8HE REV 11

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
1	ELECTRIC										
93-1C-1EDGA1 1	GENERAL ELECTRIC	SBM	CS	N	09-8	93EDG-A	N	Y	NV	*	ESK-8HF REV 11
93-1C-1EDGB1 1	GENERAL ELECTRIC	SBM	CS	N	09-8	93EDG-B	N	Y	NV	*	ESK-8HG REV 6
93-1C-1EDGC1 1	GENERAL ELECTRIC	SBM	CS	N	09-8	93EDG-C	N	Y	NV	*	ESK-8HF REV 11
93-1C-1EDGD1 1	GENERAL ELECTRIC	SBM	CS	N	09-8	93EDG-D	N	Y	NV	*	ESK-8HG REV 6
93-1D-1EDGA1 1	GENERAL ELECTRIC	SBM	CS	N	93EGP-A	93EDG-A	N	Y	NV	*	ESK-8HF REV 11
93-1D-1EDGB1 1	GENERAL ELECTRIC	SBM	CS	N	93EGP-B	93EDG-B	N	Y	NV	*	ESK-8HG REV 6
93-1D-1EDGC1 1	GENERAL ELECTRIC	SBM	CS	N	93EGP-C	93EDG-C	N	Y	NV	*	ESK-8HF REV 11
93-1D-1EDGD1 1	GENERAL ELECTRIC	SBM	CS	N	93EGP-D	93EDG-D	N	Y	NV	*	ESK-8HG REV 6
93-25/27-1ED GA03	GENERAL ELECTRIC	IJS52D	RLY	N	71H05	71H05	Y	*	CR	Y	ESK-8GB REV 5, ESK-5BB REV 21
93-25/27-1ED GB03	GENERAL ELECTRIC	IJS52D	RLY	N	71H06	71H06	Y	*	CR	Y	ESK-8GC REV 6, ESK-5BK REV 23
93-25/27-1ED GC03	GENERAL ELECTRIC	IJS52D	RLY	N	71H05	71H05	Y	*	CR	Y	ESK-8GB REV 5, ESK-5BC REV 22
93-25/27-1ED GD03	GENERAL ELECTRIC	IJS52D	RLY	N	71H06	71H06	Y	*	CR	Y	ESK-8GC REV 6, ESK-5BL REV 23
93-25A-1EDGA 03	GENERAL ELECTRIC	SBM	CS	N	09-8	71H05	N	Y	NV	*	ESK-8GB REV 5, ESK-5BB REV 21
93-25A-1EDGB 03	GENERAL ELECTRIC	SBM	CS	N	09-8	71H06	N	Y	NV	*	ESK-8GC REV 6, ESK-5BK REV 23
93-25A-1EDGC 03	GENERAL ELECTRIC	SBM	CS	N	09-8	71H05	N	Y	NV	*	ESK-8GB REV 5, ESK-5BC REV 22
93-25A-1EDGD	GENERAL	SBM	CS	N	09-8	71H06	N	Y	NV	*	ESK-8GC REV 6,

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
03	ELECTRIC										ESK-5BL REV 23
93-25B-1EDGA 03	GENERAL ELECTRIC	SBM	CS	N	93EGP-A	71H05	N	Y	NV	*	ESK-8GB REV 5, ESK-5BB REV 21
93-25B-1EDGB 03	GENERAL ELECTRIC	SBM	CS	N	93EGP-B	71H06	N	Y	NV	*	ESK-8GC REV 6, ESK-5BK REV 23
93-25B-1EDGC 03	GENERAL ELECTRIC	SBM	CS	N	93EGP-C	71H05	N	Y	NV	*	ESK-8GB REV 5, ESK-5BC REV 22
93-25B-1EDGD 03	GENERAL ELECTRIC	SBM	CS	N	93EGP-D	71H06	N	Y	NV	*	ESK-8GC REV 6, ESK-5BL REV 23
93-27-1EDGA0 1	GENERAL ELECTRIC	12HGA11J52	RLY	N	71-10502	71-10502	N	Y	CA	*	ESK-5BB REV 21
93-27-1EDGA0 2*			RLY	N		71-10504	N	Y	CA	*	ESK-5BD REV 14
93-27-1EDGB0 1	UNKNOWN	*	RLY	N	71-10602	71-10602	N	Y	CA	*	ESK-5BK REV 23
93-27-1EDGB0 2*			RLY	N		71-10604	N	Y	CA	*	ESK-5BM REV 17
93-27-1EDGC0 1	UNKNOWN	*	RLY	N	71-10512	71-10512	N	Y	CA	*	ESK-5BC REV 22
93-27-1EDGD0 1	UNKNOWN	*	RLY	N	71-10612	71-10612	N	Y	CA	*	ESK-5BL REV 23
93-27/51-A-1 EDGA08	GENERAL ELECTRIC	IJCV51A	RLY	N	71H05	71-10502	Y	Y	GERS	N	ESK-5BB REV 21
93-27/51-A-1 EDGB08	GENERAL ELECTRIC	IJCV51A	RLY	N	71H06	71-10602	Y	Y	GERS	N	ESK-5BK REV 23
93-27/51-A-1 EDGC08	GENERAL ELECTRIC	IJCV51A	RLY	N	71H05	71-10512	Y	Y	GERS	N	ESK-5BC REV 22
93-27/51-A-1 EDGD08	GENERAL ELECTRIC	IJCV51A	RLY	N	71H06	71-10612	Y	Y	GERS	N	ESK-5BL REV 23
93-27A-1EDGA 03	GENERAL ELECTRIC	NGV23A	RLY	N	71H05	93EDG-A	Y	Y	GERS	N	ESK-8HA REV 13, ESK-5BS REV 18
93-27B-1EDGB	GENERAL	NGV23B	RLY	N	71H06	93EDG-B	Y	Y	GERS	N	ESK-8HB REV 14,

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
03	ELECTRIC										ESK-5BT REV 19
93-27C-1EDGC 03	GENERAL ELECTRIC	NGV23A	RLY	N	71H05	93EDG-C	Y	Y	GERS	N	ESK-8HC REV 12, ESK-5BS REV 18
93-27D-1EDGD 03	GENERAL ELECTRIC	NGV23B	RLY	N	71H06	93EDG-D	Y	Y	GERS	N	ESK-8HD REV 14, ESK-5BT REV 19
93-27R-1EDGA 03	GENERAL ELECTRIC	NGV23B	RLY	N	71H05	93EDG-A	Y	Y	GERS	N	ESK-8HA REV 13, ESK-5BS REV 18
93-27R-1EDGB 03	GENERAL ELECTRIC	NGV23B	RLY	N	71H06	93EDG-B	Y	Y	GERS	N	ESK-8HB REV 14, ESK-5BT REV 19
93-27R-1EDGC 03	GENERAL ELECTRIC	NGV23B	RLY	N	71H05	93EDG-C	Y	Y	GERS	N	ESK-8HC REV 12, ESK-5BS REV 18
93-27R-1EDGD 03	GENERAL ELECTRIC	NGV23B	RLY	N	71H06	93EDG-D	Y	Y	GERS	N	ESK-8HD REV 14, ESK-5BT REV 19
93-32-1EDGA0 9	GENERAL ELECTRIC	ICW51A	RLY	N	93EGP-A	93EDG-A	Y	Y	GERS	N	ESK-8HA REV 13, ESK-11BC REV 16
93-32-1EDGB0 9	GENERAL ELECTRIC	ICW51A	RLY	N	93EGP-B	93EDG-B	Y	Y	GERS	N	ESK-8HB REV 14, ESK-11BM REV 18
93-32-1EDGC0 9	GENERAL ELECTRIC	ICW51A	RLY	N	93EGP-C	93EDG-C	Y	Y	GERS	N	ESK-8HC REV 12, ESK-11BH REV 16
93-32-1EDGD0 9	GENERAL ELECTRIC	ICW51A	RLY	N	93EGP-D	93EDG-D	Y	Y	GERS	N	ESK-8HD REV 14, ESK-11BS REV 19
93-32/SI-1ED GA12	SQUARE D CO	KPD-13	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	ESK-11BC REV 16
93-32/SI-1ED GB12	SQUARE D CO	KPD-13	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	ESK-11BM REV 18
93-32/SI-1ED GC12	SQUARE D CO	KPD-13	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	ESK-11BH REV 16
93-32/SI-1ED GD12	SQUARE D CO	KPD-13	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	ESK-11BS REV 19
93-32X1-1EDG A12	SQUARE D CO	KPD-13	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	ESK-11BC REV 16
93-32X1-1EDG	SQUARE D CO	KPD-13	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	ESK-11BM REV 18

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
B12											
93-32X1-1EDG C12	SQUARE D CO	KPD-13	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	ESK-11BH REV 16
93-32X1-1EDG D12	SQUARE D CO	KPD-13	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	ESK-11BS REV 19
93-40-1EDGA1 2	GENERAL ELECTRIC	IC2820	RLY	N	93ECP-A	93EDG-A	N	Y	CA	*	ESK-8HE REV 11, ESK-11BC REV 16
93-40-1EDGB1 2	GENERAL ELECTRIC	IC2820	RLY	N	93ECP-B	93EDG-B	N	Y	CA	*	ESK-8HE REV 11, ESK-11BM REV 18
93-40-1EDGC1 2	GENERAL ELECTRIC	IC2820	RLY	N	93ECP-C	93EDG-C	N	Y	CA	*	ESK-8HE REV 11, ESK-11BH REV 16
93-40-1EDGD1 2	GENERAL ELECTRIC	IC2820	RLY	N	93ECP-D	93EDG-D	N	Y	CA	*	ESK-8HE REV 11, ESK-11BS REV 19
93-40X1-1EDG A12	SQUARE D CO	KPD-13	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	ESK-11BC REV 16
93-40X1-1EDG B12	SQUARE D CO	KPD-13	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	ESK-11BM REV 18
93-40X1-1EDG C12	SQUARE D CO	KPD-13	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	ESK-11BH REV 16
93-40X1-1EDG D12	SQUARE D CO	KPD-13	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	ESK-11BS REV 19
93-52A-1EDGA 01	AMERACE CORP (AGASTAT)	E7012PB	RLY	N	71-10502	71-10502	N	Y	CA	*	ESK-5BB REV 21
93-52A-1EDGB 01	AMERACE CORP (AGASTAT)	E7012PB	RLY	N	71-10602	71-10602	N	Y	CA	*	ESK-5BK REV 23
93-52A-1EDGC 01	AMERACE CORP (AGASTAT)	E7012PB	RLY	N	71-10502	71-10512	N	Y	CA	*	ESK-5BC REV 22
93-52A-1EDGD 01	AMERACE CORP (AGASTAT)	E7012PB	RLY	N	71-10612	71-10612	N	Y	CA	*	ESK-5BL REV 23
93-59G-1EDGA 06	GENERAL ELECTRIC	IAV51D	RLY	N	71H05	71-10502	Y	*	CR	Y	ESK-5BB REV 21
93-59G-1EDGB	GENERAL	IAV51D	RLY	N	71H06	71-10602	Y	*	CR	Y	ESK-5BK REV 23

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
06	ELECTRIC										
93-59G-1EDGC 06	GENERAL ELECTRIC	IAV51D	RLY	N	71H05	71-10512	Y	*	CR	Y	ESK-5BC REV 22, ESK-8HC REV 12, ESK-8J REV 8
93-59G-1EDGD 06	GENERAL ELECTRIC	IAV51D	RLY	N	71H06	71-10612	Y	*	CR	Y	ESK-5BL REV 23
93-59GX-1EDG A01	GENERAL ELECTRIC	HLA11B	RLY	N	71H05	71-10502	Y	Y	GERS	N	ESK-5BB REV 21, ESK-8HA REV 13
93-59GX-1EDG B01	GENERAL ELECTRIC	HLA11B	RLY	N	71H06	71-10602	Y	Y	GERS	N	ESK-5BK REV 23, ESK-8HB REV 14
93-59GX-1EDG C01	GENERAL ELECTRIC	HLA11B	RLY	N	71H05	71-10512	Y	Y	GERS	N	ESK-5BC REV 22, ESK-8HC REV 12
93-59GX-1EDG D01	GENERAL ELECTRIC	HLA11B	RLY	N	71H06	71-10612	Y	Y	GERS	N	ESK-5BL REV 23, ESK-8HD REV 14
93-60-1EDGA0 3	GENERAL ELECTRIC	CFVB11A	RLY	Y	71H05	71-10502	N	Y	CA	*	ESK-5BB REV 21, ESK-8HA REV 13, ESK-8J REV 8
93-60-1EDGB0 3	GENERAL ELECTRIC	CFVB11A	RLY	Y	71H06	71-10602	N	Y	CA	*	ESK-5BK REV 23, ESK-8HB REV 14, ESK-8J REV 8
93-60-1EDGC0 3	GENERAL ELECTRIC	CFVB11A	RLY	Y	71H05	71-10512	N	N	CA	*	ESK-5BC REV 22, ESK-8HC REV 12, ESK-8J REV 8
93-60-1EDGD0 3	GENERAL ELECTRIC	CFVB11A	RLY	Y	71H06	71-10612	N	Y	CA	*	ESK-5BL REV 23, ESK-8HD REV 14, ESK-8J REV 8
93-62-1EDGA0 1	AMERACE CORP (AGASTAT)	E7012PB	RLY	N	71H05	71-10502	Y	Y	GERS	N	ESK-5BB REV 21
93-62-1EDGA0 2	AMERACE CORP (AGASTAT)	E7012PB	RLY	N	71H05	71-10504	Y	Y	GERS	N	ESK-5BD REV 14
93-62-1EDGA1 2	AMERACE CORP (AGASTAT)	E7012PC	RLY	N	71H05	93EDG-A	Y	Y	GERS	N	ESK-11BC REV 16, ESK-8HA REV 13
93-62-1EDGB0 1	AMERACE CORP (AGASTAT)	E7012PB	RLY	N	71H06	71-10602	Y	Y	GERS	N	ESK-5BK REV 23

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
93-62-1EDGB0 2	AMERACE CORP (AGASTAT)	E7012PB	RLY	N	71H06	71-10604	Y	Y	GERS	N	ESK-5BM REV 17
93-62-1EDGB1 2	AMERACE CORP (AGASTAT)	E7012PC	RLY	N	71H06	93EDG-B	Y	Y	GERS	N	ESK-11BM REV 18, ESK-8HB REV 14
93-62-1EDGC0 1	AMERACE CORP (AGASTAT)	E7012PB	RLY	N	71H05	71-10512	Y	Y	GERS	N	ESK-5BC REV 22
93-62-1EDGC1 2	AMERACE CORP (AGASTAT)	E7012PC	RLY	N	71H05	93EDG-C	Y	Y	GERS	N	ESK-11BH REV 16, ESK-8HC REV 12
93-62-1EDGD0 1	AMERACE CORP (AGASTAT)	E7012PB	RLY	N	71H06	71-10612	Y	Y	GERS	N	ESK-5BL REV 23
93-62X-1EDGA 02	GENERAL ELECTRIC	HLA11B	RLY	N	71H05	71-10504	Y	Y	GERS	N	ESK-5BD REV 14, ESK-5BA REV 21
93-62X-1EDGB 02	GENERAL ELECTRIC	HLA11B	RLY	N	71H06	71-10604	Y	Y	GERS	N	ESK-5BM REV 17, ESK-5BK REV 23
93-74-1EDGA1 2*			RLY	N		93EDG-A	N	Y	CA	*	ESK-11BA REV 18
93-74-1EDGB1 2*			RLY	N		93EDG-B	N	Y	CA	*	ESK-11BK REV 20
93-74-1EDGC1 2*			RLY	N		93EDG-C	N	Y	CA	*	ESK-11BF REV 17
93-74-1EDGD1 2*			RLY	N		93EDG-D	N	Y	CA	*	ESK-11BQ REV 21
93-74C-1EDGA 13	GENERAL ELECTRIC	CR2811	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	ESK 11BE REV 5, ESK-11BA REV 18, ESK-11BF REV 17, ESK-5BD REV 14
						93EDG-C	Y	*	CR	Y	ESK-11BE REV 5, ESK-11BA REV 18, ESK-11BF REV 17, ESK-5BD REV 14
93-74C-1EDGB 13	GENERAL ELECTRIC	CR2811	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	ESK-11BP REV 5, ESK-11BK REV 20, ESK-11BQ REV 21, ESK-5BM REV 17
						93EDG-D	Y	*	CR	Y	ESK-11BP REV 5, ESK-11BK REV 20,

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... for equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
											ESK-11BQ REV 21, ESK-5BM REV 17
93-86-1EDGA01	GENERAL ELECTRIC	12HEA61B236	RLY	N	71H05	71-10502	Y	Y	GERS	N	ESK-5BB REV 21
93-86-1EDGB01	GENERAL ELECTRIC	12HEA61B236	RLY	N	71H06	71-10602	Y	Y	GERS	N	ESK-5BK REV 23
93-86-1EDGC01	GENERAL ELECTRIC	12HEA61B236	RLY	N	71H05	71-10512	Y	Y	GERS	N	ESK-5BC REV 22
93-86-1EDGD01	GENERAL ELECTRIC	12HEA61B236	RLY	N	71H06	71-10612	Y	Y	GERS	N	ESK-5BL REV 23
93-86X-1EDGA01	GENERAL ELECTRIC	12HEA61B23X2	RLY	N	71H05	71-10502	Y	Y	GERS	N	ESK-5BB REV 21
93-86X-1EDGB01	GENERAL ELECTRIC	12HEA61B23X2	RLY	N	71H06	71-10602	Y	Y	GERS	N	ESK-5BK REV 23
93-86X-1EDGC01	GENERAL ELECTRIC	12HEA61B23X2	RLY	N	71H05	71-10512	Y	Y	GERS	N	ESK-5BC REV 22
93-86X-1EDGD01	GENERAL ELECTRIC	12HEA61B23X2	RLY	N	71H06	71-10612	Y	Y	GERS	N	ESK-5BL REV 23
93-86X1-1EDGA12	SQUARE D CO	KPD-13	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	ESK-11BC REV 16
93-86X1-1EDGB12	SQUARE D CO	KPD-13	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	ESK-11BM REV 18
93-86X1-1EDGC12	SQUARE D CO	KPD-13	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	ESK-11BH REV 16
93-86X1-1EDGD12	SQUARE D CO	KPD-13	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	ESK-11BS REV 19
93-87-A-1EDGA07	GENERAL ELECTRIC	CFD12B	RLY	Y	71H05	71-10502	N	Y	CA	*	ESK-5BB REV 21
93-87-A-1EDGB07	GENERAL ELECTRIC	CFD12B	RLY	Y	71H06	71-10602	N	Y	CA	*	ESK-5BK REV 23
93-87-A-1EDGC07	GENERAL ELECTRIC	CFD12B	RLY	Y	71H05	71-10512	N	Y	CA	*	ESK-5BC REV 22

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
93-87-A-1EDG D07	GENERAL ELECTRIC	CFD12B	RLY	Y	71H06	71-10612	N	Y	CA	*	ESK-5BL REV 23
93-C1-1EDGA26*			CONT	N		93EDG-A	N	Y	CA	*	ESK-8HE REV 11
93-C1-1EDGB26*			CONT	N		93EDG-B	N	Y	CA	*	ESK-8HE REV 11
93-C1-1EDGC26*			CONT	N		93EDG-C	N	Y	CA	*	ESK-8HE REV 11
93-C1-1EDGD26*			CONT	N		93EDG-D	N	Y	CA	*	ESK-8HE REV 11
93-C2-1EDGA12	GENERAL ELECTRIC	CR105	CONT	N	93ECP-A	93EDG-A	Y	N	CR	Y	ESK-11BC REV 16
93-C2-1EDGB12	GENERAL ELECTRIC	CR105	CONT	N	93ECP-B	93EDG-B	Y	N	CR	Y	ESK-11BM REV 18
93-C2-1EDGC12	GENERAL ELECTRIC	CR105	CONT	N	93ECP-C	93EDG-C	Y	N	CR	Y	ESK-11BH REV 16
93-C2-1EDGD12	GENERAL ELECTRIC	CR105	CONT	N	93ECP-D	93EDG-D	Y	N	CR	Y	ESK-11BS REV 19
93-CST-1EDGA01	ONTARIO MET	SB1	CS	N	71H05	71-10502	N	Y	NV	*	ESK-5BB REV 21
93-CST-1EDGB01	GENERAL ELECTRIC	SB1	CS	N	71H06	71-10602	N	Y	NV	*	ESK-5BK REV 23
93-CST-1EDGC01	GENERAL ELECTRIC	SB1	CS	N	71H05	71-10512	N	Y	NV	*	ESK-5BC REV 22
93-CST-1EDGD01	GENERAL ELECTRIC	SB1	CS	N	71H06	71-10612	N	Y	NV	*	ESK-5BL REV 23
93-ECS-1EDGA12	AMERICAN SOLENOID CO INC	*	CS	N	93ECP-A	93EDG-A	N	Y	NV	*	ESK-11BA REV 18, ESK-11BB REV 12, ESK-5BD REV 14
93-ECS-1EDGB12	AMERICAN SOLENOID CO INC	*	CS	N	93ECP-B	93EDG-B	N	Y	NV	*	ESK-11BK REV 20, ESK-11BL REV 13, ESK-5BM REV 18
93-ECS-1EDGC	AMERICAN	*	CS	N	93ECP-C	93EDG-C	N	Y	NV	*	ESK-11BF REV 17,

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
12	SOLENOID CO INC										ESK-11BG REV 12, ESK-11BB REV 12, ESK-5BD REV 14
93-ECS-1EDGD 12	AMERICAN SOLENOID CO INC	*	CS	N	93ECP-D	93EDG-D	N	Y	HV	*	ESK-11BQ REV 21, ESK-11BR REV 13, ESK-5BM REV 18
93-ESR200-1E DGA12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	ESK-11BB REV 12, ESK-11BA REV 18
93-ESR200-1E DGB12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	ESK-11BL REV 13, ESK-11BK REV 20
93-ESR200-1E DGC12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	ESK-11BG REV 12, ESK-11BF REV 17
93-ESR200-1E DGD12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	ESK-11BR REV 13, ESK-11BQ REV 21
93-ESR40-1ED GA12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	ESK-11BB REV 12
93-ESR40-1ED GB12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	ESK-11BL REV 13
93-ESR40-1ED GC12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	ESK-11BG REV 12
93-ESR40-1ED GD12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	ESK-11BR REV 13
93-ESR400-1E DGA12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	ESK-11BB REV 12, ESK-11BA REV 18, ESK-6AF REV 11, ESK-8HE REV 11
93-ESR400-1E DGB12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	ESK-11BL REV 13, ESK-11BK REV 13, ESK-6AL REV
93-ESR400-1E DGC12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	ESK-11BG REV 12, ESK-11BF REV 17, ESK-8HE REV 11, ESK-6AF REV 11
93-ESR400-1E DGD12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	ESK-11BR REV 13, ESK-11BQ REV 21,

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
											ESK-6AL REV 6
93-GFR-1EDGA 13	SQUARE D CO	KPD-13	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	ESK-11BE REV 5, ESK-11BA REV 18, ESK-11BF REV 17
						93EDG-C	Y	*	CR	Y	ESK-11BE REV 5, ESK-11BA REV 18, ESK-11BF REV 17
93-GFR-1EDGB 13	SQUARE D CO	KPD-13	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	ESK-11BP REV 5, ESK-11BK REV 20, ESK-11BQ REV 21
						93EDG-D	Y	*	CR	Y	ESK-11BP REV 5, ESK-11BK REV 20, ESK-11BQ REV 21
93-ISX-1EDGB 12	GENERAL ELECTRIC	12HFA151A2H	RLY	N	93ECP-B	93EDG-B	N	Y	CA	*	ESK-11BK REV 20
93-ISX-1EDGD 01*			RLY	N		71-10612	N	Y	CA	*	ESK-5BL REV 23
93-ISX-1EDGD 03*			RLY	N		71-10612	N	Y	CA	*	ESK-5BL REV 23, ESK-8J REV 8, ESK-8HD REV 14
93-ISX-1EDGD 12	GENERAL ELECTRIC	12HFA151A2H	RLY	N	93ECP-D	93EDG-D	N	Y	CA	*	ESK-11BQ REV 21
93-K1-1EDGA1 2	GENERAL ELECTRIC	CR2810	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	ESK-11BA REV 18, ESK-11BB REV 12, ESK-11BC REV 16, ESK-8HE REV 11
93-K1-1EDGB1 2	GENERAL ELECTRIC	CR2810	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	ESK-11BK REV 20, ESK-11BL REV 13, ESK-11BM REV 18, ESK-8HE REV 11
93-K1-1EDGC1 2	GENERAL ELECTRIC	CR2810	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	ESK-11BF REV 17, ESK-11BG REV 12, ESK-11BH REV 16, ESK-8HE REV 11
93-K1-1EDGD1 2	GENERAL ELECTRIC	CR2810	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	ESK-11BQ REV 21, ESK-11BR REV 12, ESK-11BS REV 16, ESK-8HE REV 11

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
93-K10-1EDGA 01	GENERAL ELECTRIC	CR2811A211G	RLY	N	93ECP-A	71-10502	Y	*	CR	Y	ESK-5BB REV 21
93-K10-1EDGB 01	GENERAL ELECTRIC	CR2811A211G	RLY	N	93ECP-B	71-10602	Y	*	CR	Y	ESK-5BK REV 23
93-K10-1EDGC 01	GENERAL ELECTRIC	CR2811A211G	RLY	N	93ECP-C	71-10512	Y	*	CR	Y	ESK-5BC REV 22
93-K10-1EDGD 01	GENERAL ELECTRIC	CR2811A211G	RLY	N	93ECP-D	71-10612	Y	*	CR	Y	ESK-5BL REV 23
93-K2-1EDGA1 2	GENERAL ELECTRIC	CR105	CONT	N	93ECP-A	93EDG-A	Y	N	CR	Y	ESK-11BB REV 12, ESK-11BC REV 16
93-K2-1EDGB1 2	GENERAL ELECTRIC	CR105	CONT	N	93ECP-B	93EDG-B	Y	N	CR	Y	ESK-11BL REV 13, ESK-11BM REV 18
93-K2-1EDGC1 2	GENERAL ELECTRIC	CR105	CONT	N	93ECP-C	93EDG-C	Y	N	CR	Y	ESK-11BG REV 12, ESK-11BH REV 16
93-K2-1EDGD1 2	GENERAL ELECTRIC	CR105	CONT	N	93ECP-D	93EDG-D	Y	N	CR	Y	ESK-11BR REV 13, ESK-11BS REV 19
93-K3-1EDGA1 2	SQUARE D CO	KPD-13	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	ESK-11BB REV 12, ESK-11BA REV 18, ESK-11BC REV 16, ESK-8HE REV 11
93-K3-1EDGB1 2	SQUARE D CO	KPD-13	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	ESK-11BL REV 13, ESK-11BK REV 20, ESK-11BM REV 18, ESK-8HE REV 11
93-K3-1EDGC1 2	SQUARE D CO	KPD-13	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	ESK-11BG REV 12, ESK-11BF REV 17, ESK-11BH REV 16, ESK-8HE REV 11
93-K3-1EDGD1 2	SQUARE D CO	KPD-13	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	ESK-11BR REV 13, ESK-11BQ REV 21, ESK-11BS REV 19, ESK-8HE REV 11
93-K4-1EDGA1 2	SQUARE D CO	KPD-13	RLY	N	93EGP-A	93EDG-A	Y	*	CR	Y	ESK-11BA REV 18, ESK-11BC REV 16
93-K4-1EDGB1	SQUARE D CO	KPD-13	RLY	N	93EGP-B	93EDG-B	Y	*	CR	Y	ESK-11BK REV 20,

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
2											ESK-11BM REV 18
93-K4-1EDGC1 2	SQUARE D CO	KPD-13	RLY	N	93EGP-C	93EDG-C	Y	*	CR	Y	ESK-11BF REV 17, ESK-11BH REV 16
93-K4-1EDGD1 2	SQUARE D CO	KPD-13	RLY	N	93EGP-D	93EDG-D	Y	*	CR	Y	ESK-11BQ REV 21, ESK-11BS REV 19
93-K6-1EDGA1 5*			RLY	N		93P1-A1	N	Y	CA	*	ESK-6VA REV 9
93-K6-1EDGB1 5*			RLY	N		93P1-B1	N	Y	CA	*	ESK-6VA REV 9
93-K6-1EDGC1 5*			RLY	N		93P1-C1	N	Y	CA	*	ESK-6VA REV 9
93-K6-1EDGD1 5*			RLY	N		93P1-D1	N	Y	CA	*	ESK-6VA REV 9
93-K7-1EDGA1 6*			RLY	N		93P1-A2	N	Y	CA	*	ESK-6VA REV 9
93-K7-1EDGB1 6*			RLY	N		93P1-B2	N	Y	CA	*	ESK-6VA REV 9
93-K7-1EDGC1 6*			RLY	N		93P1-C2	N	Y	CA	*	ESK-6VA REV 9
93-K7-1EDGD1 6*			RLY	N		93P1-D2	N	Y	CA	*	ESK-6VA REV 9
93-K8-1EDGA0 2	GENERAL ELECTRIC	CR2811	RLY	N	93FPAC	71-10504	Y	*	CR	Y	ESK-5BD REV 14
93-K8-1EDGB0 2	GENERAL ELECTRIC	CR2811	RLY	N	93FPBD	71-10604	Y	*	CR	Y	ESK-5BM REV 17
93-K9-1EDGA0 2	GENERAL ELECTRIC	CR2811	RLY	N	93FPAC	71-10504	Y	*	CR	Y	ESK-5BD REV 14
93-K9-1EDGB0 2	GENERAL ELECTRIC	CR2811	RLY	N	93FPBD	71-10604	Y	*	CR	Y	ESK-5BM REV 17
93-RESETL-1E DGA12	CUTLER-HAMME R INC (EATON CORP)	1025OT109-1M36	CS	N	93ECP-A	93EDG-A	N	Y	NV	*	ESK-11BC REV 16

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
93-RESETL-1E DGB12	CUTLER-HAMME R INC (EATON CORP)	1025OT109-1M36	CS	N	93ECP-B	93EDG-B	N	Y	NV	*	ESK-11BM REV 18
93-RESETL-1E DGC12	CUTLER-HAMME R INC (EATON CORP)	1025OT109-1M36	CS	N	93ECP-C	93EDG-C	N	Y	NV	*	ESK-11BH REV 16
93-RESETL-1E DGD12	CUTLER-HAMME R INC (EATON CORP)	04	CS	N	93ECP-D	93EDG-D	N	Y	NV	*	ESK-11BS REV 19
93-RESETR-1E DGA12	CUTLER-HAMME R INC (EATON CORP)	1025OT103-1M37	CS	N	09-B	93EDG-A	N	Y	NV	*	ESK-11BC REV 16
93-RESETR-1E DGB12	CUTLER-HAMME R INC (EATON CORP)	1025OT103-1M37	CS	N	09-B	93EDG-B	N	Y	NV	*	ESK-11BM REV 18
93-RESETR-1E DGC12	CUTLER-HAMME R INC (EATON CORP)	1027OT103-1M37	CS	N	09-B	93EDG-C	N	Y	NV	*	ESK-11BH REV 16
93-RESETR-1E DGD12	CUTLER-HAMME R INC (EATON CORP)	1025OT103-1M37	CS	N	09-B	93EDG-D	N	Y	NV	*	ESK-11BS REV 19
93-S1-1EDGA15*			CS	N		93P1-A1	N	Y	NV	*	ESK-6VA REV 9
						93P1-A2	N	Y	NV	*	ESK-6VA REV 9
93-S1-1EDGB15*			CS	N		93P1-B1	N	Y	NV	*	ESK-6VA REV 9
						93P1-B2	N	Y	NV	*	ESK-6VA REV 9
93-S1-1EDGC15*			CS	N		93P1-C1	N	Y	NV	*	ESK-6VA REV 9
						93P1-C2	N	Y	NV	*	ESK-6VA REV 9
93-S1-1EDGD15*			CS	N		93P1-D1	N	Y	NV	*	ESK-6VA REV 9
						93P1-D2	N	Y	NV	*	ESK-6VA REV 9
93-S2-1EDGA15*			CS	N		93P1-A1	N	Y	NV	*	ESK-6VA REV 9
93-S2-1EDGB1			CS	N		93P1-B1	N	Y	NV	*	ESK-6VA REV 9

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
5*											
93-S2-1EDGC15*			CS	N		93P1-C1	N	Y	NV	*	ESK-6VA REV 9
93-S2-1EDGD15*			CS	N		93P1-D1	N	Y	NV	*	ESK-6VA REV 9
93-S3-1EDGA16*			CS	N		93P1-A2	N	Y	NV	*	ESK-6VA REV 9
93-S3-1EDGB16*			CS	N		93P1-B2	N	Y	NV	*	ESK-6VA REV 9
93-S3-1EDGC16*			CS	N		93P1-C2	N	Y	NV	*	ESK-6VA REV 9
93-S3-1EDGD16*			CS	N		93P1-D2	N	Y	NV	*	ESK-6VA REV 9
93-SDRX-1EDGA12	SQUARE D CO	KPD-13	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	ESK-11BC REV 16
93-SDRX-1EDGB12	SQUARE D CO	KPD-13	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	ESK-11BM REV 18
93-SDRX-1EDGC12	SQUARE D CO	KPD-13	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	ESK-11BH REV 16
93-SDRX-1EDGD12	SQUARE D CO	KPD-13	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	ESK-11BS REV 19
93-STARTL-1EDGA12	CUTLER-HAMMER INC (EATON CORP)	1025OT101-1M36	CS	N	93ECP-A	93EDG-A	N	Y	NV	*	ESK-11BB REV 12
93-STARTL-1EDGB12	CUTLER-HAMMER INC (EATON CORP)	1025OT101-1M36	CS	N	93ECP-B	93EDG-B	N	Y	NV	*	ESK-11BB REV 12
93-STARTL-1EDGC12	CUTLER-HAMMER INC (EATON CORP)	1025OT101-1M36	CS	N	93ECP-C	93EDG-C	N	Y	NV	*	ESK-11BH REV 16
93-STARTL-1EDGD12	CUTLER-HAMMER INC (EATON CORP)	1025OT101-1M36	CS	N	93ECP-D	93EDG-D	N	Y	NV	*	ESK-11BR REV 13

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
93-STARTR-1EDGA12	CUTLER-HAMMER INC (EATON CORP)	1025OT101-1M36	CS	N	09-B	93EDG-A	N	Y	NV	*	ESK-11BB REV 12
93-STARTR-1EDGB12	CUTLER-HAMMER INC (EATON CORP)	1025OT101-1M36	CS	N	09-B	93EDG-B	N	Y	NV	*	ESK-11BL REV 13
93-STARTR-1EDGC12	CUTLER-HAMMER INC (EATON CORP)	1025OT101-1M36	CS	N	09-B	93EDG-C	N	Y	NV	*	ESK-11BG REV 12
93-STARTR-1EDGD12	CUTLER-HAMMER INC (EATON CORP)	1025OT101-1M36	CS	N	09-B	93EDG-D	N	Y	NV	*	ESK-11BR REV 13
93-STOPL-1EDGA12	CUTLER-HAMMER INC (EATON CORP)	1025OT102-1M34	CS	N	93ECP-A	93EDG-A	N	Y	NV	*	ESK-11BB REV 12
93-STOPL-1EDGB12	CUTLER-HAMMER INC (EATON CORP)	1025OT102-1M34	CS	N	93ECP-B	93EDG-B	N	Y	NV	*	ESK-11BL REV 13
93-STOPL-1EDGC12	CUTLER-HAMMER INC (EATON CORP)	1025OT102-1M34	CS	N	93ECP-C	93EDG-C	N	Y	NV	*	ESK-11BG REV 12
93-STOPL-1EDGD12	CUTLER-HAMMER INC (EATON CORP)	1025OT102-1M34	CS	N	93ECP-D	93EDG-D	N	Y	NV	*	ESK-11BR REV 13
93-STOPR-1EDGA12	CUTLER-HAMMER INC (EATON CORP)	1025OT102-1M34	CS	N	09-B	93EDG-A	N	Y	NV	*	ESK-11BB REV 12
93-STOPR-1EDGB12	CUTLER-HAMMER INC (EATON CORP)	1025OT102-1M34	CS	N	09-B	93EDG-B	N	Y	NV	*	ESK-11BL REV 13
93-STOPR-1EDGC12	CUTLER-HAMMER INC (EATON CORP)	1025OT102-1M34	CS	N	09-B	93EDG-C	N	Y	NV	*	ESK-11BH REV 16
93-STOPR-1EDGD12	CUTLER-HAMMER INC (EATON CORP)	1025OT102-1M34	CS	N	09-B	93EDG-D	N	Y	NV	*	ESK-11BR REV 13

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
93-TBR-1EDGA 12	SQUARE D CO	KPD-13	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	ESK-11BA REV 18, ESK-11BE REV 5
93-TBR-1EDGB 12	SQUARE D CO	KPD-13	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	ESK-11BK REV 20, ESK-11BP REV 5
93-TBR-1EDGC 12	SQUARE D CO	KPD-13	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	ESK-11BF REV 17, ESK-11BE REV 5
93-TBR-1EDGD 12	SQUARE D CO	KPD-13	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	ESK-11BQ REV 21, ESK-11BP REV 5
93-TBRX1-1ED GA13	SQUARE D CO	KPD-13	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	ESK-11BE REV 5, ESK-5BD REV 14
						93EDG-C	Y	*	CR	Y	ESK-11BE REV 5, ESK-5BD REV 14
93-TBRX1-1ED GB13	SQUARE D CO	KPD-13	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	ESK-11BP REV 5, ESK-5BM REV 17
						93EDG-D	Y	*	CR	Y	ESK-11BP REV 5, ESK-5BM REV 17
93-TBRX2-1ED GA13	SQUARE D CO	KPD-13	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	ESK-11BE REV 5, ESK-5BD REV 14
						93EDG-C	Y	*	CR	Y	ESK-11BE REV 5, ESK-5BD REV 14
93-TBRX2-1ED GB13	SQUARE D CO	KPD-13	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	ESK-11BP REV 5, ESK-5BM REV 17
						93EDG-D	Y	*	CR	Y	ESK-11BP REV 5, ESK-5BM REV 17
93-VSRX1-1ED GA13	SQUARE D CO	KPD-13	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	ESK-11BE REV 5, ESK-5BD REV 14
						93EDG-C	Y	*	CR	Y	ESK-11BE REV 5, ESK-5BD REV 14
93-VSRX1-1ED GB13	SQUARE D CO	KPD-13	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	ESK-11BP REV 5
						93EDG-D	Y	*	CR	Y	ESK-11BP REV 5
93-VSRX2-1ED GA13	SQUARE D CO	KPD-13	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	ESK-11BE REV 5, ESK-5BD REV 14
						93EDG-C	Y	*	CR	Y	ESK-11BE REV 5, ESK-5BD REV 14
93-VSRX2-1ED GB13	SQUARE D CO	KPD-13	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	ESK-11BP REV 5

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
						93EDG-D	Y	*	CR	Y	ESK-11BP REV 5
93CS-1EDGB02	ELECTRO SWITCH CORP	SERIES 20P	CS	N	25ASP-3	71-10604	N	Y	NV	*	ESK-5BM REV 17
93CS-1EDGB12	ELECTRO SWITCH CORP	SERIES 20P	CS	N	25ASP-3	93EDG-B	N	Y	NV	*	ESK-11BK REV 20
93CS-1EDGD12	ELECTRO SWITCH CORP	SERIES 20P	CS	N	25ASP-3	93EDG-D	N	Y	NV	*	ESK-11BQ REV 21
93CST-1EDGA02	GENERAL ELECTRIC	SB1	CS	N	71H05	71-10504	N	Y	NV	*	ESK-5BD REV 14
93CST-1EDGB02	GENERAL ELECTRIC	SB1	CS	N	71H06	71-10604	N	Y	NV	*	ESK-5BM REV 17
93ESL-1EDGA11	SQUARE D CO	KPD-13	RLY	N	93EGP-A	93EDG-A	Y	*	CR	Y	ESK-8HF REV 11
93ESL-1EDGB11	SQUARE D CO	KPD-13	RLY	N	93EGP-B	93EDG-B	Y	*	CR	Y	ESK-8HG REV 6
93ESL-1EDGC11	SQUARE D CO	KPD-13	RLY	N	93EGP-C	93EDG-C	Y	*	CR	Y	ESK-8HF REV 11
93ESL-1EDGD11	SQUARE D CO	KPD-13	RLY	N	93EGP-D	93EDG-D	Y	*	CR	Y	ESK-8HG REV 6
93ESR-1EDGA11	SQUARE D CO	KPD-13	RLY	N	93EGP-A	93EDG-A	Y	*	CR	Y	ESK-8HF REV 11
93ESR-1EDGB11	SQUARE D CO	KPD-13	RLY	N	93EGP-B	93EDG-B	Y	*	CR	Y	ESK-8HG REV 6
93ESR-1EDGC11	SQUARE D CO	KPD-13	RLY	N	93EGP-C	93EDG-C	Y	*	CR	Y	ESK-8HF REV 11
93ESR-1EDGD11	SQUARE D CO	KPD-13	RLY	N	93EGP-D	93EDG-D	Y	*	CR	Y	ESK-8HG REV 6
93ESS-A	SYNCHRO - START PRODUCTS INC	ESSB-4AT	INST	N	93ECSP-A	93EDG-A	Y	*	CR	Y	ESK-11BC REV 16, ESK-11BB REV 12
93ESS-B	SYNCHRO - START PRODUCTS INC	ESSB-4AT	INST	N	93ECSP-B	93EDG-B	Y	*	CR	Y	ESK-11BM REV 18, ESK-11BL REV 13

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
93ESS-C	SYNCHRO - START PRODUCTS INC	ESSB-4AT	INST	N	93ECSP-C	93EDG-C	Y	*	CR	Y	ESK-11BH REV 16, ESK-11BG REV 12
93ESS-D	SYNCHRO - START PRODUCTS INC	ESSB-4AT	INST	N	93ECSP-D	93EDG-D	Y	*	CR	Y	ESK-11BS REV 19, ESK-11BR REV 13
93FFR-1EDGA12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	ESK-11BA REV 18, ESK-8HE REV 11, ESK-11BC REV 16
93FFR-1EDGB12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	ESK-11BK REV 20, ESK-8HE REV 11, ESK-11BM REV 18
93FFR-1EDGC12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	ESK-11BF REV 17, ESK-8HE REV 11, ESK-11BH REV 16
93FFR-1EDGD12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	ESK-11BQ REV 21, ESK-8HE REV 11, ESK-11BS REV 19
93FTS1-1EDGA13*			RLY	N		93EDG-A	N	Y	CA	*	ESK-11BE REV 5
						93EDG-C	N	Y	CA	*	ESK-11BE REV 5
93FTS1-1EDGB13*			RLY	N		93EDG-B	N	Y	CA	*	ESK-11BP REV 5
						93EDG-D	N	Y	CA	*	ESK-11BP REV 5
93FTS1A-1EDGA13	SQUARE D CO	KPD-13	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	ESK-11BE REV 5, ESK-5BD REV 14
						93EDG-C	Y	*	CR	Y	ESK-11BE REV 5, ESK-5BD REV 14
93FTS1A-1EDGB13	SQUARE D CO	KPD-13	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	ESK-11BP REV 5, ESK-5BM REV 17
						93EDG-D	Y	*	CR	Y	ESK-11BP REV 5, ESK-5BM REV 17
93FTS2-1EDGA13*			RLY	N		93EDG-A	N	Y	CA	*	ESK-11BE REV 5
						93EDG-C	N	Y	CA	*	ESK-11BE REV 5
93FTS2-1EDGB13*			RLY	N		93EDG-B	N	Y	CA	*	ESK-11BP REV 5

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer. Part\model. Number.	Relay. type..	Low. ruggedness. relay.	Rack/Panel:	Component. For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
						93EDG-D	N	Y	CA	*	ESK-11BP REV 5
93FTS2A-1EDG A13	SQUARE D CO	KPD-13	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	ESK-11BE REV 5, ESK-5BD REV 14
						93EDG-C	Y	*	CR	Y	ESK-11BE REV 5, ESK-5BD REV 14
93FTS2A-1EDG B13	SQUARE D CO	KPD-13	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	ESK-11BP REV 5, ESK-5BM REV 17
						93EDG-D	Y	*	CR	Y	ESK-5BM REV 17, ESK-11BP REV 5
93IS-1EDGB01	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25ASP-3	71-10602	N	Y	NV	*	ESK-5BK REV 23
93IS-1EDGB02	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25ASP-3	71-10604	N	Y	NV	*	ESK-5BM REV 17
93IS-1EDGB03	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25ASP-3	71-10602	N	Y	NV	*	ESK-5BK REV 23, ESK-8GC REV 6
						71H06	N	Y	NV	*	ESK-8GC REV 6
93IS-1EDGB11	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25ASP-3	93EDG-B	N	Y	NV	*	ESK-8HG REV 6
93IS-1EDGB12	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25ASP-3	93EDG-B	N	Y	NV	*	ESK-11BQ REV 21
93IS-1EDGB14	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25ASP-3	93EDG-B	N	Y	NV	*	ESK-8HG REV 6
93IS-1EDGD01	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25ASP-3	71-10612	N	Y	NV	*	ESK-5BL REV 23
93IS-1EDGD03	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25ASP-3	71-10612	N	Y	NV	*	ESK-5BL REV 23, ESK-8GC REV 6
						71H06	N	Y	NV	*	ESK-8GC REV 6
93IS-1EDGD11	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25ASP-3	93EDG-D	N	Y	NV	*	ESK-8HG REV 6
93IS-1EDGD12	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25ASP-3	93EDG-D	N	Y	NV	*	ESK-11BQ REV 21
93IS-1EDGD14	ELECTRO SWITCH CORP	SERIES 20K	CS	N	25ASP-3	93EDG-D	N	Y	NV	*	ESK-8HG REV 6
93ISX-1EDGB0			RLY	N		71-10602	N	Y	CA	*	ESK-5BK REV 23

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel: Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
1*										
93ISX-1EDGB0 2*			RLY	N	71-10604	N	Y	CA	*	ESK-5BM REV 17
93ISX-1EDGB0 3*			RLY	N	71-10602	N	Y	CA	*	ESK-5BK REV 23, ESK-8J REV 8, ESK-8HB REV 14
93ISX-1EDGD0 1*			RLY	N	71-10612	N	Y	CA	*	ESK-5BL REV 23
93ISX-1EDGD0 3*			RLY	N	71-10612	N	Y	CA	*	ESK-5BL REV 23, ESK-8J REV 8, ESK-8HD REV 14
93K1-1EDGA12 *			RLY	N	92FN-1A	N	Y	CA	*	ESK-6JX REV 10, ESK-11BA REV 18
					92MOD-143A	N	Y	CA	*	ESK-6JX REV 10, ESK-11BA REV 18
					92MOD-148A	N	Y	CA	*	ESK-6JX REV 10, ESK-11BA REV 18
					92MOD-149A	N	Y	CA	*	ESK-6JX REV 10, ESK-11BA REV 18
					92MOD-150A	N	Y	CA	*	ESK-6JX REV 10, ESK-11BA REV 18
					92RTD-101A	N	Y	CA	*	ESK-6JX REV 10, ESK-11BA REV 18
93K1-1EDGB12 *			RLY	N	92FN-1B	N	Y	CA	*	ESK-6JY REV 12, ESK-11BK REV 20
					92MOD-143B	N	Y	CA	*	ESK-6JY REV 12, ESK-11BK REV 20
					92MOD-148B	N	Y	CA	*	ESK-6JY REV 12, ESK-11BK REV 20
					92MOD-149B	N	Y	CA	*	ESK-6JY REV 12, ESK-11BK REV 20
					92MOD-150B	N	Y	CA	*	ESK-6JY REV 12, ESK-11BK REV 20
					92RTD-101B	N	Y	CA	*	ESK-6JY REV 12, ESK-11BK REV 20
93K1-1EDGC12 *			RLY	N	92FN-1C	N	Y	CA	*	ESK-6JX REV 10, ESK-11BF REV 17
					92MOD-143C	N	Y	CA	*	ESK-6JX REV 10, ESK-11BF REV 17
					92MOD-148C	N	Y	CA	*	ESK-6JX REV 10, ESK-11BF REV 17

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... for equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
						92MOD-149C	N	Y	CA	*	ESK-6JX REV 10, ESK-11BF REV 17
						92MOD-150C	N	Y	CA	*	ESK-6JX REV 10, ESK-11BF REV 17
						92RTD-101C	N	Y	CA	*	ESK-6JX REV 10, ESK-11BF REV 17
93K1-1EDGD12 *			RLY	N		92FN-1D	N	Y	CA	*	ESK-6JY REV 12
						92MOD-143D	N	Y	CA	*	ESK-6JY REV 12
						92MOD-148D	N	Y	CA	*	ESK-6JY REV 12
						92MOD-149D	N	Y	CA	*	ESK-6JY REV 12
						92MOD-150D	N	Y	CA	*	ESK-6JY REV 12
						92RTD-101D	N	Y	CA	*	ESK-6JY REV 12
93K3-1EDGA12 *			RLY	N		92FN-1A	N	Y	CA	*	ESK-6JX REV 10, ESK-11BB REV 12
						92MOD-143A	N	Y	CA	*	ESK-6JX REV 10, ESK-11BB REV 12
						92MOD-148A	N	Y	CA	*	ESK-6JX REV 10, ESK-11BB REV 12
						92MOD-149A	N	Y	CA	*	ESK-6JX REV 10, ESK-11BB REV 12
						92MOD-150A	N	Y	CA	*	ESK-6JX REV 10, ESK-11BB REV 12
						92RTD-101A	N	Y	CA	*	ESK-6JX REV 10, ESK-11BB REV 12
93K3-1EDGB12 *			RLY	N		92FN-1B	N	Y	CA	*	ESK-6JY REV 12, ESK-11BL REV 13
						92MOD-143B	N	Y	CA	*	ESK-6JY REV 12, ESK-11BL REV 13
						92MOD-148B	N	Y	CA	*	ESK-6JY REV 12, ESK-11BL REV 13
						92MOD-149B	N	Y	CA	*	ESK-6JY REV 12, ESK-11BL REV 13
						92MOD-150B	N	Y	CA	*	ESK-6JY REV 12, ESK-11BL REV 13
						92RTD-101B	N	Y	CA	*	ESK-6JY REV 12, ESK-11BL REV 13
93K3-1EDGC12 *			RLY	N		92FN-1C	N	Y	CA	*	ESK-6JX REV 010
						92MOD-143C	N	Y	CA	*	ESK-6JX REV 010
						92MOD-148C	N	Y	CA	*	ESK-6JX REV 010
						92MOD-149C	N	Y	CA	*	ESK-6JX REV 010
						92MOD-150C	N	Y	CA	*	ESK-6JX REV 010
						92RTD-101C	N	Y	CA	*	ESK-6JX REV 010

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
93K3-1EDGD12 *			RLY	N		92FN-1D	N	Y	CA	*	ESK-6JY REV 12
						92MOD-143D	N	Y	CA	*	ESK-6JY REV 12
						92MOD-148D	N	Y	CA	*	ESK-6JY REV 12
						92MOD-149D	N	Y	CA	*	ESK-6JY REV 12
						92MOD-150D	N	Y	CA	*	ESK-6JY REV 12
						92RTD-101D	N	Y	CA	*	ESK-6JY REV 12
93LS-2A	GEMS INC	LS-800	INST	N	NA	93P1-A1	N	Y	CA	*	ESK-6VA REV 9
93LS-2B	GEMS INC	LS-800	INST	N	NA	93P1-B1	N	Y	CA	*	ESK-6VA REV 9
93LS-2C	GEMS INC	LS-800	INST	N	NA	93P1-C1	N	Y	CA	*	SK-6VA REV 9
93LS-2D	GEMS INC	LS-800	INST	N	NA	93P1-D1	N	Y	CA	*	ESK-6VA REV 9
93LS-3A	GEMS INC	LS-800	INST	N	NA	93P1-A1	N	Y	CA	*	ESK-6VA REV 9
						93P1-A2	N	Y	CA	*	ESK-6VA REV 9
93LS-3AX-1ED GA17	AGASTAT RELAY CO (AMERACE)	EGP	RLY	N	93JB-ECPA	93P1-A1	N	Y	CA	*	ESK-6VA REV 9
						93P1-A2	N	Y	CA	*	ESK-6VA REV 9
93LS-3B	GEMS INC	LS-800	INST	N	NA	93P1-B1	N	Y	CA	*	ESK-6VA REV 9
						93P1-B2	N	Y	CA	*	ESK-6VA REV 9
93LS-3BX-1ED GB17	AGASTAT RELAY CO (AMERACE)	EGP	RLY	N	93JB-ECPB	93P1-B1	N	Y	CA	*	ESK-6VA REV 9
						93P1-B2	N	Y	CA	*	ESK-6VA REV 9
93LS-3C	GEMS INC	LS-800	INST	N	NA	93P1-C1	N	Y	CA	*	ESK-6VA REV 9
						93P1-C2	N	Y	CA	*	ESK-6VA REV 9
93LS-3CX-1ED GC17	AGASTAT RELAY CO (AMERACE)	EGP	RLY	N	93JB-ECPC	93P1-C1	N	Y	CA	*	ESK-6VA REV 9
						93P1-C2	N	Y	CA	*	ESK-6VA REV 9
93LS-3D	GEMS INC	LS-800	INST	N	NA	93P1-D1	N	Y	CA	*	ESK-6VA REV 9
						93P1-D2	N	Y	CA	*	ESK-6VA REV 9
93LS-3DX-1ED GD17	AGASTAT RELAY CO (AMERACE)	EGP	RLY	N	93JB-ECPD	93P1-D1	N	Y	CA	*	ESK-6VA REV 9
						93P1-D2	N	Y	CA	*	ESK-6VA REV 9

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
93LS-4A	GEMS INC	LS-800	INST	N	NA	93P1-A2	N	Y	CA	*	ESK-6VA REV 9
93LS-4B	GEMS INC	LS-800	INST	N	NA	93P1-B2	N	Y	CA	*	ESK-6VA REV 9
93LS-4C	GEMS INC	LS-800	INST	N	NA	93P1-C2	N	Y	CA	*	ESK-6VA REV 9
93LS-4D	GEMS INC	LS-800	INST	N	NA	93P1-D2	N	Y	CA	*	ESK-6VA REV 9
93LS-5A	GEMS INC	LS-800	INST	N	NA	93P1-A1	N	Y	CA	*	ESK-6VA REV 9
						93P1-A2	N	Y	CA	*	ESK-6VA REV 9
93LS-5AX-1ED GA17	AGASTAT RELAY CO (AMERACE)	EGP	RLY	N	93ECP-A	93P1-A1	N	Y	CA	*	ESK-6VA REV 9
						93P1-A2	N	Y	CA	*	ESK-6VA REV 9
93LS-5B	GEMS INC	LS-800	INST	N	NA	93P1-B1	N	Y	CA	*	ESK-6VA REV 9
						93P1-B2	N	Y	CA	*	ESK-6VA REV 9
93LS-5BX-1ED GB17	AGASTAT RELAY CO (AMERACE)	EGP	RLY	N	93JB-ECPB	93P1-B1	N	Y	CA	*	ESK-6VA REV 9
						93P1-B2	N	Y	CA	*	ESK-6VA REV 9
93LS-5C	GEMS INC	LS-800	INST	N	NA	93P1-C1	N	Y	CA	*	ESK-6VA REV 9
						93P1-C2	N	Y	CA	*	ESK-6VA REV 9
93LS-5CX-1ED GC17	AGASTAT RELAY CO (AMERACE)	EGP	RLY	N	93JB-ECPC	93P1-C1	N	Y	CA	*	ESK-6VA REV 9
						93P1-C2	N	Y	CA	*	ESK-6VA REV 9
93LS-5D	GEMS INC	LS-800	INST	N	NA	93P1-D1	N	Y	CA	*	ESK-6VA REV 9
						93P1-D2	N	Y	CA	*	ESK-6VA REV 9
93LS-5DX-1ED GD17	AGASTAT RELAY CO (AMERACE)	EGP	RLY	N	93JB-ECPD	93P1-D1	N	Y	CA	*	ESK-6VA REV 9
						93P1-D2	N	Y	CA	*	ESK-6VA REV 9
93LS-6A	GEMS INC	LS-800	INST	N	NA	93P1-A1	N	Y	CA	*	ESK-6VA REV 9
						93P1-A2	N	Y	CA	*	ESK-6VA REV 9
93LS-6B	GEMS INC	LS-800	INST	N	NA	93P1-B1	N	Y	CA	*	ESK-6VA REV 9
						93P1-B2	N	Y	CA	*	ESK-6VA REV 9
93LS-6C	GEMS INC	LS-800	INST	N	NA	93P1-C1	N	Y	CA	*	ESK-6VA REV 9
						93P1-C2	N	Y	CA	*	ESK-6VA REV 9

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
93LS-6D	GEMS INC	LS-800	INST	N	NA	93P1-D1	N	Y	CA	*	ESK-6VA REV 9
						93P1-D2	N	Y	CA	*	ESK-6VA REV 9
93LS-6X-1EDG A17*			RLY	N		93P1-A1	N	Y	CA	*	ESK-6VA REV 9
						93P1-A2	N	Y	CA	*	ESK-6VA REV 9
93LS-6X-1EDG B17*			RLY	N		93P1-B1	N	Y	CA	*	ESK-6VA REV 9
						93P1-B2	N	Y	CA	*	ESK-6VA REV 9
93LS-6X-1EDG C17*			RLY	N		93P1-C1	N	Y	CA	*	ESK-6VA REV 9
						93P1-C2	N	Y	CA	*	ESK-6VA REV 9
93LS-6X-1EDG D17*			RLY	N		93P1-D1	N	Y	CA	*	ESK-6VA REV 9
						93P1-D2	N	Y	CA	*	ESK-6VA REV 9
93LS-7A	GEMS INC	LS-800	INST	N	NA	93P1-A1	N	Y	CA	*	ESK-6VA REV 9
						93P1-A2	N	Y	CA	*	ESK-6VA REV 9
93LS-7B	GEMS INC	LS-800	INST	N	NA	93P1-B1	N	Y	CA	*	ESK-6VA REV 9
						93P1-B2	N	Y	CA	*	ESK-6VA REV 9
93LS-7C	GEMS INC	LS-800	INST	N	NA	93P1-C1	N	Y	CA	*	ESK-6VA REV 9
						93P1-C2	N	Y	CA	*	ESK-6VA REV 9
93LS-7D	GEMS INC	LS-800	INST	N	NA	93P1-D1	N	Y	CA	*	ESK-6VA REV 9
						93P1-D2	N	Y	CA	*	ESK-6VA REV 9
93LS-7X-1EDG A17*			RLY	N		93P1-A1	N	Y	CA	*	ESK-6VA REV 9
						93P1-A2	N	Y	CA	*	ESK-6VA REV 9
93LS-7X-1EDG B17*			RLY	N		93P1-B1	N	Y	CA	*	ESK-6VA REV 9
						93P1-B2	N	Y	CA	*	ESK-6VA REV 9
93LS-7X-1EDG C17*			RLY	N		93P1-C1	N	Y	CA	*	ESK-6VA REV 9
						93P1-C2	N	Y	CA	*	ESK-6VA REV 9
93LS-7X-1EDG D17*			RLY	N		93P1-D1	N	Y	CA	*	ESK-6VA REV 9
						93P1-D2	N	Y	CA	*	ESK-6VA REV 9
93OST-1A	ALLEN-BRADLE	AS02-1	INST	N	NA	93EDG-A	N	Y	NV	*	ESK-11BC REV 16

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
	Y CO										
93OST-1B	ALLEN-BRADLE Y CO	AS02-1	INST	N	NA	93EDG-B	N	Y	NV	*	ESK-11BM REV 18
93OST-1C	ALLEN-BRADLE Y CO	AS02-1	INST	N	NA	93EDG-C	N	Y	NV	*	ESK-11BH REV 16
93OST-1D	ALLEN-BRADLE Y CO	AS02-1	INST	N	NA	93EDG-D	N	Y	NV	*	ESK-11BS REV 19
93PB-1EDGA11	CUTLER-HAMME R INC (EATON CORP)	1025OT101-1M36	CS	N	93EGP-A	93EDG-A	N	Y	NV	*	ESK-8HE REV 11
93PB-1EDGB11	CUTLER-HAMME R INC (EATON CORP)	1025OT101-1M36	CS	N	93EGP-B	93EDG-B	N	Y	NV	*	ESK-8HG REV 6
93PB-1EDGC11	CUTLER-HAMME R INC (EATON CORP)	1025OT101-1M36	CS	N	93EGP-C	93EDG-C	N	Y	NV	*	ESK-8HF REV 11
93PB-1EDGD11	CUTLER-HAMME R INC (EATON CORP)	1025OT101-1M36	CS	N	93EGP-D	93EDG-D	N	Y	NV	*	ESK-8HG REV 6
93PS-13A	SQUARE D CO	9012	INST	N	NA	93EDG-A	N	Y	NV	*	ESK-11BB REV 12
93PS-13B	SQUARE D CO	9012	INST	N	NA	93EDG-B	N	Y	NV	*	ESK-11BL REV 13
93PS-13C	SQUARE D CO	9012	INST	N	NA	93EDG-C	N	Y	NV	*	ESK-11BG REV 12
93PS-13D	SQUARE D CO	9012	INST	N	NA	93EDG-D	N	Y	NV	*	ESK-11BR REV 13
93PS-14A	SQUARE D CO	9012	INST	N	NA	93EDG-A	N	Y	NV	*	ESK-11BB REV 12
93PS-14B	SQUARE D CO	9012	INST	N	NA	93EDG-B	N	Y	NV	*	ESK-11BL REV 13
93PS-14C	SQUARE D CO	9012	INST	N	NA	93EDG-C	N	Y	NV	*	ESK-11BG REV 12
93PS-14D	SQUARE D CO	9012	INST	N	NA	93EDG-D	N	Y	NV	*	ESK-11BR REV 13
93PS-3A	SQUARE D CO	9012	INST	N	NA	93EDG-A	N	Y	NV	*	ESK-11BC REV 16
93PS-3B	SQUARE D CO	9012	INST	N	NA	93EDG-B	N	Y	NV	*	ESK-11BM REV 18
93PS-3C	SQUARE D CO	9012	INST	N	NA	93EDG-C	N	Y	NV	*	ESK-11BH REV 16

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
93PS-3D	SQUARE D CO	9012	INST	N	NA	93EDG-D	N	Y	NV	*	ESK-11BS REV 19
93SDR-1EDGA12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	ESK-11BC REV 16, ESK-5BB REV 21
93SDR-1EDGB12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	ESK-11BM REV 18, ESK-5BK REV 23
93SDR-1EDGC12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	ESK-11BH REV 16, ESK-5BC REV 22
93SDR-1EDGD12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	ESK-11BS REV 19, ESK-5BL REV 23
93SW-NORM/DRP-1	CUTLER-HAMMER INC (EATON CORP)	7694K4	CS	N	09-8	93EDG-A	N	Y	NV	*	ESK-8HF REV 11
93SW-NORM/DRP-1A	CUTLER-HAMMER INC (EATON CORP)	*	CS	N	93EGP-A	93EDG-A	N	Y	NV	*	ESK-8HF REV 11
93SW-NORM/DRP-2	CUTLER-HAMMER INC (EATON CORP)	7694K4	CS	N	09-8	93EDG-B	N	Y	NV	*	ESK-8HG REV 6
93SW-NORM/DRP-2A	CUTLER-HAMMER INC (EATON CORP)	*	CS	N	93EGP-B	93EDG-B	N	Y	NV	*	ESK-8HG REV 6
93SW-NORM/DRP-3	CUTLER-HAMMER INC (EATON CORP)	7694K4	CS	N	09-8	93EDG-C	N	Y	NV	*	ESK-8HF REV 11
93SW-NORM/DRP-3A	CUTLER-HAMMER INC (EATON CORP)	*	CS	N	93EGP-C	93EDG-C	N	Y	NV	*	ESK-8HF REV 11
93SW-NORM/DRP-4	CUTLER-HAMMER INC (EATON CORP)	7694K4	CS	N	09-8	93EDG-D	N	Y	NV	*	ESK-8HG REV 6
93SW-NORM/DRP-4A	CUTLER-HAMMER INC (EATON CORP)	*	CS	N	93EGP-D	93EDG-D	N	Y	NV	*	ESK-8HG REV 6
93TD1-1EDGA12	AMERACE CORP (AGASTAT)	E7022PK	RLY	N	93ECP-A	93EDG-A	Y	N	CR	Y	ESK-11BC REV 16

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
93TD1-1EDGB12	AMERACE CORP (AGASTAT)	E7022PK	RLY	N	93ECP-B	93EDG-B	Y	N	CR	Y	ESK-11BM REV 18
93TD1-1EDGC12	AMERACE CORP (AGASTAT)	E7022PK	RLY	N	93ECP-C	93EDG-C	Y	N	CR	Y	ESK-11BH REV 16
93TD1-1EDGD12	AMERACE CORP (AGASTAT)	E7022PK	RLY	N	93ECP-D	93EDG-D	Y	N	CR	Y	ESK-11BS REV 19
93TD10-1EDGA12	AMERACE CORP (AGASTAT)	E7012PD	RLY	N	93ECP-A	93EDG-A	Y	Y	GERS	N	ESK-11BC REV 16
93TD10-1EDGB12	AMERACE CORP (AGASTAT)	E7012PD	RLY	N	93ECP-B	93EDG-B	Y	Y	GERS	N	ESK-11BM REV 18
93TD10-1EDGC12	AMERACE CORP (AGASTAT)	E7012PD	RLY	N	93ECP-C	93EDG-C	Y	Y	GERS	N	ESK-11BH REV 16
93TD10-1EDGD12	AMERACE CORP (AGASTAT)	E7012PD	RLY	N	93ECP-D	93EDG-D	Y	Y	GERS	N	ESK-11BS REV 19
93TD5-1EDGA12	AMERACE CORP (AGASTAT)	E7014PC	RLY	N	93ECP-A	93EDG-A	Y	Y	GERS	N	ESK-11BB REV 12, ESK-11BC REV 16
93TD5-1EDGB12	AMERACE CORP (AGASTAT)	E7014PC	RLY	N	93ECP-B	93EDG-B	Y	Y	GERS	N	ESK-11BL REV 13, ESK-11BM REV 18
93TD5-1EDGC12	AMERACE CORP (AGASTAT)	E7014PC	RLY	N	93ECP-C	93EDG-C	Y	Y	GERS	N	ESK-11BG REV 12, ESK-11BH REV 16
93TD5-1EDGD12	AMERACE CORP (AGASTAT)	E7014PC	RLY	N	93ECP-D	93EDG-D	Y	Y	GERS	N	ESK-11BR REV 13, ESK-11BS REV 19
93TD6-1EDGA12	AMERACE CORP (AGASTAT)	E7012PD	RLY	N	93ECP-A	93EDG-A	Y	Y	GERS	N	ESK-11BA REV 18, ESK-11BC REV 16
93TD6-1EDGB12	AMERACE CORP (AGASTAT)	E7012PD	RLY	N	93ECP-B	93EDG-B	Y	Y	GERS	N	ESK-11BK REV 20, ESK-11BM REV 18
93TD6-1EDGC12	AMERACE CORP (AGASTAT)	E7012PD	RLY	N	93ECP-C	93EDG-C	Y	Y	GERS	N	ESK-11BF REV 17, ESK-11BH REV 16
93TD6-1EDGD12	AMERACE CORP (AGASTAT)	E7012PD	RLY	N	93ECP-D	93EDG-D	Y	Y	GERS	N	ESK-11BQ REV 21, ESK-11BS REV 18
93TD7-1EDGA12	AMERACE CORP (AGASTAT)	E7012PD	RLY	N	93ECP-A	93EDG-A	N	Y	CA	*	ESK-11BA REV 18

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
93TD7-1EDGB1 2	AMERACE CORP (AGASTAT)	E7012PD	RLY	N	93ECP-B	93EDG-B	N	Y	CA	*	ESK-11BK REV 20
93TD7-1EDGC1 2	AMERACE CORP (AGASTAT)	E7012PD	RLY	N	93ECP-C	93EDG-C	N	Y	CA	*	ESK-11BF REV 17
93TD7-1EDGD1 2	AMERACE CORP (AGASTAT)	E7012PD	RLY	N	93ECP-D	93EDG-D	N	Y	CA	*	ESK-11BQ REV 21
93TD8M-1EDGA 13	AMERACE CORP (AGASTAT)	E7014PC	RLY	N	93FPAC	93EDG-A	Y	Y	GERS	N	ESK-11BE REV 5, ESK-5BD REV 14
						93EDG-C	Y	Y	GERS	N	ESK-11BE REV 5, ESK-5BD REV 14
93TD8M-1EDGB 13	AMERACE CORP (AGASTAT)	E7014PC	RLY	N	93FPBD	93EDG-B	Y	Y	GERS	N	ESK-11BP REV 5, ESK-5BM REV 17
						93EDG-D	Y	Y	GERS	N	ESK-11BP REV 5, ESK-5BM REV 17
93TD8X-1EDGA 13	SQUARE D CO	KPD-13	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	ESK-11BE REV 5, ESK-5BD REV 14
						93EDG-C	Y	*	CR	Y	ESK-11BE REV 5, ESK-5BD REV 14
93TD8X-1EDGB 13	SQUARE D CO	KPD-13	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	ESK-11BP REV 5, ESK-5BM REV 17
						93EDG-D	Y	*	CR	Y	ESK-11BP REV 5, ESK-5BM REV 17
93TD9M-1EDGA 13	AMERACE CORP (AGASTAT)	E7014PC	RLY	N	93FPAC	93EDG-A	Y	Y	GERS	N	ESK-11BE REV 5
						93EDG-C	Y	Y	GERS	N	ESK-11BE REV 5
93TD9M-1EDGB 13	AMERACE CORP (AGASTAT)	E7014PC	RLY	N	93FPBD	93EDG-B	Y	Y	GERS	N	ESK-11BP REV 5
						93EDG-D	Y	Y	GERS	N	ESK-11BP REV 5
93TD9X-1EDGA 13	GENERAL ELECTRIC	CR2811	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	ESK-11BE REV 5, ESK-11BA REV 18, ESK-11BF REV 17, ESK-5BD REV 14
						93EDG-C	Y	*	CR	Y	ESK-11BE REV 5, ESK-11BA REV 18, ESK-11BF REV 17, ESK-5BD REV 14
93TD9X-1EDGB 13	GENERAL ELECTRIC	CR2811	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	ESK-11BP REV 5, ESK-11BK REV 20,

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
						93EDG-D	Y	*	CR	Y	ESK-11BQ REV 21, ESK-5BM REV 17 ESK-11BP REV 5, ESK-11BK REV 20, ESK-11BQ REV 21, ESK-5BM REV 17
93TS-3A	SQUARE D CO	9025	INST	N	NA	93EDG-A	N	Y	NV	*	ESK-11BC REV 16
93TS-3B	SQUARE D CO	9025	INST	N	NA	93EDG-B	N	Y	NV	*	ESK-11BM REV 18
93TS-3C	SQUARE D CO	9025	INST	N	NA	93EDG-C	N	Y	NV	*	ESK-11BH REV 16
93TS-3D	SQUARE D CO	9025	INST	N	NA	93EDG-D	N	Y	NV	*	ESK-11BS REV 19
93VLR-1EDGA11	SQUARE D CO	KPD-13	RLY	N	93EGP-A	93EDG-A	Y	*	CR	Y	ESK-8HF REV 11
93VLR-1EDGB11	SQUARE D CO	KPD-13	RLY	N	93EGP-B	93EDG-B	Y	*	CR	Y	ESK-8HE REV 11
93VLR-1EDGC11	SQUARE D CO	KPD-13	RLY	N	93EGP-C	93EDG-C	Y	*	CR	Y	ESK-8HE REV 11
93VLR-1EDGD11	SQUARE D CO	KPD-13	RLY	N	93EGP-D	93EDG-D	Y	*	CR	Y	ESK-8HE REV 11
93VR-2A	BASLER ELEC CO	SBHV	RLY	N	93EGP-A	93EDG-A	Y	*	CR	Y	ESK-5BB REV 21, 1.12-41 REV C, ESK-8HE REV 11
93VR-2B	BASLER ELEC CO	SBHV	RLY	N	93EGP-B	93EDG-B	Y	*	CR	Y	ESK-5BK REV 23, 1.12-41 REV C, ESK-8HE REV 11
93VR-2C	BASLER ELEC CO	SBHV	RLY	N	93EGP-C	93EDG-C	Y	*	CR	Y	ESK-5BC REV 22, 1.12-41 REV C, ESK-8HE REV 11
93VR-2D	BASLER ELEC CO	SBHV	RLY	N	93EGP-D	93EDG-D	Y	*	CR	Y	ESK-5BL REV 23, 1.12-41 REV C, ESK-8HE REV 11
93VRR-1EDGA11	SQUARE D CO	KPD-13	RLY	N	93EGP-A	93EDG-A	Y	*	CR	Y	ESK-8HF REV 11
93VRR-1EDGB11	SQUARE D CO	KPD-13	RLY	N	93EGP-B	93EDG-B	Y	*	CR	Y	ESK-8HE REV 11

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Reference drwg(s)
93VRR-1EDGC1 1	SQUARE D CO	KPD-13	RLY	N	93EGP-C	93EDG-C	Y	*	CR	Y	ESK-8HE REV 11
93VRR-1EDGD1 1	SQUARE D CO	KPD-13	RLY	N	93EGP-D	93EDG-D	Y	*	CR	Y	ESK-8HE REV 11
93VSR-1EDGA1 2	SQUARE D CO	KPD-13	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	ESK-11BA REV 18, ESK-11BE REV 5
93VSR-1EDGB1 2	SQUARE D CO	KPD-13	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	ESK-11BK REV 20, ESK-11BP REV 5
93VSR-1EDGC1 2	SQUARE D CO	KPD-13	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	ESK-11BF REV 17, ESK-11BE REV 5
93VSR-1EDGD1 2	SQUARE D CO	KPD-13	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	ESK-11BQ REV 21, ESK-11BP REV 5

1734 records listed.

New York Power Authority
James A. Fitzpatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Condensed List of Essential Relays

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... for equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
10A-K101A	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-32	02SOV-71A1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 17ms OPERATING TIME. ANSI SHAPE.
						02SOV-71B1	Y	Y	GERS	N	
						02SOV-71C1	Y	Y	GERS	N	
						02SOV-71D1	Y	Y	GERS	N	
						02SOV-71E1	Y	Y	GERS	N	
						02SOV-71G1	Y	Y	GERS	N	
						02SOV-71H1	Y	Y	GERS	N	
10A-K102A	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-32	02SOV-71A1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 17ms OPERATING TIME. ANSI SHAPE.
						02SOV-71B1	Y	Y	GERS	N	
						02SOV-71C1	Y	Y	GERS	N	
						02SOV-71D1	Y	Y	GERS	N	
						02SOV-71E1	Y	Y	GERS	N	
						02SOV-71G1	Y	Y	GERS	N	
						02SOV-71H1	Y	Y	GERS	N	
10A-K108A	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-32	93EDG-A	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 17ms OPERATING TIME. ANSI SHAPE.
						93EDG-C	Y	Y	GERS	N	
10A-K109A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-32	10MOV-16A	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUMES 80ms ADJUSTMENT. ANSI SHAPE.
						10MOV-16B	Y	Y	GERS	N	
10A-K10A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-32	93EDG-A	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUMES 80ms ADJUSTMENT. ANSI SHAPE.
						93EDG-C	Y	Y	GERS	N	
10A-K110	GENERAL	12HFA151A2F	RLY	N	09-32	10MOV-16A	Y	Y	GERS	N	MOST CONSERVATIVE

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
	ELECTRIC										GERS VALUE UTILIZED FOR CAPACITY. ASSUMES 80ms ADJUSTMENT. ANSI SHAPE.
						10MOV-16B	Y	Y	GERS	N	
10A-K115A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-32	93EDG-A	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUMES 80ms ADJUSTMENT. ANSI SHAPE.
						93EDG-C	Y	Y	GERS	N	
10A-K5A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-32	93EDG-A	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUMES 80ms ADJUSTMENT. ANSI SHAPE.
						93EDG-C	Y	Y	GERS	N	
10A-K6A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-32	93EDG-A	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUMES 80ms ADJUSTMENT. ANSI SHAPE.
						93EDG-C	Y	Y	GERS	N	
23A-K46	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-32	23MOV-14	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 17ms OPERATING TIME. ANSI SHAPE.
						23MOV-15	N	Y	CA	*	
						23MOV-16	Y	Y	GERS	N	
						23MOV-17	N	Y	NV	*	
						23MOV-19	N	Y	CA	*	
						23MOV-20	N	Y	CA	*	
						23MOV-21	N	Y	CA	*	
						23MOV-24	N	Y	CA	*	
23A-K47	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-32	23MOV-14	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 17ms OPERATING TIME.

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
											ANSI SHAPE.
						23MOV-15	N	Y	CA	*	
						23MOV-16	Y	Y	GERS	N	
						23MOV-17	N	Y	CA	*	
						23MOV-19	N	Y	CA	*	
						23MOV-20	N	Y	CA	*	
						23MOV-21	N	Y	CA	*	
						23MOV-24	N	Y	CA	*	
02E-K16	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-33	02SOV-71A1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 17ms OPERATING TIME. ANSI SHAPE.
						02SOV-71B1	Y	Y	GERS	N	
						02SOV-71C1	Y	Y	GERS	N	
						02SOV-71D1	Y	Y	GERS	N	
						02SOV-71E1	Y	Y	GERS	N	
						02SOV-71G1	Y	Y	GERS	N	
						02SOV-71H1	Y	Y	GERS	N	
02E-K17	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-33	02SOV-71A1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 17ms OPERATING TIME. ANSI SHAPE.
						02SOV-71B1	Y	Y	GERS	N	
						02SOV-71C1	Y	Y	GERS	N	
						02SOV-71D1	Y	Y	GERS	N	
						02SOV-71E1	Y	Y	GERS	N	
						02SOV-71G1	Y	Y	GERS	N	
						02SOV-71H1	Y	Y	GERS	N	
02E-K18	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-33	02SOV-71A1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 17ms OPERATING TIME. ANSI SHAPE.
						02SOV-71B1	Y	Y	GERS	N	
						02SOV-71C1	Y	Y	GERS	N	
						02SOV-71D1	Y	Y	GERS	N	
						02SOV-71E1	Y	Y	GERS	N	
						02SOV-71G1	Y	Y	GERS	N	
						02SOV-71H1	Y	Y	GERS	N	
10A-K101B	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-33	02SOV-71A1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VLAUE UTILIZED FOR CAPACITY. ASSUME

Main Equipment Designation.	Manufacturer Designation.	Manufacturer Part\model Number	Relay type	Low ruggedness relay	Rack/Panel:	Component For equipment	Essential	Satisfactory	Reason code	Outlier	Remarks
											17ms OPERATING TIME. ANSI SHAPE.
						02SOV-71B1	Y	Y	GERS	N	
						02SOV-71C1	Y	Y	GERS	N	
						02SOV-71D1	Y	Y	GERS	N	
						02SOV-71E1	Y	Y	GERS	N	
						02SOV-71G1	Y	Y	GERS	N	
						02SOV-71H1	Y	Y	GERS	N	
10A-K102B	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-33	02SOV-71A1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 17ms OPERATING TIME. ANSI SHAPE.
						02SOV-71B1	Y	Y	GERS	N	
						02SOV-71C1	Y	Y	GERS	N	
						02SOV-71D1	Y	Y	GERS	N	
						02SOV-71E1	Y	Y	GERS	N	
						02SOV-71G1	Y	Y	GERS	N	
						02SOV-71H1	Y	Y	GERS	N	
10A-K108B	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-33	93EDG-B	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 17ms OPERATING TIME. ANSI SHAPE.
						93EDG-D	Y	Y	GERS	N	
10A-K109B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-33	10MOV-16A	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUMES 80ms ADJUSTMENT. ANSI SHAPE.
						10MOV-16B	Y	Y	GERS	N	
10A-K10B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-33	93EDG-B	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUMES 80ms ADJUSTMENT. ANSI SHAPE.
						93EDG-D	Y	Y	GERS	N	
10A-K11[illegible]B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-33	93EDG-B	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUMES 80ms

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer. Part\model. Number.	Relay. type.	Low. ruggedness. relay.	Rack/Panel:	Component. For equipment.	Essential.	Satisfactory	Reason. code.	Outlier	Remarks.
											ADJUSTMENT. ANSI SHAPE.
						93EDG-D	Y	Y	GERS	N	
10A-K5B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-33	93EDG-B	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUMES 80ms ADJUSTMENT. ANSI SHAPE.
						93EDG-D	Y	Y	GERS	N	
10A-K6B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-33	93EDG-B	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUMES 80ms ADJUSTMENT. ANSI SHAPE.
						93EDG-D	Y	Y	GERS	N	
23A-K13	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-39	23HOV-1	N	Y	CA	*	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 80ms ADJUSTMENT. ANSI SHAPE.
						23HOV-2	Y	Y	GERS	N	
						23MOV-25	N	Y	CA	*	
23A-K2	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-39	23MOV-14	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 17ms OPERATING TIME. ANSI SHAPE.
						23MOV-16	Y	Y	GERS	N	
						23MOV-17	N	Y	CA	*	
						23MOV-19	N	Y	CA	*	
						23MOV-21	N	Y	CA	*	
						23MOV-24	N	Y	CA	*	
23A-K26	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-39	23MOV-14	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 17ms OPERATING TIME. ANSI SHAPE.
						23MOV-15	N	Y	CA	*	
						23MOV-16	Y	Y	GERS	N	
						23MOV-17	N	Y	CA	*	
						23MOV-19	N	Y	CA	*	

Main Equipment Designation.	Manufacturer Designation.	Manufacturer Part\model Number	Relay type	Low ruggedness relay	Rack/Panel:	Component For equipment	Essential.	Satisfactory	Reason. code	Outlier	Remarks
						23MOV-20	N	Y	CA	*	
						23MOV-21	N	Y	CA	*	
						23MOV-24	N	Y	CA	*	
23A-K27	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-39	23MOV-14	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 17ms OPERATING TIME. ANSI SHAPE.
						23MOV-15	N	Y	CA	*	
						23MOV-16	Y	Y	GERS	N	
						23MOV-17	N	Y	CA	*	
						23MOV-19	N	Y	CA	*	
						23MOV-20	N	Y	CA	*	
						23MOV-21	N	Y	CA	*	
						23MOV-24	N	Y	CA	*	
23A-K4	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-39	23MOV-14	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 80ms ADJUSTMENT. ANSI SHAPE.
						23MOV-16	Y	Y	GERS	N	
						23MOV-17	N	Y	CA	*	
						23MOV-19	N	Y	CA	*	
						23MOV-21	N	Y	CA	*	
02E-K12A	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-45	02SOV-71A1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 17ms OPERATING TIME. ANSI SHAPE.
						02SOV-71B1	Y	Y	GERS	N	
						02SOV-71C1	Y	Y	GERS	N	
						02SOV-71D1	Y	Y	GERS	N	
						02SOV-71E1	Y	Y	GERS	N	
						02SOV-71G1	Y	Y	GERS	N	
						02SOV-71H1	Y	Y	GERS	N	
02E-K12B	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-45	02SOV-71A1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 17ms OPERATING TIME. ANSI SHAPE.
						02SOV-71B1	Y	Y	GERS	N	
						02SOV-71C1	Y	Y	GERS	N	
						02SOV-71D1	Y	Y	GERS	N	
						02SOV-71E1	Y	Y	GERS	N	

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
						02SOV-71G1	Y	Y	GERS	N	
						02SOV-71H1	Y	Y	GERS	N	
02E-K14A	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-45	02SOV-71A1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 17ms OPERATING TIME. ANSI SHAPE.
02E-K14B	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-45	02SOV-71B1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 17ms OPERATING TIME. ANSI SHAPE.
02E-K14C	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-45	02SOV-71C1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 17ms OPERATING TIME. ANSI SHAPE.
02E-K14D	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-45	02SOV-71D1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 17ms OPERATING TIME. ANSI SHAPE.
02E-K14E	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-45	02SOV-71E1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 17ms OPERATING TIME. ANSI SHAPE.
02E-K14G	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-45	02SOV-71G1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 17ms OPERATING TIME. ANSI SHAPE.
02E-K14H	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-45	02SOV-71H1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 17ms OPERATING TIME. ANSI SHAPE.
02E-K15A	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-45	02SOV-71A1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
											17ms OPERATING TIME. ANSI SHAPE.
						02SOV-71B1	Y	Y	GERS	N	
						02SOV-71C1	Y	Y	GERS	N	
						02SOV-71D1	Y	Y	GERS	N	
						02SOV-71E1	Y	Y	GERS	N	
						02SOV-71G1	Y	Y	GERS	N	
						02SOV-71H1	Y	Y	GERS	N	
02E-K15B	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-45	02SOV-71A1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FO CAPACITY. ASSUME 17ms OPERATING TIME. ANSI SHAPE.
						02SOV-71B1	Y	Y	GERS	N	
						02SOV-71C1	Y	Y	GERS	N	
						02SOV-71D1	Y	Y	GERS	N	
						02SOV-71E1	Y	Y	GERS	N	
						02SOV-71G1	Y	Y	GERS	N	
						02SOV-71H1	Y	Y	GERS	N	
02E-K19A	GENERAL ELECTRIC	12HMA124A2	RLY	N	09-45	02SOV-71A1	N	Y	NA	*	NO APPLICABLE GERS.
						02SOV-71B1	N	Y	NA	*	
						02SOV-71C1	N	Y	NA	*	
						02SOV-71D1	Y	*	CR	Y	
						02SOV-71E1	N	Y	NA	*	
						02SOV-71G1	N	Y	NA	*	
						02SOV-71H1	N	Y	NA	*	
02E-K19B	GENERAL ELECTRIC	12HMA124A2	RLY	N	09-45	02SOV-71A1	N	Y	NA	*	NO APPLICABLE GERS.
						02SOV-71B1	N	Y	NA	*	
						02SOV-71C1	N	Y	NA	*	
						02SOV-71D1	Y	*	CR	Y	
						02SOV-71E1	N	Y	NA	*	
						02SOV-71G1	N	Y	NA	*	
						02SOV-71H1	N	Y	NA	*	
02E-K20A	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-45	02SOV-71A1	N	Y	NA	*	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 17ms OPERATING TIME. ANSI SHAPE.
						02SOV-71B1	N	Y	NA	*	
						02SOV-71C1	N	Y	NA	*	
						02SOV-71D1	Y	Y	GERS	N	
						02SOV-71E1	N	Y	NA	*	

Main Equipment Designation	Manufacturer Designation	Manufacturer Part\model Number	Relay type	Low ruggedness relay	Rack/Panel	Component For equipment	Essential	Satisfactory	Reason code	Outlier	Remarks
						02SOV-71G1	N	Y	NA	*	
						02SOV-71H1	N	Y	NA	*	
02E-K20B	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-45	02SOV-71A1	N	Y	NA	*	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 17ms OPERATING TIME. ANSI SHAPE.
						02SOV-71B1	N	Y	NA	*	
						02SOV-71C1	N	Y	NA	*	
						02SOV-71D1	Y	Y	GERS	N	
						02SOV-71E1	N	Y	NA	*	
						02SOV-71G1	N	Y	NA	*	
						02SOV-71H1	N	Y	NA	*	
02E-K5A	AMERACE CORP (AGASTAT)	ETR14D3EC2004-0 02	RLY	N	09-45	02SOV-71A1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ANSI SHAPE.
						02SOV-71B1	Y	Y	GERS	N	
						02SOV-71C1	Y	Y	GERS	N	
						02SOV-71D1	Y	Y	GERS	N	
						02SOV-71E1	Y	Y	GERS	N	
						02SOV-71G1	Y	Y	GERS	N	
						02SOV-71H1	Y	Y	GERS	N	
02E-K5B	AMERACE CORP (AGASTAT)	ETR14D3EC2004-0 02	RLY	N	09-45	02SOV-71A1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ANSI SHAPE.
						02SOV-71B1	Y	Y	GERS	N	
						02SOV-71C1	Y	Y	GERS	N	
						02SOV-71D1	Y	Y	GERS	N	
						02SOV-71E1	Y	Y	GERS	N	
						02SOV-71G1	Y	Y	GERS	N	
						02SOV-71H1	Y	Y	GERS	N	
02E-K6A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-45	02SOV-71A1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASUMES 80ms ADJUSTMENT. ANSI SHAPE.
						02SOV-71B1	Y	Y	GERS	N	
						02SOV-71C1	Y	Y	GERS	N	
						02SOV-71E1	Y	Y	GERS	N	
						02SOV-71G1	Y	Y	GERS	N	
						02SOV-71H1	Y	Y	GERS	N	

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
02E-K6B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-45	02SOV-71A1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 80ms ADJUSTMENT. ANSI SHAPE.
						02SOV-71B1	Y	Y	GERS	N	
						02SOV-71C1	Y	Y	GERS	N	
						02SOV-71E1	Y	Y	GERS	N	
						02SOV-71G1	Y	Y	GERS	N	
						02SOV-71H1	Y	Y	GERS	N	
02E-K7A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-45	02SOV-71A1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUMES 80ms ADJUSTMENT. ANSI SHAPE.
						02SOV-71B1	Y	Y	GERS	N	
						02SOV-71C1	Y	Y	GERS	N	
						02SOV-71E1	Y	Y	GERS	N	
						02SOV-71G1	Y	Y	GERS	N	
						02SOV-71H1	Y	Y	GERS	N	
02E-K7B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-45	02SOV-71A1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUMES 80ms ADJUSTMENT. ANSI SHAPE.
						02SOV-71B1	Y	Y	GERS	N	
						02SOV-71C1	Y	Y	GERS	N	
						02SOV-71E1	Y	Y	GERS	N	
						02SOV-71G1	Y	Y	GERS	N	
						02SOV-71H1	Y	Y	GERS	N	
02E-K8A	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-45	02SOV-71A1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 17ms OPERATING TIME. ANSI SHAPE.
						02SOV-71B1	Y	Y	GERS	N	
						02SOV-71C1	Y	Y	GERS	N	
						02SOV-71D1	Y	Y	GERS	N	
						02SOV-71E1	Y	Y	GERS	N	
						02SOV-71G1	Y	Y	GERS	N	
						02SOV-71H1	Y	Y	GERS	N	
02E-K8B	GENERAL	12HGA11A52F	RLY	N	09-45	02SOV-71A1	Y	Y	GERS	N	MOST CONSERVATIVE

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
	ELECTRIC										GERS VALUE UTILIZED FOR CAPACITY. ASSUME 17ms OPERATING TIME. ANSI SHAPE.
						02SOV-71B1	Y	Y	GERS	N	
						02SOV-71C1	Y	Y	GERS	N	
						02SOV-71D1	Y	Y	GERS	N	
						02SOV-71E1	Y	Y	GERS	N	
						02SOV-71G1	Y	Y	GERS	N	
						02SOV-71H1	Y	Y	GERS	N	
14A-K11A	GENERAL ELECTRIC	12HFA15*A2F	RLY	N	09-46	93EDG-A	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 80ms ADJUSTMENT. ANSI SHAPE.
						93EDG-C	Y	Y	GERS	N	
14A-K23A	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-46	02SOV-71A1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 17ms OPERATING TIME. ANSI SHAPE.
						02SOV-71B1	Y	Y	GERS	N	
						02SOV-71C1	Y	Y	GERS	N	
						02SOV-71D1	Y	Y	GERS	N	
						02SOV-71E1	Y	Y	GERS	N	
						02SOV-71G1	Y	Y	GERS	N	
						02SOV-71H1	Y	Y	GERS	N	
14A-K24A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-46	93EDG-A	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUMES 80ms ADJUSTMENT. ANSI SHAPE.
						93EDG-C	Y	Y	GERS	N	
14A-K25A	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-46	02SOV-71A1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 17ms OPERATING TIME. ANSI SHAPE.
						02SOV-71B1	Y	Y	GERS	N	
						02SOV-71C1	Y	Y	GERS	N	
						02SOV-71D1	Y	Y	GERS	N	
						02SOV-71E1	Y	Y	GERS	N	
						02SOV-71G1	Y	Y	GERS	N	

New York Power Authority
James A. Fitzpatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Condensed List of Essential Relays

Main Equipment Designation.	Manufacturer Designation.	Manufacturer Part\model Number	Relay type	Low ruggedness relay	Rack/Panel	Component For equipment	Essential	Satisfactory	Reason code	Outlier	Remarks
						02SOV-71H1	Y	Y	GERS	N	
14A-K26A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-46	93EDG-A	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUMES 80ms ADJUSTMENT. ANSI SHAPE.
						93EDG-C	Y	Y	GERS	N	
14A-K5A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-46	23MOV-14	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 80ms ADJUSTMENT. ANSI SHAPE.
						23MOV-15	N	Y	CA	*	
						23MOV-16	Y	Y	GERS	N	
						23MOV-17	N	Y	CA	*	
						23MOV-19	N	Y	CA	*	
						23MOV-20	N	Y	CA	*	
						23MOV-21	N	Y	CA	*	
						23MOV-24	N	Y	CA	*	
						93EDG-A	Y	Y	GERS	N	
						93EDG-B	Y	Y	GERS	N	
						93EDG-C	Y	Y	GERS	N	
						93EDG-D	Y	Y	GERS	N	
14A-K6A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-46	23MOV-14	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 80ms ADJUSTMENT. ANSI SHAPE.
						23MOV-15	N	Y	CA	*	
						23MOV-16	Y	Y	GERS	N	
						23MOV-17	N	Y	CA	*	
						23MOV-19	N	Y	CA	*	
						23MOV-20	N	Y	CA	*	
						23MOV-21	N	Y	CA	*	
						23MOV-24	N	Y	CA	*	
						93EDG-A	Y	Y	GERS	N	
						93EDG-B	Y	Y	GERS	N	
						93EDG-C	Y	Y	GERS	N	
						93EDG-D	Y	Y	GERS	N	
14A-K7A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-46	93EDG-A	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 80ms ADJUSTMENT.

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer. Part\model. Number.	Relay. type.	Low. ruggedness. relay.	Rack/Panel:	Component. For equipment.	Essential.	Satisfactory	Reason. code.	Outlier	Remarks.
											ANSI SHAPE.
						93EDG-B	Y	Y	GERS	N	
						93EDG-C	*	Y	GERS	N	
						93EDG-D	Y	Y	GERS	N	
14A-K8A	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-46	93EDG-A	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 80ms ADJUSTMENT. ANSI SHAPE.
						93EDG-B	Y	Y	GERS	N	
						93EDG-C	Y	Y	GERS	N	
						93EDG-D	Y	Y	GERS	N	
14A-K11B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-47	93EDG-B	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 80ms ADJUSTMENT. ANSI SHAPE.
						93EDG-D	Y	Y	GERS	N	
14A-K23B	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-47	02SOV-71A1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 17ms OPERATING TIME. ANSI SHAPE.
						02SOV-71B1	Y	Y	GERS	N	
						02SOV-71C1	Y	Y	GERS	N	
						02SOV-71D1	Y	Y	GERS	N	
						02SOV-71E1	Y	Y	GERS	N	
						02SOV-71G1	Y	Y	GERS	N	
						02SOV-71H1	Y	Y	GERS	N	
14A-K24B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-47	93EDG-B	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUMES 80ms ADJUSTMENT. ANSI SHAPE.
						93EDG-D	Y	Y	GERS	N	
14A-K25B	GENERAL ELECTRIC	12HGA11A52F	RLY	N	09-47	02SOV-71A1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 17ms OPERATING TIME. ANSI SHAPE.
						02SOV-71B1	Y	Y	GERS	N	
						02SOV-71C1	Y	Y	GERS	N	

Main Equipment Designation	Manufacturer Designation	Manufacturer Part\model Number	Relay type	Low ruggedness relay	Rack/Panel	Component For equipment	Essential	Satisfactory	Reason code	Outlier	Remarks
						02SOV-71D1	Y	Y	GERS	N	
						02SOV-71E1	Y	Y	GERS	N	
						02SOV-71G1	Y	Y	GERS	N	
						02SOV-71H1	Y	Y	GERS	N	
14A-K26B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-47	93EDG-B	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 80ms ADJUSTMENT. ANSI SHAPE.
						93EDG-D	Y	Y	GERS	N	
14A-K5B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-47	23MOV-14	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 80ms ADJUSTMENT. ANSI SHAPE.
						23MOV-15	N	Y	CA	*	
						23MOV-16	Y	Y	GERS	N	
						23MOV-17	N	Y	CA	*	
						23MOV-19	N	Y	CA	*	
						23MOV-20	N	Y	CA	*	
						23MOV-21	N	Y	CA	*	
						23MOV-24	N	Y	CA	*	
						93EDG-A	Y	Y	GERS	N	
						93EDG-B	Y	Y	GERS	N	
						93EDG-C	Y	Y	GERS	N	
						93EDG-D	Y	Y	GERS	N	
14A-K6B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-47	23MOV-14	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 80ms ADJUSTMENT. ANSI SHAPE.
						23MOV-15	N	Y	NV	*	
						23MOV-16	Y	Y	GERS	N	
						23MOV-17	N	Y	CA	*	
						23MOV-19	N	Y	CA	*	
						23MOV-20	N	Y	CA	*	
						23MOV-21	N	Y	CA	*	
						23MOV-24	N	Y	CA	*	
						93EDG-A	Y	Y	GERS	N	
						93EDG-B	Y	Y	GERS	N	
						93EDG-C	Y	Y	GERS	N	
						93EDG-D	Y	Y	GERS	N	
14A-K7B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-47	93EDG-A	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
											FOR CAPACITY. ASSUME 80ms ADJUSTMENT. ANSI SHAPE.
						93EDG-B	Y	Y	GERS	N	
						93EDG-C	Y	Y	GERS	N	
						93EDG-D	Y	Y	GERS	N	
14A-K8B	GENERAL ELECTRIC	12HFA151A2F	RLY	N	09-47	93EDG-A	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 80ms ADJUSTMENT. ANSI SHAPE.
						93EDG-B	Y	Y	GERS	N	
						93EDG-C	Y	Y	GERS	N	
						93EDG-D	Y	Y	GERS	N	
02-3A-K101A	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-95	02SOV-71A1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ANSI SHAPE.
						02SOV-71B1	Y	Y	GERS	N	
						02SOV-71C1	Y	Y	GERS	N	
						02SOV-71D1	Y	Y	GERS	N	
						02SOV-71E1	Y	Y	GERS	N	
						02SOV-71G1	Y	Y	GERS	N	
						02SOV-71H1	Y	Y	GERS	N	
						93EDG-A	Y	Y	GERS	N	
						93EDG-B	Y	Y	GERS	N	
						93EDG-C	Y	Y	GERS	N	
						93EDG-D	Y	Y	GERS	N	
02-3A-K102A	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-95	23MOV-14	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ANSI SHAPE.
						23MOV-15	N	Y	CA	*	
						23MOV-16	Y	Y	GERS	N	
						23MOV-17	N	Y	CA	*	
						23MOV-19	N	Y	CA	*	
						23MOV-20	N	Y	CA	*	
						23MOV-21	N	Y	CA	*	
						23MOV-24	N	Y	CA	*	
02-3A-K104A	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-95	02SOV-71A1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ANSI SHAPE.
						02SOV-71B1	Y	Y	GERS	N	

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer. Part\model. Number.	Relay. type.	Low. ruggedness. relay.	Rack/Panel:	Component. For equipment.	Essential.	Satisfactory	Reason. code.	Outlier	Remarks.
						02SOV-71C1	Y	Y	GERS	N	
						02SOV-71D1	Y	Y	GERS	N	
						02SOV-71E1	Y	Y	GERS	N	
						02SOV-71G1	Y	Y	GERS	N	
						02SOV-71H1	Y	Y	GERS	N	
						93EDG-A	Y	Y	GERS	N	
						93EDG-B	Y	Y	GERS	N	
						93EDG-C	Y	Y	GERS	N	
						93EDG-D	Y	Y	GERS	N	
02-3A-K105A	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-95	23MOV-14	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ANSI SHAPE.
						23MOV-15	N	Y	CA	*	
						23MOV-16	Y	Y	GERS	N	
						23MOV-17	N	Y	CA	*	
						23MOV-19	N	Y	CA	*	
						23MOV-20	N	Y	CA	*	
						23MOV-21	N	Y	CA	*	
						23MOV-24	N	Y	CA	*	
02-3A-K108A	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-95	02SOV-71A1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ANSI SHAPE.
						02SOV-71B1	Y	Y	GERS	N	
						02SOV-71C1	Y	Y	GERS	N	
						02SOV-71D1	Y	Y	GERS	N	
						02SOV-71E1	Y	Y	GERS	N	
						02SOV-71G1	Y	Y	GERS	N	
						02SOV-71H1	Y	Y	GERS	N	
10A-K133A	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-95	23MOV-14	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ANSI SHAPE.
						23MOV-15	N	Y	CA	*	
						23MOV-16	Y	Y	GERS	N	
						23MOV-17	N	Y	CA	*	
						23MOV-19	N	Y	CA	*	
						23MOV-20	N	Y	CA	*	
						23MOV-21	N	Y	CA	*	
						23MOV-24	N	Y	CA	*	
						93EDG-A	Y	Y	GERS	N	
						93EDG-B	Y	Y	GERS	N	
						93EDG-C	Y	Y	GERS	N	
						93EDG-D	Y	Y	GERS	N	

New York Power Authority
James A. Fitzpatrick Nuclear Power Plant
Unresolved Safety Issue A-46
Condensed List of Essential Relays

Main Equipment Designation	Manufacturer Designation	Manufacturer Part\model Number	Relay type	Low ruggedness relay	Rack/Panel	Component For equipment	Essential	Satisfactory	Reason code	Outlier	Remarks
10A-K134A	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-95	23MOV-14	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ANSI SHAPE.
						23MOV-15	N	Y	CA	*	
						23MOV-16	Y	Y	GERS	N	
						23MOV-17	N	Y	CA	*	
						23MOV-19	N	Y	CA	*	
						23MOV-20	N	Y	CA	*	
						23MOV-21	N	Y	CA	*	
						23MOV-24	N	Y	CA	*	
						93EDG-A	Y	Y	GERS	N	
						93EDG-B	Y	Y	GERS	N	
						93EDG-C	Y	Y	GERS	N	
						93EDG-D	Y	Y	GERS	N	
02-3A-K101B	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-96	02SOV-71A1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ANSI SHAPE.
						02SOV-71B1	Y	Y	GERS	N	
						02SOV-71C1	Y	Y	GERS	N	
						02SOV-71D1	Y	Y	GERS	N	
						02SOV-71E1	Y	Y	GERS	N	
						02SOV-71G1	Y	Y	GERS	N	
						02SOV-71H1	Y	Y	GERS	N	
						93EDG-A	Y	Y	GERS	N	
						93EDG-B	Y	Y	GERS	N	
						93EDG-C	Y	Y	GERS	N	
						93EDG-D	Y	Y	GERS	N	
02-3A-K102B	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-96	23MOV-14	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ANSI SHAPE.
						23MOV-15	N	Y	CA	*	
						23MOV-16	Y	Y	GERS	N	
						23MOV-17	N	Y	CA	*	
						23MOV-19	N	Y	CA	*	
						23MOV-20	N	Y	CA	*	
						23MOV-21	N	Y	CA	*	
						23MOV-24	N	Y	CA	*	
02-3A-K104B	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-96	02SOV-71A1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ANSI SHAPE.
						02SOV-71B1	Y	Y	GERS	N	

Main.. ..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
						02SOV-71C1	Y	Y	GERS	N	
						02SOV-71D1	Y	Y	GERS	N	
						02SOV-71E1	Y	Y	GERS	N	
						02SOV-71G1	Y	Y	GERS	N	
						02SOV-71H1	Y	Y	GERS	N	
						93EDG-A	Y	Y	GERS	N	
						93EDG-B	Y	Y	GERS	N	
						93EDG-C	Y	Y	GERS	N	
						93EDG-D	Y	Y	GERS	N	
02-3A-K105B	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-96	23MOV-14	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ANSI SHAPE.
						23MOV-15	N	Y	CA	*	
						23MOV-16	Y	Y	GERS	N	
						23MOV-17	N	Y	NV	*	
						23MOV-19	N	Y	CA	*	
						23MOV-20	N	Y	CA	*	
						23MOV-21	N	Y	CA	*	
						23MOV-24	N	Y	CA	*	
02-3A-K108B	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-96	02SOV-71A1	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ANSI SHAPE.
						02SOV-71B1	Y	Y	GERS	N	
						02SOV-71C1	Y	Y	GERS	N	
						02SOV-71D1	Y	Y	GERS	N	
						02SOV-71E1	Y	Y	GERS	N	
						02SOV-71G1	Y	Y	GERS	N	
						02SOV-71H1	Y	Y	GERS	N	
10A-K133B	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-96	23MOV-14	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ANSI SHAPE.
						23MOV-15	N	Y	CA	*	
						23MOV-16	Y	Y	GERS	N	
						23MOV-17	N	Y	CA	*	
						23MOV-19	N	Y	CA	*	
						23MOV-20	N	Y	CA	*	
						23MOV-21	N	Y	CA	*	
						23MOV-24	N	Y	CA	*	
						93EDG-A	Y	Y	GERS	N	
						93EDG-B	Y	Y	GERS	N	
						93EDG-C	Y	Y	GERS	N	
						93EDG-D	Y	Y	GERS	N	

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
10A-K134B	AGASTAT RELAY CO (AMERACE)	EGPBC20004003	RLY	N	09-96	23MOV-14	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ANSI SHAPE.
						23MOV-15	N	Y	CA	*	
						23MOV-16	Y	Y	GERS	N	
						23MOV-17	N	Y	CA	*	
						23MOV-19	N	Y	CA	*	
						23MOV-20	N	Y	CA	*	
						23MOV-21	N	Y	CA	*	
						23MOV-24	N	Y	CA	*	
						93EDG-A	Y	Y	GERS	N	
						93EDG-B	Y	Y	GERS	N	
						93EDG-C	Y	Y	GERS	N	
						93EDG-D	Y	Y	GERS	N	
46-63B-1ESWA 04	GENERAL ELECTRIC	12HFA154E22H	RLY	N	09AR-5A	46P-2A	Y	Y	GERS	N	SEISMIC CAPACITY ASSIGNED FROM GENERAL ELECTRIC BULLETIN UTILIZING NON-OPERATING MODE, NORMALLY OPEN CONTACT.
46-63X-1ESWA 04	GENERAL ELECTRIC	CR2811	RLY	N	09AR-5A	46P-2A	Y	*	CR	Y	NO APPLICABLE GERS.
						46P-2B	Y	*	CR	Y	
46-63Y-1ESWA 04	GENERAL ELECTRIC	CR2811	RLY	N	09AR-5A	46P-2A	Y	*	CR	Y	NO APPLICABLE GERS.
						46P-2B	Y	*	CR	Y	
46-63B-1ESWB 04	GENERAL ELECTRIC	12HFA154E22H	RLY	N	09AR-5B	46P-2B	Y	Y	GERS	N	SEISMIC CAPACITY ASSIGNED FROM GENERAL ELECTRIC BULLETIN UTILIZING NON-OPERATING MODE, NORMALLY OPEN CONTACT.
46-63X-1ESWB 04	GENERAL ELECTRIC	CR2811	RLY	N	09AR-5B	46P-2A	Y	*	CR	Y	NO APPLICABLE GERS.
						46P-2B	Y	*	CR	Y	
46-63Y-1ESWB 04	GENERAL ELECTRIC	CR2811	RLY	N	09AR-5B	46P-2A	Y	*	CR	Y	NO APPLICABLE GERS.
						46P-2B	Y	*	CR	Y	

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outiier	Remarks.....
27-4-1CADA05	GENERAL ELECTRIC	CR2810	RLY	N	27CAD	27SOV-129A	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. MODEL NUMBER ASSUMED TO BE "CR2810A". REFERENCED SCHEMATIC SHOWS AC VOLTAGE AND NO LATCHING FUNCTION. GERS MODIFIED SHAPE.
27-4-1CADB05	GENERAL ELECTRIC	CR2810	RLY	N	27CAD	27SOV-129B	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. MODEL NUMBER ASSUMED TO BE "CR2810A". REFERENCED SCHEMATIC SHOWS AC VOLTAGE AND NO LATCHING FUNCTION. GERS MODIFIED SHAPE.
71BMCC-2-0E2 (MC)	GENERAL ELECTRIC	IC28001607	CONT	N	71BMCC-2	23MOV-60	Y	Y	GERS	N	
12-42X-1PCIB 09	GENERAL ELECTRIC	IC28001607	CONT	N	71BMCC-4	12MOV-18	Y	Y	GERS	N	RELAY MODEL NUMBER INDICATES DEVICE IS A CONTACTOR.
71BMCC-4-0B1 (MC)	GENERAL ELECTRIC	IC2800	CONT	N	71BMCC-4	23MOV-25	Y	Y	GERS	N	GERS SHAPE.
71BMCC-4-0B2 (MC)	GENERAL ELECTRIC	IC2800	CONT	N	71BMCC-4	12MOV-18	Y	Y	GERS	N	GERS SHAPE.
71BMCC-4-0D2 (MC)	GENERAL ELECTRIC	IC2800	CONT	N	71BMCC 4	10MOV-17	Y	Y	GERS	N	GERS SHAPE.
71BMCC-6-0A1 (MC)	GENERAL ELECTRIC	IC2820A200	CONT	N	71BMCC-6	23MOV-16	Y	Y	GERS	N	
71BMCC-6-0B2 (MC)	GENERAL ELECTRIC	IC2800A200	CONT	N	71BMCC-6	23MOV-20	Y	Y	GERS	N	
10-50GS-1RHR A01	GENERAL ELECTRIC	PJC11A	RLY	N	71H05	10P-3A	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. GERS MODIFIED SHAPE.

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
10-86-1RHRA01	GENERAL ELECTRIC	HEA61C	RLY	N	71H05	10P-3A	Y	Y	GERS	N	ANSI SHAPE.
10-86-1RHRA02	GENERAL ELECTRIC	HEA61C	RLY	N	71H05	10P-1A	Y	Y	GERS	N	ANSI SHAPE.
10-86-1RHRB01	GENERAL ELECTRIC	HEA61C	RLY	N	71H05	10P-3B	Y	Y	GERS	N	ANSI SHAPE.
10-86-1RHRC02	GENERAL ELECTRIC	HEA61C	RLY	N	71H05	10P-1C	Y	Y	GERS	N	ANSI SHAPE.
71-271AB-1HOEA04	GENERAL ELECTRIC	NGV13A	RLY	N	71H05	71H05	Y	Y	GERS	N	ANSI SHAPE.
71-272BC-1HOEA04	GENERAL ELECTRIC	NGV13A	RLY	N	71H05	71H05	Y	Y	GERS	N	ANSI SHAPE.
71-27T1-1HOEA03	GENERAL ELECTRIC	SAM17A	RLY	N	71H05	71H05	Y	*	CR	Y	NO APPLICABLE GERS. PER ESK-5BS, THIS RELAY HAS A TARGET UNIT, THEREFORE GENERAL ELECTRIC SEISMIC DATA IS NOT APPLICABLE (REFER TO BULLETIN GE2-6675 PAGE 5, DATED 5/20/77).
71-27T1X-1HOEA03	GENERAL ELECTRIC	HLA11B	RLY	N	71H05	71H05	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. GERS MODIFIED SHAPE.
71-27XA-1HOEA03	GENERAL ELECTRIC	HLA11B	RLY	N	71H05	71H05	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. GERS MODIFIED SHAPE.
71-27XC-1HOEA03	GENERAL ELECTRIC	HLA11B	RLY	N	71H05	71H05	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. GERS MODIFIED SHAPE.
71-50/51-A-1HOEA02	GENERAL ELECTRIC	IAC51B	RLY	N	71H05	71-10560	Y	Y	GERS	N	SEISMIC CAPACITY ASSIGNED FROM GENERAL ELECTRIC BULLETIN UTILIZING

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
											NON-OPERATING, "TOC" COLUMN.
71-50/51-A-1 RHRA01	GENERAL ELECTRIC	12IAC66K8A	RLY	N	71H05	10P-3A	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. TIME DIAL SETTING ASSUMED TO BE 1.0. ZPA CALCULATED USING ANSI SHAPE MULTIPLIER OF 0.4 X PSA.
71-50/51-A-1 RHRA02	GENERAL ELECTRIC	12IAC66K8A	RLY	N	71H05	10P-1A	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME TIME DIAL TO BE SET AT 1.0. ZPA CALCULATED USING ANSI SHAPE MULTIPLIER OF 0.4 X PSA.
71-50/51-A-1 RHRB01	GENERAL ELECTRIC	12IAC66K8A	RLY	N	71H05	10P-3B	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME TIME DIAL TO BE SET AT 1.0. ZPA CALCULATED USING ANSI SHAPE MULTIPLIER OF 0.4 X PSA.
71-50/51-A-1 RHRC02	GENERAL ELECTRIC	12IAC66K8A	RLY	N	71H05	10P-1C	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME TIME DIAL SETTING TO BE 1.0. ZPA CALCULATED USING ANSI SHAPE MULTIPLIER OF 0.4 X PSA.
71-50GS-1HOE A02	GENERAL ELECTRIC	12PJC11AV1A	RLY	N	71H05	71-10560	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. GERS MODIFIED SHAPE.

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
71-50GS-1RHR A02	GENERAL ELECTRIC	12PJC11AV1A	RLY	N	71H05	10P-1A	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. GERS MODIFIED SHAPE.
71-50GS-1RHR B01	GENERAL ELECTRIC	12PJC11AV1A	RLY	N	71H05	10P-3B	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. GERS MODIFIED SHAPE.
71-50GS-1RHR C02	GENERAL ELECTRIC	12PJC11AV1A	RLY	N	71H05	10P-1C	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. GERS MODIFIED SHAPE.
71-51-A-1HOE A01	GENERAL ELECTRIC	12IAC51A2A	RLY	N	71H05	71-10514	Y	Y	GERS	N	SEISMIC CAPACITY ASSIGNED FROM GENERAL ELECTRIC BULLETIN UTILIZING NON-OPERATING, "TOC" COLUMN.
71-51-A-1HOE A22	GENERAL ELECTRIC	IAC51A	RLY	N	71H05	71-10514	Y	Y	GERS	N	SEISMIC CAPACITY ASSIGNED FROM GENERAL ELECTRIC BULLETIN UTILIZING NON-OPERATING, "TOC" COLUMN.
71-51GS-1HOE A01	GENERAL ELECTRIC	12IAC51A3A	RLY	N	71H05	71-10514	Y	Y	GERS	N	SEISMIC CAPACITY ASSIGNED FROM GENERAL ELECTRIC BULLETIN UTILIZING NON-OPERATING, "TOC" COLUMN.
71-62-3-1HOE A03	AMERACE CORP (AGASTAT)	E7012PB	RLY	N	71H05	10P-3A	N	Y	CA	*	ANSI SHAPE.
						71H05	Y	Y	GERS	N	
71-62-4-1HOE A03	AMERACE CORP (AGASTAT)	E7012PC	RLY	N	71H05	10P-3B	N	Y	CA	*	ANSI SHAPE.
						71H05	Y	Y	GERS	N	
71-67-1HOEA2 0-A	GENERAL ELECTRIC	12CJC15E3A	RLY	N	71H05	71-10514	Y	Y	GERS	N	PER DRAWING ESK-5BA, THE DIRECTIONAL "D" AND INSTANTANEOUS OVERCURRENT "IOC"

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
											CONTACTS OF THIS DIRECTIONAL PHASE FAULT RELAY ARE WIRED IN SERIES. BOTH CONTACTS MUST CLOSE TO TRIP THE BREAKER. AS SUCH, THE HIGHER SEISMIC CAPACITY VALUE FOR THE NON-OPERATING MODE, NON-TRIP DIRECTION, IS ASSIGNED FROM THE POSITION/CONDITION COLUMN OF THE REFERENCED GENERAL ELECTRIC BULLETIN.
71-86-1HOEA01	GENERAL ELECTRIC	12HEA61A223	RLY	N	71H05	71-10514	Y	Y	GERS	N	ANSI SHAPE.
71-86-1HOEA02	GENERAL ELECTRIC	12HEA61A236	RLY	N	71H05	71-10560	Y	Y	GERS	N	ANSI SHAPE.
71-86A-1HOEA01	GENERAL ELECTRIC	12HEA61A223	RLY	N	71H05	71-10514	Y	Y	GERS	N	ANSI SHAPE.
71-86D-1HOEA01	GENERAL ELECTRIC	12HEA61A223	RLY	N	71H05	71-10514	Y	Y	GERS	N	ANSI SHAPE.
71-87-A-1HOEA01	GENERAL ELECTRIC	12IAC53B2A	RLY	N	71H05	71-10514	Y	Y	GERS	N	RELAY MODEL WAS "IAC53", ASSUMED TO BE "12IAC53B2A" AS SIMILARLY UTILIZED ON TRAIN B. MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ZPA CALCULATED USING ANSI SHAPE MULTIPLIER OF 0.4 X PSA.
71-94-1HOEA03	GENERAL FLECTRIC	HLA11B	RLY	N	71H05	71-10514	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. GERS MODIFIED SHAPE.
						71H05	Y	Y	GERS	N	

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
71-94LS-1HOE A03	GENERAL ELECTRIC	HLA11B	RLY	N	71H05	10P-1A	N	Y	CA	*	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. GERS MODIFIED SHAPE.
						10P-1C	N	Y	CA	*	
						10P-3A	N	Y	CA	*	
						10P-3B	N	Y	CA	*	
						71H05	Y	Y	GERS	N	
93-25/27-1ED GA03	GENERAL ELECTRIC	IJS52D	RLY	N	71H05	71H05	Y	*	CR	Y	NO APPLICABLE GERS.
93-25/27-1ED GC03	GENERAL ELECTRIC	IJS52D	RLY	N	71H05	71H05	Y	*	CR	Y	NO APPLICABLE GERS.
93-27/51-A-1 EDGA08	GENERAL ELECTRIC	IJCV51A	RLY	N	71H05	71-10502	Y	Y	GERS	N	ANSI SHAPE ASSUMED.
93-27/51-A-1 EDGC08	GENERAL ELECTRIC	IJCV51A	RLY	N	71H05	71-10512	Y	Y	GERS	N	ANSI SHAPE ASSUMED.
93-27A-1EDGA 03	GENERAL ELECTRIC	NGV23A	RLY	N	71H05	93EDG-A	Y	Y	GERS	N	SEISMIC CAPACITY APPLIES TO ALL CONTACT CONFIGURATIONS AND OPERATING MODES.
93-27C-1EDGC 03	GENERAL ELECTRIC	NGV23A	RLY	N	71H05	93EDG-C	Y	Y	GERS	N	SEISMIC CAPACITY APPLIES TO ALL CONTACT CONFIGURATIONS AND OPERATING MODES.
93-27R-1EDGA 03	GENERAL ELECTRIC	NGV23B	RLY	N	71H05	93EDG-A	Y	Y	GERS	N	SEISMIC CAPACITY APPLIES TO ALL CONTACT CONFIGURATIONS AND OPERATING MODES.
93-27R-1EDGC 05	GENERAL ELECTRIC	NGV23B	RLY	N	71H05	93EDG-C	Y	Y	GERS	N	SEISMIC CAPACITY APPLIES TO ALL CONTACT CONFIGURATIONS AND OPERATING MODES.
93-59G-1EDGA 06	GENERAL ELECTRIC	IAV51D	RLY	N	71H05	71-10502	Y	*	CR	Y	NO APPLICABLE GERS.

Main.....Equipment...Designation.	Manufacturer Designation.	Manufacturer...Part\model.....Number.....	Relay. type..	Low.....ruggedness. relay.....	Rack/Panel:	Component.....For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
93-59G-1EDGC 06	GENERAL ELECTRIC	IAV51D	RLY	N	71H05	71-10512	Y	*	CR	Y	NO APPLICABLE GERS.
93-59GX-1EDG A01	GENERAL ELECTRIC	HLA11B	RLY	N	71H05	71-10502	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. GERS MODIFIED SHAPE.
93-59GX-1EDG C01	GENERAL ELECTRIC	HLA11B	RLY	N	71H05	71-10512	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. GERS MODIFIED SHAPE.
93-62-1EDGA0 1	AMERACE CORP (AGASTAT)	E7012PB	RLY	N	71H05	71-10502	Y	Y	GERS	N	ANSI SHAPE.
93-62-1EDGA0 2	AMERACE CORP (AGASTAT)	E7012PB	RLY	N	71H05	71-10504	Y	Y	GERS	N	ANSI SHAPE.
93-62-1EDGA1 2	AMERACE CORP (AGASTAT)	E7012PC	RLY	N	71H05	93EDG-A	Y	Y	GERS	N	ANSI SHAPE.
93-62-1EDGC0 1	AMERACE CORP (AGASTAT)	E7012PB	RLY	N	71H05	71-10512	Y	Y	GERS	N	ANSI SHAPE.
93-62-1EDGC1 2	AMERACE CORP (AGASTAT)	E7012PC	RLY	N	71H05	93EDG-C	Y	Y	GERS	N	ANSI SHAPE.
93-62X-1EDGA 02	GENERAL ELECTRIC	HLA11B	RLY	N	71H05	71-10504	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. GERS MODIFIED SHAPE.
93-86-1EDGA0 1	GENERAL ELECTRIC	12HEA61B236	RLY	N	71H05	71-10502	Y	Y	GERS	N	ANSI SHAPE.
93-86-1EDGC0 1	GENERAL ELECTRIC	12HEA61B236	RLY	N	71H05	71-10512	Y	Y	GERS	N	ANSI SHAPE.
93-86X-1EDGA 01	GENERAL ELECTRIC	12HEA61B23X2	RLY	N	71H05	71-10502	Y	Y	GERS	N	ANSI SHAPE.
93-86X-1EDGC 01	GENERAL ELECTRIC	12HEA61B23X2	RLY	N	71H05	71-10512	Y	Y	GERS	N	ANSI SHAPE.
10-50GS-1RHR C01	GENERAL ELECTRIC	PJC11A	RLY	N	71H06	10P-3C	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. GERS

Main Equipment Designation.	Manufacturer Designation.	Manufacturer Part\model Number	Relay type	Low ruggedness relay	Rack/Panel:	Component For equipment	Essential	Satisfactory	Reason code	Outlier	Remarks
											MODIFIED SHAPE.
10-86-1RHRB02	GENERAL ELECTRIC	HEA61C	RLY	N	71H06	10P-1B	Y	Y	GERS	N	ANSI SHAPE.
10-86-1RHRC01	GENERAL ELECTRIC	HEA61C	RLY	N	71H06	10P-3C	Y	Y	GERS	N	ANSI SHAPE.
10-86-1RHRD01	GENERAL ELECTRIC	HEA61C	RLY	N	71H06	10P-3D	Y	Y	GERS	N	ANSI SHAPE.
10-86-1RHRD02	GENERAL ELECTRIC	HEA61C	RLY	N	71H06	10P-1D	Y	Y	GERS	N	ANSI SHAPE.
71-271AB-1HOEB04	GENERAL ELECTRIC	NGV13A	RLY	N	71H06	71H06	Y	Y	GERS	N	ANSI SHAPE.
71-272BC-1HOEB04	GENERAL ELECTRIC	NGV13A	RLY	N	71H06	71H06	Y	Y	GERS	N	ANSI SHAPE.
71-27T1-1HOEB03	GENERAL ELECTRIC	SAM17A	RLY	N	71H06	71H06	Y	*	CR	Y	NO APPLICABLE GERS. PER ESK-5BT, THIS RELAY HAS A TARGET UNIT, THEREFORE GENERAL ELECTRIC SEISMIC DATA IS NOT APPLICABLE (REFER TO BULLETIN GEZ-6675 PAGE 5, DATED 5/20/77).
71-27T1X-1HOEB03	GENERAL ELECTRIC	HLA11B	RLY	N	71H06	71H06	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. GERS MODIFIED SHAPE.
71-27XB-1HOEB03	GENERAL ELECTRIC	HLA11B	RLY	N	71H06	71H06	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. GERS MODIFIED SHAPE.
71-27XD-1HOEB03	GENERAL ELECTRIC	HLA11B	RLY	N	71H06	71H06	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. GERS MODIFIED SHAPE.
71-50/51-A-1HOEB02	GENERAL ELECTRIC	IAC51B	RLY	N	71H06	71-10660	Y	Y	GERS	N	SEISMIC CAPACITY ASSIGNED FROM

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model-.... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
											GENERAL ELECTRIC BULLETIN UTILIZING NON-OPERATING, "TOC" COLUMN.
71-50/51-A-1 RHRC01	GENERAL ELECTRIC	12IAC66K8A	RLY	N	71H06	10P-3C	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME TIME DIAL SETTING TO BE 1.0. ZPA CALCULATED USING ANSI SHAPE MULTIPLIER OF 0.4 X PSA.
71-50/51-A-1 RHRD01	GENERAL ELECTRIC	12IAC66K8A	RLY	N	71H06	10P-3D	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME TIME DIAL SETTING TO BE 1.0. ZPA CALCULATED USING ANSI SHAPE MULTIPLIER OF 0.4 X PSA.
71-50/51-A-1 RHRD02	GENERAL ELECTRIC	12IAC66K8A	RLY	N	71H06	10P-1D	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME TIME DIAL SETTING TO BE 1.0. ZPA CALCULATED USING ANSI SHAPE MULTIPLIER OF 0.4 X PSA.
71-50/51A-1R HRB02	GENERAL ELECTRIC	12IAC66K8A	RLY	N	71H06	10P-1B	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME TIME DIAL SETTING TO BE 1.0. ZPA CALCULATED USING ANSI SHAPE MULTIPLIER OF 0.4 X PSA.
71-50GS-1HOE B02	GENERAL ELECTRIC	12PJC11AV1A	RLY	N	71H06	71-10660	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. GERS

Main Equipment Designation.	Manufacturer Designation.	Manufacturer Part\model Number	Relay type	Low ruggedness relay	Rack/Panel: For equipment	Component	Essential	Satisfactory	Reason code	Outlier	Remarks
											MODIFIED SHAPE.
71-50GS-1RHR B02	GENERAL ELECTRIC	12PJC11AV1A	RLY	N	71H06	10P-1B	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. GERS MODIFIED SHAPE.
71-50GS-1RHR D01	GENERAL ELECTRIC	12PJC11AV1A	RLY	N	71H06	10P-3D	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. GERS MODIFIED SHAPE.
71-50GS-1RHR D02	GENERAL ELECTRIC	12PJC11AV1A	RLY	N	71H06	10P-1D	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. GERS MODIFIED SHAPE.
71-51-A-1HOE B01	GENERAL ELECTRIC	12IAC51A2A	RLY	N	71H06	71-10614	Y	Y	GERS	N	SEISMIC CAPACITY ASSIGNED FROM GENERAL ELECTRIC BULLETIN UTILIZING NON-OPERATING, "TOC" COLUMN.
71-51-A-1HOE B22	GENERAL ELECTRIC	IAC51A	RLY	N	71H06	71-10614	Y	Y	GERS	N	SEISMIC CAPACITY ASSIGNED FROM GENERAL ELECTRIC BULLETIN UTILIZING NON-OPERATING, "TOC" COLUMN.
71-51GS-1HOE B01	GENERAL ELECTRIC	12IAC53A3A	RLY	N	71H06	71-10614	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. GERS MODIFIED SHAPE.
71-62-3-1HOE B03	AMERACE CORP (AGASTAT)	E7012PB	RLY	N	71H06	10P-3D	N	Y	CA	*	ANSI SHAPE.
						71H06	Y	Y	GERS	N	
71-62-4-1HOE B03	AMERACE CORP (AGASTAT)	E7012PC	RLY	N	71H06	10P-3C	N	Y	CA	*	ANSI SHAPE.
						71H06	Y	Y	GERS	N	
71-67-1HOEB2 0-A	GENERAL ELECTRIC	12CJC15E3A	RLY	N	71H06	71-10614	Y	Y	GERS	N	PER DRAWING ESK-5BJ, THE DIRECTIONAL "D" AND INSTANTANEOUS OVERCURRENT "IOC"

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
											CONTACTS OF THIS DIRECTIONAL PHASE FAULT RELAY ARE WIRED IN SERIES. BOTH CONTACTS MUST CLOSE TO TRIP THE BREAKER. AS SUCH, THE HIGHER SEISMIC CAPACITY VALUE FOR THE NON-OPERATING MODE, NON-TRIP DIRECTION, IS ASSIGNED FROM THE POSITION/CONDITION COLUMN OF THE GENERAL ELECTRIC BULLETIN.
71-86-1HOEB01	GENERAL ELECTRIC	12HEA61A223	RLY	N	71H06	71-10614	Y	Y	GERS	N	ANSI SHAPE.
71-86-1HOEB02	GENERAL ELECTRIC	12HEA61A223	RLY	N	71H06	71-10660	Y	Y	GERS	N	ANSI SHAPE.
71-86A-1HOEB01	GENERAL ELECTRIC	12HEA61A223	RLY	N	71H06	71-10614	Y	Y	GERS	N	ANSI SHAPE.
71-86D-1HOEB01	GENERAL ELECTRIC	12HEA61A223	RLY	N	71H06	71-10614	Y	Y	GERS	N	ANSI SHAPE.
71-87-A-1HOEB01	GENERAL ELECTRIC	12IAC53B2A	RLY	N	71H06	71-10614	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ZPA CALCULATED USING ANSI SHAPE MULTIPLIER OF 0.4 X PSA.
71-94-1HOEB03	GENERAL ELECTRIC	HLA11B	RLY	N	71H06	71-10614	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. GERS MODIFIED SHAPE.
						71H06	Y	Y	GERS	N	
71-94LS-1HOEB03	GENERAL ELECTRIC	HLA11B	RLY	N	71H06	10P-1B	N	Y	CA	*	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. GERS MODIFIED SHAPE.

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
						10P-1D	N	Y	CA	*	
						10P-3C	N	Y	CA	*	
						10P-3D	N	Y	CA	*	
						71H06	Y	Y	GERS	N	
93-25/27-1EDGB03	GENERAL ELECTRIC	IJS52D	RLY	N	71H06	71H06	Y	*	CR	Y	NO APPLICABLE GERS.
93-25/27-1EDGD03	GENERAL ELECTRIC	IJS52D	RLY	N	71H06	71H06	Y	*	CR	Y	NO APPLICABLE GERS.
93-27/51-A-1EDGB08	GENERAL ELECTRIC	IJCV51A	RLY	N	71H06	71-10602	Y	Y	GERS	N	ANSI SHAPE ASSUMED.
93-27/51-A-1EDGD08	GENERAL ELECTRIC	IJCV51A	RLY	N	71H06	71-10612	Y	Y	GERS	N	ANSI SHAPE ASSUMED.
93-27B-1EDGB03	GENERAL ELECTRIC	NGV23B	RLY	N	71H06	93EDG-B	Y	Y	GERS	N	SEISMIC CAPACITY APPLIES TO ALL CONTACT CONFIGURATIONS AND OPERATING MODES.
93-27D-1EDGD03	GENERAL ELECTRIC	NGV23B	RLY	N	71H06	93EDG-D	Y	Y	GERS	N	SEISMIC CAPACITY APPLIES TO ALL CONTACT CONFIGURATIONS AND OPERATING MODES.
93-27R-1EDGB03	GENERAL ELECTRIC	NGV23B	RLY	N	71H06	93EDG-B	Y	Y	GERS	N	SEISMIC CAPACITY APPLIES TO ALL CONTACT CONFIGURATIONS AND OPERATING MODES.
93-27R-1EDGD03	GENERAL ELECTRIC	NGV23B	RLY	N	71H06	93EDG-D	Y	Y	GERS	N	SEISMIC CAPACITY APPLIES TO ALL CONTACT CONFIGURATIONS AND OPERATING MODES.
93-59G-1EDGB06	GENERAL ELECTRIC	IAV51D	RLY	N	71H06	71-10602	Y	*	CR	Y	NO APPLICABLE GERS.
93-59G-1EDGD06	GENERAL ELECTRIC	IAV51D	RLY	N	71H06	71-10612	Y	*	CR	Y	NO APPLICABLE GERS.
93-59GX-1EDG	GENERAL	HLA11B	RLY	N	71H06	71-10602	Y	Y	GERS	N	MOST CONSERVATIVE

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
B01	ELECTRIC										GERS VALUE UTILIZED FOR CAPACITY. GERS MODIFIED SHAPE.
93-59GX-1EDG D01	GENERAL ELECTRIC	HLA11B	RLY	N	71H06	71-10612	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. GERS MODIFIED SHAPE.
93-62-1EDGB0 1	AMERACE CORP (AGASTAT)	E7012PB	RLY	N	71H06	71-10602	Y	Y	GERS	N	ANSI SHAPE.
93-62-1EDGB0 2	AMERACE CORP (AGASTAT)	E7012PB	RLY	N	71H06	71-10604	Y	Y	GERS	N	ANSI SHAPE.
93-62-1EDGB1 2	AMERACE CORP (AGASTAT)	E7012PC	RLY	N	71H06	93EDG-B	Y	Y	GERS	N	ANSI SHAPE.
93-62-1EDGD0 1	AMERACE CORP (AGASTAT)	E7012PB	RLY	N	71H06	71-10612	Y	Y	GERS	N	ANSI SHAPE.
93-62X-1EDGB 02	GENERAL ELECTRIC	HLA11B	RLY	N	71H06	71-10604	Y	Y	GERS	N	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. RELAY MODEL WAS "HLA", ASSUMED TO BE "HLA11B" AS SIMILARLY UTILIZED ON TRAIN A. GERS MODIFIED SHAPE.
93-86-1EDGB0 1	GENERAL ELECTRIC	12HEA61B236	RLY	N	71H06	71-10602	Y	Y	GERS	N	ANSI SHAPE.
93-86-1EDGD0 1	GENERAL ELECTRIC	12HEA61B236	RLY	N	71H06	71-10612	Y	Y	GERS	N	ANSI SHAPE.
93-86X-1EDGB 01	GENERAL ELECTRIC	12HEA61B23X2	RLY	N	71H06	71-10602	Y	Y	GERS	N	ANSI SHAPE.
93-86X-1EDGD 01	GENERAL ELECTRIC	12HEA61B23X2	RLY	N	71H06	71-10612	Y	Y	GERS	N	ANSI SHAPE.
71MCC-152-0B 4(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-152	29MOV-74	Y	Y	GERS	N	GERS SHAPE.
71MCC-152-0F 1(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-152	10MOV-26A	Y	Y	GERS	N	GERS SHAPE.

Main Equipment Designation.	Manufacturer Designation.	Manufacturer Part\model Number	Relay type	Low ruggedness relay	Rack/Panel:	Component For equipment	Essential.	Satisfactory	Reason code	Outlier	Remarks
71MCC-152-0G 2(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-152	12MOV-15	Y	Y	GERS	N	GERS SHAPE.
71MCC-153-0B 3(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-153	10MOV-16A	Y	Y	GERS	N	GERS SHAPE.
71MCC-153-0B 4(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-153	10MOV-21A	Y	Y	GERS	N	GERS SHAPE.
71MCC-161-0A 2(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-161	10MOV-70B	Y	Y	GERS	N	GERS SHAPE.
71MCC-161-0C 3(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-161	10MOV-26B	Y	Y	GERS	N	GERS SHAPE.
71MCC-163-0D 3(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-163	23MOV-59	Y	Y	GERS	N	GERS SHAPE.
71MCC-163-0H 3(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-163	10MOV-16B	Y	Y	GERS	N	GERS SHAPE.
71MCC-163-0H 4(MC)	GENERAL ELECTRIC	CR109	CONT	N	71MCC-163	10MOV-21B	Y	Y	GERS	N	GERS SHAPE.
71MCC-254-0D 3(MC)	GENERAL ELECTRIC	CR106C0	CONT	N	71MCC-254	93P-2A	Y	Y	GERS	N	
71MCC-254-0D 4(MC)	GENERAL ELECTRIC	CR106C0	CONT	N	71MCC-254	93P-2C	Y	Y	GERS	N	
71MCC-254-0D 5(MC)	GENERAL ELECTRIC	CR106C0	CONT	N	71MCC-254	93P-3A	Y	Y	GERS	N	
71MCC-254-0D 6(MC)	GENERAL ELECTRIC	CR106C0	CONT	N	71MCC-254	93P-3C	Y	Y	GERS	N	
71MCC-264-0D 3(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-264	93P-2B	Y	Y	GERS	N	GERS SHAPE.
71MCC-264-0D 4(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-264	93P-2D	Y	Y	GERS	N	GERS SHAPE.
71MCC-264-0D 5(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-264	93P-3B	Y	Y	GERS	N	GERS SHAPE.
71MCC-264-0D 6(MC)	GENERAL ELECTRIC	CR106	CONT	N	71MCC-264	93P-3D	Y	Y	GERS	N	GERS SHAPE.

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer. Part\model. Number	Relay. type..	Low. ruggedness. relay.	Rack/Panel: Component. For equipment..		Essential.	Satisfactory	Reason. code...	Outlier	Remarks.
71-273AB-1HO EA04	BROWN BOVERI	ITE-27N	RLY	N	93AURP-01	71H05	Y	Y	GERS	N	ANSI SHAPE.
71-274BC-1HO EA04	BROWN BOVERI	ITE-27N	RLY	N	93AURP-01	71H05	Y	Y	GERS	N	ANSI SHAPE.
71-27T2X-1HO EA03	GENERAL ELECTRIC	12HFA151A2F	RLY	N	93AURP-01	71H05	Y	N	CR	Y	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 80ms ADJUSTMENT. ANSI SHAPE.
71-27T3-1HOE A03	AMERACE CORP (AGASTAT)	E7012PD	RLY	N	93AURP-01	71H05	Y	Y	GERS	N	ANSI SHAPE.
71-273AB-1HO EB04	BROWN BOVERI	ITE-27N	RLY	N	93AURP-02	71H06	Y	Y	GERS	N	ANSI SHAPE.
71-274BC-1HO EB04	BROWN BOVERI	ITE-27N	RLY	N	93AURP-02	71H06	Y	Y	GERS	N	ANSI SHAPE.
71-27T2X-1HO EB03	GENERAL ELECTRIC	12HFA151A2F	RLY	N	93AURP-02	71H06	Y	N	CR	Y	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 80ms ADJUSTMENT. ANSI SHAPE.
71-27T3-1HOE B03	AMERACE CORP (AGASTAT)	E7012PD	RLY	N	93AURP-02	71H06	Y	Y	GERS	N	ANSI SHAPE.
93-32/SI-1ED GA12	SQUARE D CO	KPD-13	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS.
93-32X1-1EDG A12	SQUARE D CO	KPD-13	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93-40X1-1EDG A12	SQUARE D CO	KPD-13	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93-86X1-1EDG A12	SQUARE D CO	KPD-13	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93-C2-1EDGA1 2	GENERAL ELECTRIC	CR105	CONT	N	93ECP-A	93EDG-A	Y	N	CR	Y	GERS SHAPE.
93-ESR200-1E DGA12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS.

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer. Part\model. Number	Relay. type..	Low. ruggedness. relay.	Rack/Panel:	Component. For equipment..	Essential.	Satisfactory	Reason. code.	Outlier	Remarks.
93-ESR40-1EDGA12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS.
93-ESR400-1EDGA12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS.
93-K1-1EDGA12	GENERAL ELECTRIC	CR2810	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS. REFERENCED SCHEMATICS IDENTIFY THIS RELAY AS HAVING A LATCHING FUNCTION NOT CONSIDERED IN THE GERS. ASSUME MODEL NUMBER TO BE "CR2810A".
93-K10-1EDGA01	GENERAL ELECTRIC	CR2811A211G	RLY	N	93ECP-A	71-10502	Y	*	CR	Y	NO APPLICABLE GERS.
93-K2-1EDGA12	GENERAL ELECTRIC	CR105	CONT	N	93ECP-A	93EDG-A	Y	N	CR	Y	GERS SHAPE.
93-K3-1EDGA12	SQUARE D CO	KPD-13	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93-SDRX-1EDGA12	SQUARE D CO	KPD-13	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93-TBR-1EDGA12	SQUARE D CO	KPD-13	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93FFR-1EDGA12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS.
93SDR-1EDGA12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS.
93TD1-1EDGA12	AMERACE CORP (AGASTAT)	E7022PK	RLY	N	93ECP-A	93EDG-A	Y	N	CR	Y	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ANSI SHAPE. RELAY CAPACITY IS LOWEST FOR TRANSITIONAL MODE OF OPERATION. RELAY IS IN TRANSITION MODE DURING EDG STARTUP.

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer. Part\model. Number	Relay. type.	Low. ruggedness. relay	Rack/Panel:	Component. For equipment.	Essential.	Satisfactory	Reason. code	Outlier	Remarks
93TD10-1EDGA 12	AMERACE CORP (AGASTAT)	E7012PD	RLY	N	93ECP-A	93EDG-A	Y	Y	GERS	N	ANSI SHAPE.
93TD5-1EDGA1 2	AMERACE CORP (AGASTAT)	E7014PC	RLY	N	93ECP-A	93EDG-A	Y	Y	GERS	N	ANSI SHAPE.
93TD6-1EDGA1 2	AMERACE CORP (AGASTAT)	E7012PD	RLY	N	93ECP-A	93EDG-A	Y	Y	GERS	N	ANSI SHAPE.
93VSR-1EDGA1 2	SQUARE D CO	KPD-13	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93-32/SI-1ED GB12	SQUARE D CO	KPD-13	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS.
93-32X1-1EDG B12	SQUARE D CO	KPD-13	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
93-40X1-1EDG B12	SQUARE D CO	KPD-13	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
93-86X1-1EDG B12	SQUARE D CO	KPD-13	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
93-C2-1EDGB1 2	GENERAL ELECTRIC	CR105	CONT	N	93ECP-B	93EDG-B	Y	N	CR	Y	GERS SHAPE.
93-ESR200-1E DGB12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS.
93-ESR40-1ED GB12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS.
93-ESR400-1E DGB12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS.
93-K1-1EDGB1 2	GENERAL ELECTRIC	CR2810	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS. REFERENCED SCHEMATICS IDENTIFY THIS RELAY AS HAVING A LATCHING FUNCTION NOT CONSIDERED IN THE GERS. ASSUME MODEL NUMBER TO BE "CR2810A".
93-K10-1EDGB 01	GENERAL ELECTRIC	CR2811A211G	RLY	N	93ECP-B	71-10602	Y	*	CR	Y	NO APPLICABLE GERS.

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
93-K2-1EDGB12	GENERAL ELECTRIC	CR105	CONT	N	93ECP-B	93EDG-B	Y	N	CR	Y	GERS SHAPE.
93-K3-1EDGB12	SQUARE D CO	KPD-13	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS.
93-SDRX-1EDGB12	SQUARE D CO	KPD-13	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
93-TBR-1EDGB12	SQUARE D CO	KPD-13	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
93FFR-1EDGB12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS.
93SDR-1EDGB12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS.
93TD1-1EDGB12	AMERACE CORP (AGASTAT)	E7022PK	RLY	N	93ECP-B	93EDG-B	Y	N	CR	Y	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ANSI SHAPE. RELAY CAPACITY IS LOWEST FOR TRANSITIONAL MODE OF OPERATION. RELAY IS IN TRANSITION MODE DURING EDG STARTUP.
93TD10-1EDGB12	AMERACE CORP (AGASTAT)	E7012PD	RLY	N	93ECP-B	93EDG-B	Y	Y	GERS	N	ANSI SHAPE.
93TD5-1EDGB12	AMERACE CORP (AGASTAT)	E7014PC	RLY	N	93ECP-B	93EDG-B	Y	Y	GERS	N	ANSI SHAPE.
93TD6-1EDGB12	AMERACE CORP (AGASTAT)	E7012PD	RLY	N	93ECP-B	93EDG-B	Y	Y	GERS	N	ANSI SHAPE.
93VSR-1EDGB12	SQUARE D CO	KPD-13	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
93-32/SI-1EDGC12	SQUARE D CO	KPD-13	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS.
93-32X1-1EDGC12	SQUARE D CO	KPD-13	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS
93-40X1-1EDG	SQUARE D CO	KPD-13	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
C12											
93-86X1-1EDG C12	SQUARE D CO	KPD-13	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS
93-C2-1EDGC1 2	GENERAL ELECTRIC	CR105	CONT	N	93ECP-C	93EDG-C	Y	N	CR	Y	GERS SHAPE.
93-ESR200-1E DGC12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS.
93-ESR40-1ED GC12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS.
93-ESR400-1E DGC12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS.
93-K1-1EDGC1 2	GENERAL ELECTRIC	CR2810	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS. REFERENCED SCHEMATICS IDENTIFY THIS RELAY AS HAVING A LATCHING FUNCTION NOT CONSIDERED IN THE GERS. ASSUME MODEL NUMBER TO BE "CR2810A".
93-K10-1EDGC 01	GENERAL ELECTRIC	CR2811A211G	RLY	N	93ECP-C	71-10512	Y	*	CR	Y	NO APPLICABLE GERS.
93-K2-1EDGC1 2	GENERAL ELECTRIC	CR105	CONT	N	93ECP-C	93EDG-C	Y	N	CR	Y	GERS SHAPE.
93-K3-1EDGC1 2	SQUARE D CO	KPD-13	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS
93-SDRX-1EDG C12	SQUARE D CO	KPD-13	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS
93-TBR-1EDGC 12	SQUARE D CO	KPD-13	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS
93FFR-1EDGC1 2	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS.
93SDR-1EDGC1 2	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS.

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel: Component..... For equipment..		Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
93TD1-1EDGC12	AMERACE CORP (AGASTAT)	E7G22PK	RLY	N	93ECP-C	93EDG-C	Y	N	CR	Y	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ANSI SHAPE. RELAY CAPACITY IS LOWEST FOR TRANSITIONAL MODE OF OPERATION. RELAY IS IN TRANSITION MODE DURING EDG STARTUP.
93TD10-1EDGC12	AMERACE CORP (AGASTAT)	E7012PD	RLY	N	93ECP-C	93EDG-C	Y	Y	GERS	N	ANSI SHAPE.
93TD5-1EDGC12	AMERACE CORP (AGASTAT)	E7014PC	RLY	N	93ECP-C	93EDG-C	Y	Y	GERS	N	ANSI SHAPE.
93TD6-1EDGC12	AMERACE CORP (AGASTAT)	E7012PD	RLY	N	93ECP-C	93EDG-C	Y	Y	GERS	N	ANSI SHAPE.
93VSR-1EDGC12	SQUARE D CO	KPD-13	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS
93-32/SI-1EDGD12	SQUARE D CO	KPD-13	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS.
93-32X1-1EDGD12	SQUARE D CO	KPD-13	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS
93-40X1-1EDGD12	SQUARE D CO	KPD-13	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS
93-86X1-1EDGD12	SQUARE D CO	KPD-13	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS
93-C2-1EDGD12	GENERAL ELECTRIC	CR105	CONT	N	93ECP-D	93EDG-D	Y	N	CR	Y	GERS SHAPE.
93-ESR200-1EDGD12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS.
93-ESR40-1EDGD12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS.
93-ESR400-1EDGD12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS.
93-K1-1EDGD1	GENERAL	CR2810	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS.

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
2	ELECTRIC										REFERENCED SCHEMATICS IDENTIFY THIS RELAY AS HAVING A LATCHING FUNCTION NOT CONSIDERED IN THE GERS. ASSUME MODEL NUMBER TO BE "CR2810A".
93-K10-1EDGD 01	GENERAL ELECTRIC	CR2811A211G	RLY	N	93ECP-D	71-10612	Y	*	CR	Y	NO APPLICABLE GERS.
93-K2-1EDGD1 2	GENERAL ELECTRIC	CR105	CONT	N	93ECP-D	93EDG-D	Y	N	CR	Y	GERS SHAPE.
93-K3-1EDGD1 2	SQUARE D CO	KPD-13	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS
93-SDRX-1EDG D12	SQUARE D CO	KPD-13	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS
93-TBR-1EDGD 12	SQUARE D CO	KPD-13	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS
93FFR-1EDGD1 2	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS.
93SDR-1EDGD1 2	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS.
93TD1-1EDGD1 2	AMERACE CORP (AGASTAT)	E7022PK	RLY	N	93ECP-D	93EDG-D	Y	N	CR	Y	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ANSI SHAPE. RELAY CAPACITY ISLOWEST FOR TRANSITIONAL MODE OF OPERATION. RELAY IS IN TRANSITION MODE DURING EDG STARTUP.
93TD10-1EDGD 12	AMERACE CORP (AGASTAT)	E7012PD	RLY	N	93ECP-D	93EDG-D	Y	Y	GERS	N	ANSI SHAPE.
93TD5-1EDGD1 2	AMERACE CORP (AGASTAT)	E7014PC	RLY	N	93ECP-D	93EDG-D	Y	Y	GERS	N	ANSI SHAPE.
93TD6-1EDGD1	AMERACE CORP	E7012PD	RLY	N	93ECP-D	93EDG-D	Y	Y	GERS	N	ANSI SHAPE.

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
2	(AGASTAT)										
93VRR-1EDGD12	SQUARE D CO	KPD-13	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS
93ESS-A	SYNCHRO - START PRODUCTS INC	ESSB-4AT	INST	N	93ECSP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS.
93ESS-B	SYNCHRO - START PRODUCTS INC	ESSB-4AT	INST	N	93ECSP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS.
93ESS-C	SYNCHRO - START PRODUCTS INC	ESSB-4AT	INST	N	93ECSP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS.
93ESS-D	SYNCHRO - START PRODUCTS INC	ESSB-4AT	INST	N	93ECSP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS.
93-32-1EDGA09	GENERAL ELECTRIC	ICW51A	RLY	N	93EGP-A	93EDG-A	Y	Y	GERS	N	SEISMIC CAPACITY OBTAINED FROM GENERAL ELECTRIC BULLETIN UTILIZING NON-OPERATING, NORMALLY OPEN CONTACT POSITION/CONDITION COLUMN.
93-K4-1EDGA12	SQUARE D CO	KPD-13	RLY	N	93EGP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93ESL-1EDGA11	SQUARE D CO	KPD-13	RLY	N	93EGP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93ESR-1EDGA11	SQUARE D CO	KPD-13	RLY	N	93EGP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93VLR-1EDGA11	SQUARE D CO	KPD-13	RLY	N	93EGP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93VR-2A	BASLER ELEC CO	SBHV	RLY	N	93EGP-A	93EDG-A	Y	*	CR	Y	NO GERS.
93VRR-1EDGA11	SQUARE D CO	KPD-13	RLY	N	93EGP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
93-32-1EDGB09	GENERAL ELECTRIC	ICW51A	RLY	N	93EGP-B	93EDG-B	Y	Y	GERS	N	SEISMIC CAPACITY OBTAINED FROM GENERAL ELECTRIC BULLETIN UTILIZING NON-OPERATING, NORMALLY OPEN CONTACT POSITION/CONDITION COLUMN.
93-K4-1EDGB12	SQUARE D CO	KPD-13	RLY	N	93EGP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
93ESL-1EDGB11	SQUARE D CO	KPD-13	RLY	N	93EGP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
93ESR-1EDGB11	SQUARE D CO	KPD-13	RLY	N	93EGP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
93VLR-1EDGB11	SQUARE D CO	KPD-13	RLY	N	93EGP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
93VR-2B	BASLER ELEC CO	SBHV	RLY	N	93EGP-B	93EDG-B	Y	*	CR	Y	NO GERS.
93VRR-1EDGB11	SQUARE D CO	KPD-13	RLY	N	93EGP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
93-32-1EDGC09	GENERAL ELECTRIC	ICW51A	RLY	N	93EGP-C	93EDG-C	Y	Y	GERS	N	SEISMIC CAPACITY OBTAINED FROM GENERAL ELECTRIC BULLETIN UTILIZING NON-OPERATING, NORMALLY OPEN CONTACT POSITION/CONDITION COLUMN.
93-K4-1EDGC12	SQUARE D CO	KPD-13	RLY	N	93EGP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS
93ESL-1EDGC11	SQUARE D CO	KPD-13	RLY	N	93EGP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS
93ESR-1EDGC11	SQUARE D CO	KPD-13	RLY	N	93EGP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS
93VLR-1EDGC1	SQUARE D CO	KPD-13	RLY	N	93EGP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS

Main.....Equipment...Designation.	Manufacturer Designation.	Manufacturer...Part\model.....Number.....	Relay. type..	Low.....ruggedness. relay.....	Rack/Panel:	Component.....For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
1											
93VR-2C	BASLER ELEC CO	SBHV	RLY	N	93EGP-C	93EDG-C	Y	*	CR	Y	NO GERS.
93VRR-1EDGC11	SQUARE D CO	KPD-13	RLY	N	93EGP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS
93-32-1EDGD09	GENERAL ELECTRIC	ICW51A	RLY	N	93EGP-D	93EDG-D	Y	Y	GERS	N	SEISMIC CAPACIY OBTAINED FROM GENERAL ELECTRIC BULLETIN UTILIZING NON-OPERATING, NORMALLY OPEN CONTACT POSITION/CONDITION COLUMN.
93-K4-1EDGD12	SQUARE D CO	KPD-13	RLY	N	93EGP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS
93ESL-1EDGD1	SQUARE D CO	KPD-13	RLY	N	93EGP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS
93ESR-1EDGD11	SQUARE D CO	KPD-13	RLY	N	93EGP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS
93VLR-1EDGD11	SQUARE D CO	KPD-13	RLY	N	93EGP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS
93VR-2D	BASLER ELEC CO	SBHV	RLY	N	93EGP-D	93EDG-D	Y	*	CR	Y	NO GERS.
93VRR-1EDGD11	SQUARE D CO	KPD-13	RLY	N	93EGP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS
93-74C-1EDGA13	GENERAL ELECTRIC	CR2811	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS.
						93EDG-C	Y	*	CR	Y	
93-GFR-1EDGA13	SQUARE D CO	KPD-13	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-C	Y	*	CR	Y	
93-K8-1EDGA02	GENERAL ELECTRIC	CR2811	RLY	N	93FPAC	71-10504	Y	*	CR	Y	NO APPLICABLE GERS.
93-K9-1EDGA0	GENERAL	CR2811	RLY	N	93FPAC	71-10504	Y	*	CR	Y	NO APPLICABLE GERS.

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
2	ELECTRIC										
93-TBRX1-1EDGA13	SQUARE D CO	KPD-13	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-C	Y	*	CR	Y	
93-TBRX2-1EDGA13	SQUARE D CO	KPD-13	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-C	Y	*	CR	Y	
93-VSRX1-1EDGA13	SQUARE D CO	KPD-13	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-C	Y	*	CR	Y	
93-VSRX2-1EDGA13	SQUARE D CO	KPD-13	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS.
						93EDG-C	Y	*	CR	Y	
93FTS1A-1EDGA13	SQUARE D CO	KPD-13	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-C	Y	*	CR	Y	
93FTS2A-1EDGA13	SQUARE D CO	KPD-13	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-C	Y	*	CR	Y	
93TD8M-1EDGA13	AMERACE CORP (AGASTAT)	E7014PC	RLY	N	93FPAC	93EDG-A	Y	Y	GERS	N	ANSI SHAPE.
						93EDG-C	Y	Y	GERS	N	
93TD8X-1EDGA13	SQUARE D CO	KPD-13	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-C	Y	*	CR	Y	
93TD9M-1EDGA13	AMERACE CORP (AGASTAT)	E7014PC	RLY	N	93FPAC	93EDG-A	Y	Y	GERS	N	ANSI SHAPE.
						93EDG-C	Y	Y	GERS	N	
93TD9X-1EDGA13	GENERAL ELECTRIC	CR2811	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS.
						93EDG-C	Y	*	CR	Y	
93-74C-1EDGB13	GENERAL ELECTRIC	CR2811	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS.
						93EDG-D	Y	*	CR	Y	
93-GFR-1EDGB13	SQUARE D CO	KPD-13	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
						93EDG-D	Y	*	CR	Y	
93-K8-1EDGB02	GENERAL ELECTRIC	CR2811	RLY	N	93FPBD	71-10604	Y	*	CR	Y	NO APPLICABLE GERS.
93-K9-1EDGB02	GENERAL ELECTRIC	CR2811	RLY	N	93FPBD	71-10604	Y	*	CR	Y	NO APPLICABLE GERS.
93-TBRX1-1EDGB13	SQUARE D CO	KPD-13	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-D	Y	*	CR	Y	
93-TBRX2-1EDGB13	SQUARE D CO	KPD-13	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-D	Y	*	CR	Y	
93-VSRX1-1EDGB13	SQUARE D CO	KPD-13	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-D	Y	*	CR	Y	
93-VSRX2-1EDGB13	SQUARE D CO	KPD-13	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-D	Y	*	CR	Y	
93FTS1A-1EDGB13	SQUARE D CO	KPD-13	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-D	Y	*	CR	Y	
93FTS2A-1EDGB13	SQUARE D CO	KPD-13	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-D	Y	*	CR	Y	
93TD8M-1EDGB13	AMERACE CORP (AGASTAT)	E7014PC	RLY	N	93FPBD	93EDG-B	Y	Y	GERS	N	ANSI SHAPE.
						93EDG-D	Y	Y	GERS	N	
93TD8X-1EDGB13	SQUARE D CO	KPD-13	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-D	Y	*	CR	Y	
93TD9M-1EDGB13	AMERACE CORP (AGASTAT)	E7014PC	RLY	N	93FPBD	93EDG-B	Y	Y	GERS	N	ANSI SHAPE.
						93EDG-D	Y	Y	GERS	N	
93TD9X-1EDGB13	GENERAL ELECTRIC	CR2811	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS.
						93EDG-D	Y	*	CR	Y	

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer . Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
10DPIS-125A	BARTON INSTRUMENT CO (ITT)	289	INST	N	NA	10MOV-16A	Y	N	CR	Y	GERS SHAPE.
10DPIS-125B	BARTON INSTRUMENT CO (ITT)	289	INST	N	NA	10MOV-16B	Y	N	CR	Y	GERS SHAPE.
15PS-122A	STATIC-O-RING	4N6-B5-NX-C1A-J JTTX6	INST	N	NA	46P-2A	Y	Y	GERS	N	GERS SHAPE.
						46P-2B	Y	Y	GERS	N	
15PS-122B	STATIC-O-RING	4N6-B5-NX-C1A-J JTTX6	INST	N	NA	46P-2A	Y	Y	GERS	N	GERS SHAPE.
						46P-2B	Y	Y	GERS	N	
15PS-122C	STATIC-O-RING	4N6-B5-NX-C1A-J JTTX6	INST	N	NA	46P-2A	Y	Y	GERS	N	GERS SHAPE.
						46P-2B	Y	Y	GERS	N	
15PS-122D	STATIC-O-RING	4N6-B5-NX-C1A-J JTTX6	INST	N	NA	46P-2A	Y	Y	GERS	N	GERS SHAPE.
						46P-2B	Y	Y	GERS	N	

382 records listed.

The following table summarizes the relay outliers. Listed first are the makes that are outliers because the demand exceeds the capacity, these are followed by the makes that are outliers because there is no capacity data.

#	Make/Model	Cabinet	Location	Capacity	Demand
4	***Amerace (Agastat) E7022PK***	93ECP-A,B,C,D	EG 272	4.0g peak / 1.6g ZPA	3.7g peak / 2.4g ZPA
2	***Barton 289***	10DPIS-125A,B	RB 242	3.0g peak / 1.2g ZPA	2.4g peak / 1.5g ZPA
2	***GE 12HFA151A2F***	93AURP-01, 02	EG 272	3.0g peak / 1.2g ZPA	2.4g peak / 1.5g ZPA
4	Basler SBHV	93EGP-A,B,C,D	EG 272	No GERS	3.7g peak / 2.4g ZPA
2	GE 12HMA124A2	09-45	RR 284	No GERS	1.9g peak / 1.0g ZPA
8	GE CR105	93ECP-A,B,C,D	EG 272	No GERS	3.7g peak / 2.4g ZPA
4	GE CR2810	93ECP-A,B,C,D	EG 272	No GERS	3.7g peak / 2.4g ZPA
36	GE CR2811	09AR-5A,B 93FPAC,BD 93ECP-A,B,C,D	EG 272	No GERS	1.9g peak / 1.0g ZPA 2.4g peak / 1.5g ZPA 3.7g peak / 2.4g ZPA
4	***GE IAV51D***	71H05, 06	EG 272	No GERS	3.7g peak / 2.4g ZPA
4	GE IJS52D	71H05, 06	EG 272	No GERS	3.7g peak / 2.4g ZPA
2	***GE SAM17A***	71H05	EG 272	No GERS	3.7g peak / 2.4g ZPA
68	Square D KPD-13	93EGP-A,B,C,D 93FPAC, BD 93ECP-A,B,C,D	EG 272	No GERS	3.7g peak / 2.4g ZPA 2.4g peak / 1.5g ZPA 3.7g peak / 2.4g ZPA
4	Synchro-Start ESSB-4AT	93ECP-A,B,C,D	EG 272	No GERS	3.7g peak / 2.4g ZPA

The makes that are italicized can be resolved as outliers as follows:

Amerace (Agastat) E7022PK

The demand was calculated by using 2.25x SSE as the in-structure response spectra (IRS, per GIP Table 6-1) multiplied by the "High" amplification factor of 7 (GIP Table 6-2), for a total amplification of nearly 16x SSE. The cabinets are adjacent to the emergency diesel generators. The turbine building foundation in this area consists of a 12" thick reinforced concrete slab (top of slab at 272') on top of either a well compacted soil fill or a concrete fill down to the top of rock at 265'. This construction justifies using the SSE as the IRS (rather than 2.25x SSE), which reduces the demand to 1.6g peak / 1.1g ZPA, well below the capacity of 4.0g peak / 1.6g ZPA.

Barton 289

The demand was calculated by using 2.25x SSE as the in-structure response spectra (IRS, per GIP Table 6-1) multiplied by the "Medium" amplification factor of 4.5 (GIP Table 6-2), for a total amplification of about 10x SSE. The racks are secured to building steel anchored to the reactor building wall at elevation 242', which is 30' below grade, and only 15' above the basement floor, which is founded on rock. This construction justifies using the SSE as the IRS (rather than 2.25x SSE), which reduces the demand to 1.1g peak / 0.7g ZPA, well below the capacity of 3.0g peak / 1.2g ZPA.

GE 12HFA151A2F

The demand was calculated by using 2.25x SSE as the in-structure response spectra (IRS, per GIP Table 6-1) multiplied by the "Medium" amplification factor of 4.5 (GIP Table 6-2), for a total amplification of about 10x SSE. The cabinets are mounted on a reinforced concrete wall in the electrical rooms in the emergency diesel generator buildings. Per the discussion above for the Amerace relays, the SSE, rather than 2.25x SSE is a

more reasonable estimate of the IRS, which reduces the demand to 1.1g peak / 0.7g ZPA, well below the capacity of 3.0g peak / 1.2g ZPA.

GE IAV51D and GE SAM17A

General Electric has provided NYPA with proprietary data that shows that the relay capacity is greater than the demand (Letter dated August 30, 1995 from Robert M. Schuster of GE to P. Okas of NYPA, Task Authorization No. 95-011).

In addition, the GE letter referenced above also contains data that shows that the GE 12HMA124A2 relays have a capacity greater than the demand for all operational modes *except* NOP/NC (not operating, contacts normally closed). This would resolve this outlier if these relays are not placed in the NOP/NC configuration.

New York Power Authority
James A. Fitzpatrick Nuclear Power Plant
Unresolved Safety Issue A-46
List of Outlier Relays

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
71-27T2X-1HO EA03	GENERAL ELECTRIC	12HFA151A2F	RLY	N	93AURP-01	71H05	Y	N	CR	Y	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 80ms ADJUSTMENT. ANSI SHAPE.
71-27T2X-1HO EB03	GENERAL ELECTRIC	12HFA151A2F	RLY	N	93AURP-02	71H06	Y	N	CR	Y	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ASSUME 80ms ADJUSTMENT. ANSI SHAPE.
02E-K19A	GENERAL ELECTRIC	12HMA124A2	RLY	N	09-45	02SOV-71A1	N	Y	NA	*	NO APPLICABLE GERS.
						02SOV-71B1	N	Y	NA	*	
						02SOV-71C1	N	Y	NA	*	
						02SOV-71D1	Y	*	CR	Y	
						02SOV-71E1	N	Y	NA	*	
						02SOV-71G1	N	Y	NA	*	
						02SOV-71H1	N	Y	NA	*	
02E-K19B	GENERAL ELECTRIC	12HMA124A2	RLY	N	09-45	02SOV-71A1	N	Y	NA	*	NO APPLICABLE GERS.
						02SOV-71B1	N	Y	NA	*	
						02SOV-71C1	N	Y	NA	*	
						02SOV-71D1	Y	*	CR	Y	
						02SOV-71E1	N	Y	NA	*	
						02SOV-71G1	N	Y	NA	*	
						02SOV-71H1	N	Y	NA	*	
10DPIS-125A	BARTON INSTRUMENT CO (ITT)	289	INST	N	NA	10MOV-16A	Y	N	CR	Y	GERS SHAPE.
10DPIS-125B	BARTON INSTRUMENT CO (ITT)	289	INST	N	NA	10MOV-16B	Y	N	CR	Y	GERS SHAPE.
93-C2-1EDGA12	GENERAL ELECTRIC	CR105	CONT	N	93ECP-A	93EDG-A	Y	N	CR	Y	GERS SHAPE.
93-C2-1EDGB12	GENERAL ELECTRIC	CR105	CONT	N	93ECP-B	93EDG-B	Y	N	CR	Y	GERS SHAPE.
93-C2-1EDGC12	GENERAL ELECTRIC	CR105	CONT	N	93ECP-C	93EDG-C	Y	N	CR	Y	GERS SHAPE.
93-C2-1EDGD1	GENERAL	CR105	CONT	N	93ECP-D	93EDG-D	Y	N	CR	Y	GERS SHAPE.

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
2	ELECTRIC										
93-K2-1EDGA1 2	GENERAL ELECTRIC	CR105	CONT	N	93ECP-A	93EDG-A	Y	N	CR	Y	GERS SHAPE.
93-K2-1EDGB1 2	GENERAL ELECTRIC	CR105	CONT	N	93ECP-B	93EDG-B	Y	N	CR	Y	GERS SHAPE.
93-K2-1EDGC1 2	GENERAL ELECTRIC	CR105	CONT	N	93ECP-C	93EDG-C	Y	N	CR	Y	GERS SHAPE.
93-K2-1EDGD1 2	GENERAL ELECTRIC	CR105	CONT	N	93ECP-D	93EDG-D	Y	N	CR	Y	GERS SHAPE.
93-K1-1EDGA1 2	GENERAL ELECTRIC	CR2810	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS. REFERENCED SCHEMATICS IDENTIFY THIS RELAY AS HAVING A LATCHING FUNCTION NOT CONSIDERED IN THE GERS. ASSUME MODEL NUMBER TO BE "CR2810A".
93-K1-1EDGB1 2	GENERAL ELECTRIC	CR2810	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS. REFERENCED SCHEMATICS IDENTIFY THIS RELAY AS HAVING A LATCHING FUNCTION NOT CONSIDERED IN THE GERS. ASSUME MODEL NUMBER TO BE "CR2810A".
93-K1-1EDGC1 2	GENERAL ELECTRIC	CR2810	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS. REFERENCED SCHEMATICS IDENTIFY THIS RELAY AS HAVING A LATCHING FUNCTION NOT CONSIDERED IN THE GERS. ASSUME MODEL NUMBER TO BE "CR2810A".
93-K1-1EDGD1 2	GENERAL ELECTRIC	CR2810	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS. REFERENCED SCHEMATICS IDENTIFY THIS RELAY AS HAVING

Main. Equipment. Designation.	Manufacturer Designation.	Manufacturer. Part\model. Number.	Relay. type.	Low. ruggedness. relay.	Rack/Panel:	Component. For equipment.	Essential.	Satisfactory	Reason. code.	Outlier	Remarks.
											A LATCHING FUNCTION NOT CONSIDERED IN THE GERS. ASSUME MODEL NUMBER TO BE "CR2810A".
46-63X-1ESWA 04	GENERAL ELECTRIC	CR2811	RLY	N	09AR-5A	46P-2A	Y	*	CR	Y	NO APPLICABLE GERS.
						46P-2B	Y	*	CR	Y	
46-63X-1ESWB 04	GENERAL ELECTRIC	CR2811	RLY	N	09AR-5B	46P-2A	Y	*	CR	Y	NO APPLICABLE GERS.
						46P-2B	Y	*	CR	Y	
46-63Y-1ESWA 04	GENERAL ELECTRIC	CR2811	RLY	N	09AR-5A	46P-2A	Y	*	CR	Y	NO APPLICABLE GERS.
						46P-2B	Y	*	CR	Y	
46-63Y-1ESWB 04	GENERAL ELECTRIC	CR2811	RLY	N	09AR-5B	46P-2A	Y	*	CR	Y	NO APPLICABLE GERS.
						46P-2B	Y	*	CR	Y	
93-74C-1EDGA 13	GENERAL ELECTRIC	CR2811	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS.
						93EDG-C	Y	*	CR	Y	
93-74C-1EDGB 13	GENERAL ELECTRIC	CR2811	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS.
						93EDG-D	Y	*	CR	Y	
93-ESR200-1E DGA12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS.
93-ESR200-1E DGB12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS.
93-ESR200-1E DGC12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS.
93-ESR200-1E DGD12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS.
93-ESR40-1ED GA12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS.
93-ESR40-1ED GB12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS.

New York Power Authority
James A. Fitzpatrick Nuclear Power Plant
Unresolved Safety Issue A-46
List of Outlier Relays

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
93-ESR40-1EDGC12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS.
93-ESR40-1EDGD12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS.
93-ESR400-1EDGA12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS.
93-ESR400-1EDGB12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS.
93-ESR400-1EDGC12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS.
93-ESR400-1EDGD12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS.
93-K8-1EDGA02	GENERAL ELECTRIC	CR2811	RLY	N	93FPAC	71-10504	Y	*	CR	Y	NO APPLICABLE GERS.
93-K8-1EDGB02	GENERAL ELECTRIC	CR2811	RLY	N	93FPBD	71-10604	Y	*	CR	Y	NO APPLICABLE GERS.
93-K9-1EDGA02	GENERAL ELECTRIC	CR2811	RLY	N	93FPAC	71-10504	Y	*	CR	Y	NO APPLICABLE GERS.
93-K9-1EDGB02	GENERAL ELECTRIC	CR2811	RLY	N	93FPBD	71-10604	Y	*	CR	Y	NO APPLICABLE GERS.
93FFR-1EDGA12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS.
93FFR-1EDGB12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS.
93FFR-1EDGC12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS.
93FFR-1EDGD12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS.
93SDR-1EDGA12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS.
93SDR-1EDGB12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS.

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
93SDR-1EDGC1 2	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS.
93SDR-1EDGD1 2	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS.
93TD9X-1EDGA 13	GENERAL ELECTRIC	CR2811	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS.
						93EDG-C	Y	*	CR	Y	
93TD9X-1EDGB 13	GENERAL ELECTRIC	CR2811	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS.
						93EDG-D	Y	*	CR	Y	
93-K10-1EDGA 01	GENERAL ELECTRIC	CR2811A211G	RLY	N	93ECP-A	71-10502	Y	*	CR	Y	NO APPLICABLE GERS.
93-K10-1EDGB 01	GENERAL ELECTRIC	CR2811A211G	RLY	N	93ECP-B	71-10602	Y	*	CR	Y	NO APPLICABLE GERS.
93-K10-1EDGC 01	GENERAL ELECTRIC	CR2811A211G	RLY	N	93ECP-C	71-10512	Y	*	CR	Y	NO APPLICABLE GERS.
93-K10-1EDGD 01	GENERAL ELECTRIC	CR2811A211G	RLY	N	93ECP-D	71-10612	Y	*	CR	Y	NO APPLICABLE GERS.
93TD1-1EDGA1 2	AMERACE CORP (AGASTAT)	E7022PK	RLY	N	93ECP-A	93EDG-A	Y	N	CR	Y	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ANSI SHAPE. RELAY CAPACITY IS LOWEST FOR TRANSITIONAL MODE OF OPERATION. RELAY IS IN TRANSITION MODE DURING EDG STARTUP.
93TD1-1EDGB1 2	AMERACE CORP (AGASTAT)	E7022PK	RLY	N	93ECP-B	93EDG-B	Y	N	CR	Y	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ANSI SHAPE. RELAY CAPACITY IS LOWEST FOR TRANSITIONAL MODE OF OPERATION. RELAY IS IN TRANSITION MODE DURING EDG STARTUP.

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
93TD1-1EDGC12	AMERACE CORP (AGASTAT)	E7022PK	RLY	N	93ECP-C	93EDG-C	Y	N	CR	Y	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ANSI SHAPE. RELAY CAPACITY IS LOWEST FOR TRANSITIONAL MODE OF OPERATION. RELAY IS IN TRANSITION MODE DURING EDG STARTUP.
93TD1-1EDGD12	AMERACE CORP (AGASTAT)	E7022PK	RLY	N	93ECP-D	93EDG-D	Y	N	CR	Y	MOST CONSERVATIVE GERS VALUE UTILIZED FOR CAPACITY. ANSI SHAPE. RELAY CAPACITY ISLOWEST FOR TRANSITIONAL MODE OF OPERATION. RELAY IS IN TRANSITION MODE DURING EDG STARTUP.
93ESS-A	SYNCHRO - START PRODUCTS INC	ESSB-4AT	INST	N	93ECSP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS.
93ESS-B	SYNCHRO - START PRODUCTS INC	ESSB-4AT	INST	N	93ECSP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS.
93ESS-C	SYNCHRO - START PRODUCTS INC	ESSB-4AT	INST	N	93ECSP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS.
93ESS-D	SYNCHRO - START PRODUCTS INC	ESSB-4AT	INST	N	93ECSP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS.
93-59G-1EDGA06	GENERAL ELECTRIC	IAV51D	RLY	N	71H05	71-10502	Y	*	CR	Y	NO APPLICABLE GERS.
93-59G-1EDGB06	GENERAL ELECTRIC	IAV51D	RLY	N	71H06	71-10602	Y	*	CR	Y	NO APPLICABLE GERS.
93-59G-1EDGC06	GENERAL ELECTRIC	IAV51D	RLY	N	71H05	71-10512	Y	*	CR	Y	NO APPLICABLE GERS.
93-59G-1EDGD	GENERAL	IAV51D	RLY	N	71H06	71-10612	Y	*	CR	Y	NO APPLICABLE GERS.

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
06	ELECTRIC										
93-25/27-1ED GA03	GENERAL ELECTRIC	IJS52D	RLY	N	71H05	71H05	Y	*	CR	Y	NO APPLICABLE GERS.
93-25/27-1ED GB03	GENERAL ELECTRIC	IJS52D	RLY	N	71H06	71H06	Y	*	CR	Y	NO APPLICABLE GERS.
93-25/27-1ED GC03	GENERAL ELECTRIC	IJS52D	RLY	N	71H05	71H05	Y	*	CR	Y	NO APPLICABLE GERS.
93-25/27-1ED GD03	GENERAL ELECTRIC	IJS52D	RLY	N	71H06	71H06	Y	*	CR	Y	NO APPLICABLE GERS.
93-32/SI-1ED GA12	SQUARE D CO	KPD-13	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS.
93-32/SI-1ED GB12	SQUARE D CO	KPD-13	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS.
93-32/SI-1ED GC12	SQUARE D CO	KPD-13	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS.
93-32/SI-1ED GD12	SQUARE D CO	KPD-13	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS.
93-32X1-1EDG A12	SQUARE D CO	KPD-13	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93-32X1-1EDG B12	SQUARE D CO	KPD-13	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
93-32X1-1EDG C12	SQUARE D CO	KPD-13	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS
93-32X1-1EDG D12	SQUARE D CO	KPD-13	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS
93-40X1-1EDG A12	SQUARE D CO	KPD-13	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93-40X1-1EDG B12	SQUARE D CO	KPD-13	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
93-40X1-1EDG C12	SQUARE D CO	KPD-13	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS
93-40X1-1EDG	SQUARE D CO	KPD-13	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
D12											
93-86X1-1EDG A12	SQUARE D CO	KPD-13	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93-86X1-1EDG B12	SQUARE D CO	KPD-13	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
93-86X1-1EDG C12	SQUARE D CO	KPD-13	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS
93-86X1-1EDG D12	SQUARE D CO	KPD-13	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS
93-GFR-1EDGA 13	SQUARE D CO	KPD-13	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-C	Y	*	CR	Y	
93-GFR-1EDGB 13	SQUARE D CO	KPD-13	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-D	Y	*	CR	Y	
93-K3-1EDGA1 2	SQUARE D CO	KPD-13	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93-K3-1EDGB1 2	SQUARE D CO	KPD-13	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS.
93-K3-1EDGC1 2	SQUARE D CO	KPD-13	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS
93-K3-1EDGD1 2	SQUARE D CO	KPD-13	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS
93-K4-1EDGA1 2	SQUARE D CO	KPD-13	RLY	N	93EGP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93-K4-1EDGB1 2	SQUARE D CO	KPD-13	RLY	N	93EGP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
93-K4-1EDGC1 2	SQUARE D CO	KPD-13	RLY	N	93EGP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS
93-K4-1EDGD1 2	SQUARE D CO	KPD-13	RLY	N	93EGP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS
93-SDkX-1EDG A12	SQUARE D CO	KPD-13	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
93-SDRX-1EDG B12	SQUARE D CO	KPD-13	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
93-SDRX-1EDG C12	SQUARE D CO	KPD-13	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS
93-SDRX-1EDG D12	SQUARE D CO	KPD-13	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS
93-TBR-1EDGA 12	SQUARE D CO	KPD-13	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93-TBR-1EDGB 12	SQUARE D CO	KPD-13	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
93-TBR-1EDGC 12	SQUARE D CO	KPD-13	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS
93-TBR-1EDGD 12	SQUARE D CO	KPD-13	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS
93-TBRX1-1ED GA13	SQUARE D CO	KPD-13	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-C	Y	*	CR	Y	
93-TBRX1-1ED GB13	SQUARE D CO	KPD-13	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-D	Y	*	CR	Y	
93-TBRX2-1ED GA13	SQUARE D CO	KPD-13	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-C	Y	*	CR	Y	
93-TBRX2-1ED GB13	SQUARE D CO	KPD-13	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-D	Y	*	CR	Y	
93-VSRX1-1ED GA13	SQUARE D CO	KPD-13	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-C	Y	*	CR	Y	
93-VSRX1-1ED GB13	SQUARE D CO	KPD-13	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-D	Y	*	CR	Y	
93-VSRX2-1ED GA13	SQUARE D CO	KPD-13	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS.
						93EDG-C	Y	*	CR	Y	

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
93-VSRX2-1EDGB13	SQUARE D CO	KPD-13	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-D	Y	*	CR	Y	
93ESL-1EDGA11	SQUARE D CO	KPD-13	RLY	N	93EGP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93ESL-1EDGB11	SQUARE D CO	KPD-13	RLY	N	93EGP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
93ESL-1EDGC11	SQUARE D CO	KPD-13	RLY	N	93EGP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS
93ESL-1EDGD11	SQUARE D CO	KPD-13	RLY	N	93EGP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS
93ESR-1EDGA11	SQUARE D CO	KPD-13	RLY	N	93EGP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93ESR-1EDGB11	SQUARE D CO	KPD-13	RLY	N	93EGP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
93ESR-1EDGC11	SQUARE D CO	KPD-13	RLY	N	93EGP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS
93ESR-1EDGD11	SQUARE D CO	KPD-13	RLY	N	93EGP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS
93FTS1A-1EDGA13	SQUARE D CO	KPD-13	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-C	Y	*	CR	Y	
93FTS1A-1EDGB13	SQUARE D CO	KPD-13	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-D	Y	*	CR	Y	
93FTS2A-1EDGA13	SQUARE D CO	KPD-13	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-C	Y	*	CR	Y	
93FTS2A-1EDGB13	SQUARE D CO	KPD-13	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-D	Y	*	CR	Y	
93TD8X-1EDGA13	SQUARE D CO	KPD-13	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-C	Y	*	CR	Y	

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
93TD8X-1EDGB 13	SQUARE D CO	KPD-13	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-D	Y	*	CR	Y	
93VLR-1EDGA1 1	SQUARE D CO	KPD-13	RLY	N	93EGP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93VLR-1EDGB1 1	SQUARE D CO	KPD-13	RLY	N	93EGP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
93VLR-1EDGC1 1	SQUARE D CO	KPD-13	RLY	N	93EGP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS
93VLR-1EDGD1 1	SQUARE D CO	KPD-13	RLY	N	93EGP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS
93VRR-1EDGA1 1	SQUARE D CO	KPD-13	RLY	N	93EGP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93VRR-1EDGB1 1	SQUARE D CO	KPD-13	RLY	N	93EGP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
93VRR-1EDGC1 1	SQUARE D CO	KPD-13	RLY	N	93EGP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS
93VRR-1EDGD1 1	SQUARE D CO	KPD-13	RLY	N	93EGP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS
93VSR-1EDGA1 2	SQUARE D CO	KPD-13	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93VSR-1EDGB1 2	SQUARE D CO	KPD-13	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
93VSR-1EDGC1 2	SQUARE D CO	KPD-13	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS
93VSR-1EDGD1 2	SQUARE D CO	KPD-13	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS
71-27T1-1HOE A03	GENERAL ELECTRIC	SAM17A	RLY	N	71H05	71H0!	Y	*	CR	Y	NO APPLICABLE GERS. PER ESK-5BS, THIS RELAY HAS A TARGET UNIT, THEREFORE GENERAL ELECTRIC SEISMIC DATA IS NOT APPLICABLE (REFER TO BULLETIN GEZ-6675

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
											PAGE 5, DATED 5/20/77).
71-27T1-1HOE B03	GENERAL ELECTRIC	SAM17A	RLY	N	71H06	71H06	Y	*	CR	Y	NO APPLICABLE GERS. PER ESK-58T, THIS RELAY HAS A TARGET UNIT, THEREFORE GENERAL ELECTRIC SEISMIC DATA IS NOT APPLICABLE (REFER TO BULLETIN GEZ-6675 PAGE 5, DATED 5/20/77).
93VR-2A	BASLER ELEC CO	SBHV	RLY	N	93EGP-A	93EDG-A	Y	*	CR	Y	NO GERS.
93VR-2B	BASLER ELEC CO	SBHV	RLY	N	93EGP-B	93EDG-B	Y	*	CR	Y	NO GERS.
93VR-2C	BASLER ELEC CO	SBHV	RLY	N	93EGP-C	93EDG-C	Y	*	CR	Y	NO GERS.
93VR-2D	BASLER ELEC CO	SBHV	RLY	N	93EGP-D	93EDG-D	Y	*	CR	Y	NO GERS.

144 records listed.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 02E-K19A Equipment Class RELAY

Equipment Location: Building RR Floor Elevation 284'8EL

Room or Row/Column 9.5/G Base Elevation NA

Equipment Description ADS LOGIC RELAY - LOCATED IN PANEL 09-45

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand	____	Shell Buckling[1]	____
Caveats	____	Anchor Bolts and Embedment	____
Anchorage	____	Anchorage Connections	____
Seismic Interaction	____	Flexibility of Attached Piping[1]	____
Other	____	Other	____
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	____
Mounting, Type, Location	____	Other Seismic Performance Concerns	____
Other	____	Limited Analytical Review	____
		Other	____

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. GENERAL ELECTRIC - MODEL: 12HMA124A2. RELAY SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER. RELAY CHATTER COULD ENERGIZE ADS VALVE 02SOV-71D1.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 02E-K19A

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER RELAY. COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE RELAY WITH A SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER RELAY, OR

4) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY ENERGIZATION OF THE ADS VALVE IS NOT DETRIMENTAL TO SAFE SHUTDOWN.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name | Signature | Date

Print or Type Name | Signature | Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 02E-K19B Equipment Class RELAY

Equipment Location: Building RR Floor Elevation 284'8EL

Room or Row/Column 9.5/G Base Elevation NA

Equipment Description ADS LOGIC RELAY - LOCATED IN PANEL 09-45

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand		Shell Buckling[1]	
Caveats		Anchor Bolts and Embedment	
Anchorage		Anchorage Connections	
Seismic Interaction		Flexibility of Attached Piping[1]	
Other		Other	
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	
Mounting, Type, Location		Other Seismic Performance Concerns	
Other		Limited Analytical Review	
		Other	

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. GENERAL ELECTRIC - MODEL: 12HMA124A2. RELAY SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER. RELAY CHATTER COULD ENERGIZE ADS VALVE 02SOV-71D1.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 02E-K19B

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER RELAY. COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE RELAY WITH A SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER RELAY, OR

4) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY ENERGIZATION OF THE ADS VALVE IS NOT DETRIMENTAL TO SAFE SHUTDOWN.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N Deinha	9/11/95

Print or Type Name | Signature | Date

Print or Type Name | Signature | Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 10DPIS-125A Equipment Class 18

Equipment Location: Building RB Floor Elevation 242'8EL

Room or Row/Column 4/A Base Elevation NA

Equipment Description RHR LOOP A DIFFERENTIAL PRESSURE INDICATING SWITCH

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand	____	Shell Buckling[1]	____
Caveats	____	Anchor Bolts and Embedment	____
Anchorage	____	Anchorage Connections	____
Seismic Interaction	____	Flexibility of Attached Piping[1]	____
Other	____	Other	____
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	____
Mounting, Type, Location	____	Other Seismic Performance Concerns	____
		Limited Analytical Review	____
Other	____	Other	____

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. ITT BARTON - MODEL: 289. GERS SEISMIC CAPACITY FOR THIS SWITCH IS EXCEEDED BY DEMAND. THE GERS CAPACITY IS GENERIC TO A CLASS OF DEVICES AND MAY BE OVERLY CONSERVATIVE FOR THIS SPECIFIC SWITCH. SWITCH CHATTER COULD CLOSE RHR VALVE 10MOV-16A.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 10DPIS-125A

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER SWITCH, COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE SWITCH WITH A SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER SWITCH, OR

4) ESTABLISH PROCEDURAL STEP TO VERIFY THE POSITION OF 10MOV-16A DURING RHR LINEUP (IN RESPONSE TO A SEISMIC EVENT).

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name | Signature | Date

Print or Type Name | Signature | Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 10DPIS-125B Equipment Class 18

Equipment Location: Building RB Floor Elevation 242'8EL

Room or Row/Column 3/D Base Elevation NA

Equipment Description RHR LOOP B DIFFERENTIAL PRESSURE INDICATING SWITCH

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand	____	Shell Buckling[1]	____
Caveats	____	Anchor Bolts and Embedment	____
Anchorage	____	Anchorage Connections	____
Seismic Interaction	____	Flexibility of Attached Piping[1]	____
Other	____	Other	____
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	____
Mounting, Type, Location	____	Other Seismic Performance Concerns	____
Other	____	Limited Analytical Review	____
		Other	____

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. ITT BARTON - MODEL: 289. GERS SEISMIC CAPACITY FOR THIS SWITCH IS EXCEEDED BY DEMAND. THE GERS CAPACITY IS GENERIC TO A CLASS OF DEVICES AND MAY BE OVERLY CONSERVATIVE FOR THIS SPECIFIC SWITCH. SWITCH CHATTER COULD CLOSE RHR VALVE 10MOV-16B.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 10DPIS-125B

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER SWITCH. COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE SWITCH WITH A SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER SWITCH, OR

4) ESTABLISH PROCEDURAL STEP TO VERIFY THE POSITION OF 10MOV-16B DURING RHR LINEUP (IN RESPONSE TO A SEISMIC EVENT).

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name | Signature | Date

Print or Type Name | Signature | Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 46-63X-1ESWA04 Equipment Class RELAY

Equipment Location: Building RR Floor Elevation 284'8EL

Room or Row/Column 10.5/E Base Elevation NA

Equipment Description EMERGENCY SERVICE WATER LOCKOUT MATRIX LOGIC RELAY - LOCATED IN PANEL 09AR-5A

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand		Shell Buckling[1]	
Caveats		Anchor Bolts and Embedment	
Anchorage		Anchorage Connections	
Seismic Interaction		Flexibility of Attached Piping[1]	
Other		Other	
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	
Mounting, Type, Location		Other Seismic Performance Concerns	
		Limited Analytical Review	
Other		Other	

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. GENERAL ELECTRIC - MODEL: CR2811. RELAY SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER. RELAY CHATTER COULD CAUSE UNWANTED ESW INJECTION.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 46-63X-1ESWA04

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER RELAY. COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE RELAY WITH SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER RELAY, OR

4) ESTABLISH THROUGH FURTHER ANALYSIS THAT ESW INJECTION IS NOT DETRIMENTAL TO SAFE SHUTDOWN. CONSIDERATION OF COST ASSOCIATED WITH CHEMICAL CONTAMINATION OF THE RBCLC SYSTEM RESULTING FROM A SPURIOUS ESW INJECTION SHOULD ALSO BE CONSIDERED.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name — Signature — Date

Print or Type Name — Signature — Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 46-63Y-1ESWA04 Equipment Class RELAY

Equipment Location: Building RR Floor Elevation 284'8EL

Room or Row/Column 10.5/E Base Elevation NA

Equipment Description EMERGENCY SERVICE WATER LOCKOUT MATRIX LOGIC RELAY - LOCATED IN PANEL 09AR-5A

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand	____	Shell Buckling[1]	____
Caveats	____	Anchor Bolts and Embedment	____
Anchorage	____	Anchorage Connections	____
Seismic Interaction	____	Flexibility of Attached Piping[1]	____
Other	____	Other	____
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	____
Mounting, Type, Location	____	Other Seismic Performance Concerns	____
		Limited Analytical Review	____
Other	____	Other	____

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. GENERAL ELECTRIC - MODEL: CR2811. RELAY SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER. RELAY CHATTER COULD CAUSE UNWANTED ESW INJECTION.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 46-63Y-1ESWA04

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER RELAY. COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE RELAY WITH SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER RELAY, OR

4) ESTABLISH THROUGH FURTHER ANALYSIS THAT ESW INJECTION IS NOT DETRIMENTAL TO SAFE SHUTDOWN. CONSIDERATION OF COST ASSOCIATED WITH CHEMICAL CONTAMINATION OF THE RBCLC SYSTEM RESULTING FROM A SPURIOUS ESW INJECTION SHOULD ALSO BE CONSIDERED.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name | Signature | Date

Print or Type Name | Signature | Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 46-63X-1ESWB04 Equipment Class RELAY

Equipment Location: Building RR Floor Elevation 284'8EL

Room or Row/Column 10.5/E Base Elevation NA

Equipment Description EMERGENCY SERVICE WATER LOCKOUT MATRIX LOGIC RELAY - LOCATED IN PANEL 09AR-5B

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand		Shell Buckling[1]	
Caveats		Anchor Bolts and Embedment	
Anchorage		Anchorage Connections	
Seismic Interaction		Flexibility of Attached Piping[1]	
Other		Other	
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	
Mounting, Type, Location		Other Seismic Performance Concerns	
Other		Limited Analytical Review	
		Other	

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. GENERAL ELECTRIC - MODEL: CR2811. RELAY SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER. RELAY CHATTER COULD CAUSE UNWANTED ESW INJECTION.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 46-63X-1ESWB04

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER RELAY. COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE RELAY WITH SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER RELAY, OR

4) ESTABLISH THROUGH FURTHER ANALYSIS THAT ESW INJECTION IS NOT DETRIMENTAL TO SAFE SHUTDOWN. CONSIDERATION OF COST ASSOCIATED WITH CHEMICAL CONTAMINATION OF THE RBCLC SYSTEM RESULTING FROM A SPURIOUS ESW INJECTION SHOULD ALSO BE CONSIDERED.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name | Signature | Date

Print or Type Name | Signature | Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 46-63Y-1ESWB04 Equipment Class RELAY

Equipment Location: Building RR Floor Elevation 284'8EL

Room or Row/Column 10.5/E Base Elevation NA

Equipment Description EMERGENCY SERVICE WATER LOCKOUT MATRIX LOGIC RELAY - LOCATED IN PANEL 09AR-5B

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand	____	Shell Buckling[1]	____
Caveats	____	Anchor Bolts and Embedment	____
Anchorage	____	Anchorage Connections	____
Seismic Interaction	____	Flexibility of Attached Piping[1]	____
Other	____	Other	____
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	____
Mounting, Type, Location	____	Other Seismic Performance Concerns	____
Other	____	Limited Analytical Review	____
		Other	____

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. GENERAL ELECTRIC - MODEL: CR2811. RELAY SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER. RELAY CHATTER COULD CAUSE UNWANTED ESW INJECTION.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 46-63Y-1ESWB04

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER RELAY. COMPARE CAPACITY TO DEMAND. OR

2) REPLACE THE RELAY WITH SEISMICALLY QUALIFIED EQUIVALENT. OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER RELAY. OR

4) ESTABLISH THROUGH FURTHER ANALYSIS THAT ESW INJECTION IS NOT DETRIMENTAL TO SAFE SHUTDOWN. CONSIDERATION OF COST ASSOCIATED WITH CHEMICAL CONTAMINATION OF THE RBCLC SYSTEM RESULTING FROM A SPURIOUS ESW INJECTION SHOULD ALSO BE CONSIDERED.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name — Signature — Date

Print or Type Name — Signature — Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 71-27T1-1HOEA03 Equipment Class RELAY

Equipment Location: Building DIESEL Floor Elevation 272EL

Room or Row/Column 24/A1 Base Elevation NA

Equipment Description EMERGENCY BUS 10500 UNDERVOLTAGE CIRCUIT 1HOEA03 LOSS OF VOLTAGE TIMING RELAY - LOCATED IN SWGR 71HO5

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand		Shell Buckling[1]	
Caveats		Anchor Bolts and Embedment	
Anchorage		Anchorage Connections	
Seismic Interaction		Flexibility of Attached Piping[1]	
Other		Other	
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	inclusion Rules	
Mounting, Type, Location		Other Seismic Performance Concerns	
		Limited Analytical Review	
Other		Other	

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. GENERAL ELECTRIC - MODEL: SAM17A (WITH TARGET). RELAY SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER. RELAY CHATTER COULD ADVERSELY IMPACT EDG START AND/OR PROGRAMMED RESTART SEQUENCE. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 7[illegible]-27T1-1HOEA03

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER RELAY. COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE RELAY WITH SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER RELAY, OR

4) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY CHATTER (30 SECONDS) OF THE RELAY CONTACTS WILL NOT ADVERSELY IMPACT THE EDG START AND/OR PROGRAMMED RESTART SEQUENCE. THIS ANALYSIS SHOULD CONSIDER BOTH SCENARIOS: (1) OFFSITE POWER IS AVAILABLE AND (2) OFFSITE POWER IS LOST DURING THE SSE.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name / Signature / Date

Print or Type Name / Signature / Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 71-27T1-1HOEB03 Equipment Class RELAY

Equipment Location: Building DIESEL Floor Elevation 272EL

Room or Row/Column 27/A1 Base Elevation NA

Equipment Description EMERGENCY BUS 10600 UNDERVOLTAGE CIRCUIT 1HOEA03 LOSS OF VOLTAGE TIMING RELAY - LOCATED IN SWGR 71HO6

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand		Shell Buckling[1]	
Caveats		Anchor Bolts and Embedment	
Anchorage		Anchorage Connections	
Seismic Interaction		Flexibility of Attached Piping[1]	
Other		Other	
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	
Mounting, Type, Location		Other Seismic Performance Concerns	
		Limited Analytical Review	
Other		Other	

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. GENERAL ELECTRIC - MODEL: SAM17A (WITH TARGET). RELAY SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER.. RELAY CHATTER COULD ADVERSELY IMPACT EDG START AND/OR PROGRAMMED RESTART SEQUENCE. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 71-27T1-1HOEB03

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER RELAY, COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE RELAY WITH SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER RELAY, OR

4) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY CHATTER (30 SECONDS) OF THE RELAY CONTACTS WILL NOT ADVERSELY IMPACT THE EDG START AND/OR PROGRAMMED RESTART SEQUENCE. THIS ANALYSIS SHOULD CONSIDER BOTH SCENARIOS: (1) OFFSITE POWER IS AVAILABLE AND (2) OFFSITE POWER IS LOST DURING THE SSE.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name | Signature | Date

Print or Type Name | Signature | Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 71-27T2X-1HOEA03 Equipment Class RELAY

Equipment Location: Building DIESEL Floor Elevation 272EL

Room or Row/Column 24.5/A Base Elevation NA

Equipment Description AUXILIARY RELAY EA03 - LOCATED IN PANEL 93AURP-01

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand	____	Shell Buckling[1]	____
Caveats	____	Anchor Bolts and Embedment	____
Anchorage	____	Anchorage Connections	____
Seismic Interaction	____	Flexibility of Attached Piping[1]	____
Other	____	Other	____
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	____
Mounting, Type, Location	____	Other Seismic Performance Concerns	____
Other	____	Limited Analytical Review	____
		Other	____

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. GENERAL ELECTRIC - MODEL: 12HFA152A2F. RELAY SEISMIC CAPACITY IS EXCEEDED BY DEMAND. RELAY CHATTER COULD ADVERSELY IMPACT EDG START AND/OR PROGRAMMED RESTART SEQUENCE. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 71-27T2X-1HOEA03

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY CHATTER (30 SECONDS) OF THE RELAY CONTACTS WILL NOT ADVERSELY IMPACT THE EDG START AND/OR PROGRAMMED RESTART SEQUENCE. THIS ANALYSIS SHOULD CONSIDER BOTH SCENARIOS: (1) OFFSITE POWER IS AVAILABLE AND (2) OFFSITE POWER IS LOST DURING THE SSE, OR

2) REPLACE THE RELAY WITH A SEISMICALLY QUALIFIED EQUIVALENT.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name | Signature | Date

Print or Type Name | Signature | Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 71-27T2X-1HOEB03 Equipment Class RELAY

Equipment Location: Building DIESEL Floor Elevation 272EL

Room or Row/Column 26.8/A Base Elevation NA

Equipment Description AUXILIARY RELAY EB03 - LOCATED IN PANEL 93AURP-02

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand		Shell Buckling[1]	
Caveats		Anchor Bolts and Embedment	
Anchorage		Anchorage Connections	
Seismic Interaction		Flexibility of Attached Piping[1]	
Other		Other	
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	
Mounting, Type, Location		Other Seismic Performance Concerns	
Other		Limited Analytical Review	
		Other	

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. GENERAL ELECTRIC - MODEL: 12HFA152A2F. RELAY SEISMIC CAPACITY IS EXCEEDED BY DEMAND. RELAY CHATTER COULD ADVERSELY IMPACT EDG START AND/OR PROGRAMMED RESTART SEQUENCE. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 71-27T2X-1HOEB03

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY CHATTER (30 SECONDS) OF THE RELAY CONTACTS WILL NOT ADVERSELY IMPACT THE EDG START AND/OR PROGRAMMED RESTART SEQUENCE. THIS ANALYSIS SHOULD CONSIDER BOTH SCENARIOS: (1) OFFSITE POWER IS AVAILABLE AND (2) OFFSITE POWER IS LOST DURING THE SSE, OR

2) REPLACE THE RELAY WITH A SEISMICALLY QUALIFIED EQUIVALENT.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name — Signature — Date

Print or Type Name — Signature — Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 93-25/27-1EDGA03 Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column 24/A2 Base Elevation NA

Equipment Description BUS 10500 & EDG A SYNCHRONIZING & UNDERVOLTAGE RELAY - LOCATED IN SWGR 71HO5

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand	____	Shell Buckling[1]	____
Caveats	____	Anchor Bolts and Embedment	____
Anchorage	____	Anchorage Connections	____
Seismic Interaction	____	Flexibility of Attached Piping[1]	____
Other	____	Other	____
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	____
Mounting, Type, Location	____	Other Seismic Performance Concerns	____
		Limited Analytical Review	____
Other	____	Other	____

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. GENERAL ELECTRIC - MODEL: IJS52D. RELAY SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER.. RELAY CHATTER COULD ADVERSELY IMPACT EDG OUTPUT ACB CLOSING. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93-25/27-1EDGA03

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER RELAY. COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE RELAY WITH SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER RELAY, OR

4) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY CHATTER (30 SECONDS) OF THE RELAY CONTACTS WILL NOT ADVERSELY IMPACT EDG OUTPUT ACB CLOSING. THIS ANALYSIS SHOULD CONSIDER BOTH SCENARIOS: (1) OFFSITE POWER IS AVAILABLE AND (2) OFFSITE POWER IS LOST DURING THE SSE.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name | Signature | Date

Print or Type Name | Signature | Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 93-25/27-1EDGB03 Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column 26/A2 Base Elevation NA

Equipment Description BUS 10600 & EDG B SYNCHRONIZING & UNDERVOLTAGE RELAY - LOCATED IN SWGR 71HO6

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand	____	Shell Buckling[1]	____
Caveats	____	Anchor Bolts and Embedment	____
Anchorage	____	Anchorage Connections	____
Seismic Interaction	____	Flexibility of Attached Piping[1]	____
Other	____	Other	____
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	____
Mounting, Type, Location	____	Other Seismic Performance Concerns	____
Other	____	Limited Analytical Review	____
		Other	____

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. GENERAL ELECTRIC - MODEL: IJS52D. RELAY SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER.. RELAY CHATTER COULD ADVERSELY IMPACT EDG OUTPUT ACB CLOSING. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93-25/27-1EDGB03

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER RELAY. COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE RELAY WITH SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER RELAY, OR

4) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY CHATTER (30 SECONDS) OF THE RELAY CONTACTS WILL NOT ADVERSELY IMPACT EDG OUTPUT ACB CLOSING. THIS ANALYSIS SHOULD CONSIDER BOTH SCENARIOS: (1) OFFSITE POWER IS AVAILABLE AND (2) OFFSITE POWER IS LOST DURING THE SSE.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name — Signature — Date

Print or Type Name — Signature — Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 93-25/27-1EDGC03 Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column 25/A2 Base Elevation NA

Equipment Description BUS 10500 & EDG C SYNCHRONIZING & UNDERVOLTAGE RELAY - LOCATED IN SWGR 71HO5

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand	____	Shell Buckling[1]	____
Caveats	____	Anchor Bolts and Embedment	____
Anchorage	____	Anchorage Connections	____
Seismic Interaction	____	Flexibility of Attached Piping[1]	____
Other	____	Other	____
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	____
Mounting, Type, Location	____	Other Seismic Performance Concerns	____
		Limited Analytical Review	____
Other	____	Other	____

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. GENERAL ELECTRIC - MODEL: IIS52D. RELAY SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER.. RELAY CHATTER COULD ADVERSELY IMPACT EDG OUTPUT ACB CLOSING. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93-25/27-1EDGC03

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER RELAY. COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE RELAY WITH SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER RELAY, OR

4) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY CHATTER (30 SECONDS) OF THE RELAY CONTACTS WILL NOT ADVERSELY IMPACT EDG OUTPUT ACB CLOSING. THIS ANALYSIS SHOULD CONSIDER BOTH SCENARIOS: (1) OFFSITE POWER IS AVAILABLE AND (2) OFFSITE POWER IS LOST DURING THE SSE.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name | Signature | Date

Print or Type Name | Signature | Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 93-25/27-1EDGD03 Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column 27/A2 Base Elevation NA

Equipment Description BUS 10600 & EDG D SYNCHRONIZING & UNDERVOLTAGE RELAY - LOCATED IN SWGR 71HO6

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand		Shell Buckling[1]	
Caveats		Anchor Bolts and Embedment	
Anchorage		Anchorage Connections	
Seismic Interaction		Flexibility of Attached Piping[1]	
Other		Other	
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	
Mounting, Type, Location		Other Seismic Performance Concerns	
		Limited Analytical Review	
Other		Other	

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. GENERAL ELECTRIC - MODEL: IJS52D. RELAY SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER.. RELAY CHATTER COULD ADVERSELY IMPACT EDG OUTPUT ACB CLOSING. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93-25/27-1EDGD03

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER RELAY. COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE RELAY WITH SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER RELAY, OR

4) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY CHATTER (30 SECONDS) OF THE RELAY CONTACTS WILL NOT ADVERSELY IMPACT EDG OUTPUT ACB CLOSING. THIS ANALYSIS SHOULD CONSIDER BOTH SCENARIOS: (1) OFFSITE POWER IS AVAILABLE AND (2) OFFSITE POWER IS LOST DURING THE SSE.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name | Signature | Date

Print or Type Name | Signature | Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 93-59G-1EDGA06 Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column 24/A2 Base Elevation NA

Equipment Description EDG A OVERVOLTAGE RELAY - LOCATED IN SWGR 71HO5

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand	____	Shell Buckling[1]	____
Caveats	____	Anchor Bolts and Embedment	____
Anchorage	____	Anchorage Connections	____
Seismic Interaction	____	Flexibility of Attached Piping[1]	____
Other	____	Other	____
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	____
Mounting, Type, Location	____	Other Seismic Performance Concerns	____
		Limited Analytical Review	____
Other	____	Other	____

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. GENERAL ELECTRIC - MODEL: IAV51D. RELAY SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER.. RELAY CHATTER COULD ADVERSELY IMPACT EDG OUTPUT ACB CLOSING. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93-59G-1EDGA06

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER RELAY. COMPARE CAPACITY TO DEMAND. OR

2) REPLACE THE RELAY WITH SEISMICALLY QUALIFIED EQUIVALENT. OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER RELAY. OR

4) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY CHATTER (30 SECONDS) OF THE RELAY CONTACTS WILL NOT ADVERSELY IMPACT EDG OUTPUT ACB CLOSING. THIS ANALYSIS SHOULD CONSIDER BOTH SCENARIOS: (1) OFFSITE POWER IS AVAILABLE AND (2) OFFSITE POWER IS LOST DURING THE SSE.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name — Signature — Date

Print or Type Name — Signature — Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 93-59G-1EDGB06 Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column 26/A2 Base Elevation NA

Equipment Description EDG B OVERVOLTAGE RELAY - LOCATED IN SWGR 71HO6

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand	____	Shell Buckling[1]	____
Caveats	____	Anchor Bolts and Embedment	____
Anchorage	____	Anchorage Connections	____
Seismic Interaction	____	Flexibility of Attached Piping[1]	____
Other	____	Other	____
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	____
Mounting, Type, Location	____	Other Seismic Performance Concerns	____
		Limited Analytical Review	____
Other	____	Other	____

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. GENERAL ELECTRIC - MODEL: IAV51D. RELAY SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER.. RELAY CHATTER COULD ADVERSELY IMPACT EDG OUTPUT ACB CLOSING. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93-59G-1EDGB06

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER RELAY. COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE RELAY WITH SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER RELAY, OR

4) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY CHATTER (30 SECONDS) OF THE RELAY CONTACTS WILL NOT ADVERSELY IMPACT EDG OUTPUT ACB CLOSING. THIS ANALYSIS SHOULD CONSIDER BOTH SCENARIOS: (1) OFFSITE POWER IS AVAILABLE AND (2) OFFSITE POWER IS LOST DURING THE SSE.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name / Signature / Date

Print or Type Name / Signature / Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 93-59G-1EDGC06 Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column 25/A2 Base Elevation NA

Equipment Description EDG C OVERVOLTAGE RELAY - LOCATED IN SWGR 71HO5

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand	____	Shell Buckling[1]	____
Caveats	____	Anchor Bolts and Embedment	____
Anchorage	____	Anchorage Connections	____
Seismic Interaction	____	Flexibility of Attached Piping[1]	____
Other	____	Other	____
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	____
Mounting, Type, Location	____	Other Seismic Performance Concerns	____
		Limited Analytical Review	____
Other	____	Other	____

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. GENERAL ELECTRIC - MODEL: IAV51D. RELAY SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER.. RELAY CHATTER COULD ADVERSELY IMPACT EDG OUTPUT ACB CLOSING. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93-59G-1EDGC06

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER RELAY. COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE RELAY WITH SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER RELAY, OR

4) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY CHATTER (30 SECONDS) OF THE RELAY CONTACTS WILL NOT ADVERSELY IMPACT EDG OUTPUT ACB CLOSING. THIS ANALYSIS SHOULD CONSIDER BOTH SCENARIOS: (1) OFFSITE POWER IS AVAILABLE AND (2) OFFSITE POWER IS LOST DURING THE SSE.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name | Signature | Date

Print or Type Name | Signature | Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 93-59G-1EDGD06 Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column 27/A2 Base Elevation NA

Equipment Description EDG D OVERVOLTAGE RELAY - LOCATED IN SWGR 71HO6

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand	____	Shell Buckling[1]	____
Caveats	____	Anchor Bolts and Embedment	____
Anchorage	____	Anchorage Connections	____
Seismic Interaction	____	Flexibility of Attached Piping[1]	____
Other	____	Other	____
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	____
Mounting, Type, Location	____	Other Seismic Performance Concerns	____
Other	____	Limited Analytical Review	____
		Other	____

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. GENERAL ELECTRIC - MODEL: IAV51D. RELAY SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER.. RELAY CHATTER COULD ADVERSELY IMPACT EDG OUTPUT ACB CLOSING. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93-59G-1EDGD06

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER RELAY, COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE RELAY WITH SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER RELAY, OR

4) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY CHATTER (30 SECONDS) OF THE RELAY CONTACTS WILL NOT ADVERSELY IMPACT EDG OUTPUT ACB CLOSING. THIS ANALYSIS SHOULD CONSIDER BOTH SCENARIOS: (1) OFFSITE POWER IS AVAILABLE AND (2) OFFSITE POWER IS LOST DURING THE SSE.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name | Signature | Date

Print or Type Name | Signature | Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 93-C2-1EDGA12 Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column 24/A3 Base Elevation NA

Equipment Description EDG A FUEL PRIME PUMP START RELAY - LOCATED IN PANEL 93ECP-A

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand		Shell Buckling[1]	
Caveats		Anchor Bolts and Embedment	
Anchorage		Anchorage Connections	
Seismic Interaction		Flexibility of Attached Piping[1]	
Other		Other	
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	
Mounting, Type, Location		Other Seismic Performance Concerns	
Other		Limited Analytical Review	
		Other	

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. GENERAL ELECTRIC - MODEL: CR105. RELAY SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER.. RELAY CHATTER COULD ADVERSELY IMPACT EDG DURING STARTING BY PREVENTING CONTINUOUS ENERGIZATION OF PUMP. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93-C2-1EDGA12

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER RELAY. COMPARE CAPACITY TO DEMAND. OR

2) REPLACE THE RELAY WITH SEISMICALLY QUALIFIED EQUIVALENT. OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER RELAY. OR

4) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY CHATTER (30 SECONDS) OF THE RELAY CONTACTS WILL NOT ADVERSELY IMPACT EDG START.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name | Signature | Date

Print or Type Name | Signature | Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 93-C2-1EDGB12 Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column 26/A3 Base Elevation NA

Equipment Description EDG B FUEL PRIME PUMP START RELAY - LOCATED IN PANEL 93ECP-B

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand	____	Shell Buckling[1]	____
Caveats	____	Anchor Bolts and Embedment	____
Anchorage	____	Anchorage Connections	____
Seismic Interaction	____	Flexibility of Attached Piping[1]	____
Other	____	Other	____
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	____
Mounting, Type, Location	____	Other Seismic Performance Concerns	____
		Limited Analytical Review	____
Other	____	Other	____

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. GENERAL ELECTRIC - MODEL: CR105. RELAY SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER.. RELAY CHATTER COULD ADVERSELY IMPACT EDG DURING STARTING BY PREVENTING CONTINUOUS ENERGIZATION OF PUMP. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93-C2-1EDGB12

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER RELAY. COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE RELAY WITH SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER RELAY, OR

4) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY CHATTER (30 SECONDS) OF THE RELAY CONTACTS WILL NOT ADVERSELY IMPACT EDG START.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N Deinha	9/11/95

Print or Type Name | Signature | Date

Print or Type Name | Signature | Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 93-C2-1EDGC12 Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column 25/A3 Base Elevation NA

Equipment Description EDG C FUEL PRIME PUMP START RELAY - LOCATED IN PANEL 93ECP-C

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand		Shell Buckling[1]	
Caveats		Anchor Bolts and Embedment	
Anchorage		Anchorage Connections	
Seismic Interaction		Flexibility of Attached Piping[1]	
Other		Other	
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	
Mounting, Type, Location		Other Seismic Performance Concerns	
		Limited Analytical Review	
Other		Other	

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. GENERAL ELECTRIC - MODEL: CR105. RELAY SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER.. RELAY CHATTER COULD ADVERSELY IMPACT EDG DURING STARTING BY PREVENTING CONTINUOUS ENERGIZATION OF PUMP. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93-C2-1EDGC12

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER RELAY. COMPARE CAPACITY TO DEMAND. OR

2) REPLACE THE RELAY WITH SEISMICALLY QUALIFIED EQUIVALENT. OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER RELAY. OR

4) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY CHATTER (30 SECONDS) OF THE RELAY CONTACTS WILL NOT ADVERSELY IMPACT EDG START.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name / Signature / Date

Print or Type Name / Signature / Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 93-C2-1EDGD12 Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column 27/A1 Base Elevation NA

Equipment Description EDG D FUEL PRIME PUMP START RELAY - LOCATED IN PANEL 93ECP-D

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand	____	Shell Buckling[1]	____
Caveats	____	Anchor Bolts and Embedment	____
Anchorage	____	Anchorage Connections	____
Seismic Interaction	____	Flexibility of Attached Piping[1]	____
Other	____	Other	____
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	____
Mounting, Type, Location	____	Other Seismic Performance Concerns	____
		Limited Analytical Review	____
Other	____	Other	____

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. GENERAL ELECTRIC - MODEL: CR105. RELAY SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER.. RELAY CHATTER COULD ADVERSELY IMPACT EDG DURING STARTING BY PREVENTING CONTINUOUS ENERGIZATION OF PUMP. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93-C2-1EDGD12

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER RELAY. COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE RELAY WITH SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER RELAY, OR

4) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY CHATTER (30 SECONDS) OF THE RELAY CONTACTS WILL NOT ADVERSELY IMPACT EDG START.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name | Signature | Date

Print or Type Name | Signature | Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 93-K2-1EDGA12 Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column 24/A3 Base Elevation NA

Equipment Description EDG A GOVERNOR BOOSTER MOTOR START RELAY - LOCATED IN PANEL 93ECP-A

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand		Shell Buckling[1]	
Caveats		Anchor Bolts and Embedment	
Anchorage		Anchorage Connections	
Seismic Interaction		Flexibiiity of Attached Piping[1]	
Other		Other	
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	
Mounting, Type, Location		Other Seismic Performance Concerns	
Other		Limited Analytical Review	
		Other	

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. GENERAL ELECTRIC - MODEL: CR105. RELAY SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER.. RELAY CHATTER COULD ADVERSELY IMPACT EDG DURING STARTING BY PREVENTING CONTINUOUS ENERGIZATION OF MOTOR. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93-K2-1EDGA12

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER RELAY. COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE RELAY WITH SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER RELAY, OR

4) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY CHATTER (30 SECONDS) OF THE RELAY CONTACTS WILL NOT ADVERSELY IMPACT EDG START.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name | Signature | Date

Print or Type Name | Signature | Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 93-K2-1EDGB12 Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column 26/A3 Base Elevation NA

Equipment Description EDG B GOVERNOR BOOSTER MOTOR START RELAY - LOCATED IN PANEL 93ECP-B

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand	____	Shell Buckling[1]	____
Caveats	____	Anchor Bolts and Embedment	____
Anchorage	____	Anchorage Connections	____
Seismic Interaction	____	Flexibility of Attached Piping[1]	____
Other	____	Other	____
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	____
Mounting, Type, Location	____	Other Seismic Performance Concerns	____
		Limited Analytical Review	____
Other	____	Other	____

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. GENERAL ELECTRIC - MODEL: CR105. RELAY SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER.. RELAY CHATTER COULD ADVERSELY IMPACT EDG DURING STARTING BY PREVENTING CONTINUOUS ENERGIZATION OF MOTOR. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93-K2-1EDGB12

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER RELAY. COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE RELAY WITH SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER RELAY, OR

4) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY CHATTER (30 SECONDS) OF THE RELAY CONTACTS WILL NOT ADVERSELY IMPACT EDG START.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N Deinha	9/11/95

Print or Type Name | Signature | Date

Print or Type Name | Signature | Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 93-K2-1EDGC12 Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column 25/A3 Base Elevation NA

Equipment Description EDG C GOVERNOR BOOSTER MOTOR START RELAY - LOCATED IN PANEL 93ECP-C

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand		Shell Buckling[1]	
Caveats		Anchor Bolts and Embedment	
Anchorage		Anchorage Connections	
Seismic Interaction		Flexibility of Attached Piping[1]	
Other		Other	
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	
Mounting, Type, Location		Other Seismic Performance Concerns	
		Limited Analytical Review	
Other		Other	

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. GENERAL ELECTRIC - MODEL: CR105. RELAY SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER.. RELAY CHATTER COULD ADVERSELY IMPACT EDG DURING STARTING BY PREVENTING CONTINUOUS ENERGIZATION OF MOTOR. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93-K2-1EDGC12

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER RELAY. COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE RELAY WITH SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER RELAY, OR

4) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY CHATTER (30 SECONDS) OF THE RELAY CONTACTS WILL NOT ADVERSELY IMPACT EDG START.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name | Signature | Date

Print or Type Name | Signature | Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 93-K2-1EDGD12 Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column 27/A1 Base Elevation NA

Equipment Description EDG D GOVERNOR BOOSTER MOTOR START RELAY - LOCATED IN PANEL 93ECP-D

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand	____	Shell Buckling[1]	____
Caveats	____	Anchor Bolts and Embedment	____
Anchorage	____	Anchorage Connections	____
Seismic Interaction	____	Flexibility of Attached Piping[1]	____
Other	____	Other	____
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	____
Mounting, Type, Location	____	Other Seismic Performance Concerns	____
		Limited Analytical Review	____
Other	____	Other	____

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. GENERAL ELECTRIC - MODEL: CR105. RELAY SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER.. RELAY CHATTER COULD ADVERSELY IMPACT EDG DURING STARTING BY PREVENTING CONTINUOUS ENERGIZATION OF MOTOR. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93-K2-1EDGD12

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER RELAY. COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE RELAY WITH SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER RELAY, OR

4) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY CHATTER (30 SECONDS) OF THE RELAY CONTACTS WILL NOT ADVERSELY IMPACT EDG START.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name / Signature / Date

Print or Type Name / Signature / Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 93-K1-1EDGA12 Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column 24/A3 Base Elevation NA

Equipment Description EDG A AUTO START RELAY- LOCATED IN PANEL 93ECP-A

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand	____	Shell Buckling[1]	____
Caveats	____	Anchor Bolts and Embedment	____
Anchorage	____	Anchorage Connections	____
Seismic Interaction	____	Flexibility of Attached Piping[1]	____
Other	____	Other	____
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	____
Mounting, Type, Location	____	Other Seismic Performance Concerns	____
		Limited Analytical Review	____
Other	____	Other	____

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. GENERAL ELECTRIC - MODEL: CR2810 (LATCHING). RELAY SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER.. RELAY CHATTER AND/OR LATCHING OF THIS RELAY COULD ADVERSELY IMPACT EDG START AND/OR PROGRAMMED RESTART SEQUENCE. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93-K1-1EDGA12

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER RELAY. COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE RELAY WITH SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER RELAY, OR

4) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY CHATTER (30 SECONDS) OR LATCHING OF THE RELAY CONTACTS WILL NOT ADVERSELY IMPACT THE EDG START AND/OR PROGRAMMED RESTART SEQUENCE. THIS ANALYSIS SHOULD CONSIDER BOTH SCENARIOS: (1) OFFSITE POWER IS AVAILABLE AND (2) OFFSITE POWER IS LOST DURING THE SSE.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name / Signature / Date

Print or Type Name / Signature / Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 93-K1-1EDGB12 Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column 26/A3 Base Elevation NA

Equipment Description EDG B AUTO START RELAY- LOCATED IN PANEL 93ECP-B

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand		Shell Buckling[1]	
Caveats		Anchor Bolts and Embedment	
Anchorage		Anchorage Connections	
Seismic Interaction		Flexibility of Attached Piping[1]	
Other		Other	
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	
Mounting, Type, Location		Other Seismic Performance Concerns	
		Limited Analytical Review	
Other		Other	

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. GENERAL ELECTRIC - MODEL: CR2810 (LATCHING). RELAY SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER.. RELAY CHATTER AND/OR LATCHING OF THIS RELAY COULD ADVERSELY IMPACT EDG START AND/OR PROGRAMMED RESTART SEQUENCE. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93-K1-1EDGB12

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER RELAY. COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE RELAY WITH SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER RELAY, OR

4) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY CHATTER (30 SECONDS) OR LATCHING OF THE RELAY CONTACTS WILL NOT ADVERSELY IMPACT THE EDG START AND/OR PROGRAMMED RESTART SEQUENCE. THIS ANALYSIS SHOULD CONSIDER BOTH SCENARIOS: (1) OFFSITE POWER IS AVAILABLE AND (2) OFFSITE POWER IS LOST DURING THE SSE.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name | Signature | Date

Print or Type Name | Signature | Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 93-K1-1EDGC12 Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column 25/A3 Base Elevation NA

Equipment Description EDG C AUTO START RELAY- LOCATED IN PANEL 93ECP-C

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand	____	Shell Buckling[1]	____
Caveats	____	Anchor Bolts and Embedment	____
Anchorage	____	Anchorage Connections	____
Seismic Interaction	____	Flexibility of Attached Piping[1]	____
Other	____	Other	____
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	____
Mounting, Type, Location	____	Other Seismic Performance Concerns	____
		Limited Analytical Review	____
Other	____	Other	____

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. GENERAL ELECTRIC - MODEL: CR2810 (LATCHING). RELAY SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER.. RELAY CHATTER AND/OR LATCHING OF THIS RELAY COULD ADVERSELY IMPACT EDG START AND/OR PROGRAMMED RESTART SEQUENCE. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93-K1-1EDGC12

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER RELAY. COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE RELAY WITH SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER RELAY, OR

4) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY CHATTER (30 SECONDS) OR LATCHING OF THE RELAY CONTACTS WILL NOT ADVERSELY IMPACT THE EDG START AND/OR PROGRAMMED RESTART SEQUENCE. THIS ANALYSIS SHOULD CONSIDER BOTH SCENARIOS: (1) OFFSITE POWER IS AVAILABLE AND (2) OFFSITE POWER IS LOST DURING THE SSE.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name | Signature | Date

Print or Type Name | Signature | Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 93-K1-1EDGD12 Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column 27/A1 Base Elevation NA

Equipment Description EDG D AUTO START RELAY- LOCATED IN PANEL 93ECP-D

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand		Shell Buckling[1]	
Caveats		Anchor Bolts and Embedment	
Anchorage		Anchorage Connections	
Seismic Interaction		Flexibility of Attached Piping[1]	
Other		Other	
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	
Mounting, Type, Location		Other Seismic Performance Concerns	
Other		Limited Analytical Review	
		Other	

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. GENERAL ELECTRIC - MODEL: CR2810 (LATCHING). RELAY SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER.. RELAY CHATTER AND/OR LATCHING OF THIS RELAY COULD ADVERSELY IMPACT EDG START AND/OR PROGRAMMED RESTART SEQUENCE. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93-K1-1EDGD12

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER RELAY. COMPARE CAPACITY TO DEMAND. OR

2) REPLACE THE RELAY WITH SEISMICALLY QUALIFIED EQUIVALENT. OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER RELAY. OR

4) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY CHATTER (30 SECONDS) OR LATCHING OF THE RELAY CONTACTS WILL NOT ADVERSELY IMPACT THE EDG START AND/OR PROGRAMMED RESTART SEQUENCE. THIS ANALYSIS SHOULD CONSIDER BOTH SCENARIOS: (1) OFFSITE POWER IS AVAILABLE AND (2) OFFSITE POWER IS LOST DURING THE SSE.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name | Signature | Date

Print or Type Name | Signature | Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 93ESS-A Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column 24/A3 Base Elevation NA

Equipment Description EDG A ELECTRONIC SPEED SWITCH - LOCATED IN PANEL 93ECSP-A

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand	____	Shell Buckling[1]	____
Caveats	____	Anchor Bolts and Embedment	____
Anchorage	____	Anchorage Connections	____
Seismic Interaction	____	Flexibility of Attached Piping[1]	____
Other	____	Other	____
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	____
Mounting, Type, Location	____	Other Seismic Performance Concerns	____
		Limited Analytical Review	____
Other	____	Other	____

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. SYNCHRO START PRODUCTS - MODEL: ESSB-4AT. SWITCH SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER.. SWITCH CHATTER COULD ADVERSELY IMPACT EDG START SEQUENCE. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93ESS-A

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER SWITCH. COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE SWITCH WITH A SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER SWITCH, OR

4) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY CHATTER (30 SECONDS) OF THE CONTACTS WILL NOT ADVERSELY IMPACT THE EDG START SEQUENCE.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name | Signature | Date

Print or Type Name | Signature | Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 93ESS-B Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column 26.5/A3 Base Elevation NA

Equipment Description EDG B ELECTRONIC SPEED SWITCH - LOCATED IN PANEL 93ECSP-B

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand	____	Shell Buckling[1]	____
Caveats	____	Anchor Bolts and Embedment	____
Anchorage	____	Anchorage Connections	____
Seismic Interaction	____	Flexibility of Attached Piping[1]	____
Other	____	Other	____
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	____
Mounting, Type, Location	____	Other Seismic Performance Concerns	____
		Limited Analytical Review	____
Other	____	Other	____

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. SYNCHRO START PRODUCTS - MODEL: ESSB-4AT. SWITCH SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER.. SWITCH CHATTER COULD ADVERSELY IMPACT EDG START SEQUENCE. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93ESS-B

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER SWITCH. COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE SWITCH WITH A SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER SWITCH, OR

4) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY CHATTER (30 SECONDS) OF THE CONTACTS WILL NOT ADVERSELY IMPACT THE EDG START SEQUENCE.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name | Signature | Date

Print or Type Name | Signature | Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 93ESS-C Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column 25/A3 Base Elevation NA

Equipment Description EDG C ELECTRONIC SPEED SWITCH - LOCATED IN PANEL 93ECSP-C

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand		Shell Buckling[1]	
Caveats		Anchor Bolts and Embedment	
Anchorage		Anchorage Connections	
Seismic Interaction		Flexibility of Attached Piping[1]	
Other		Other	
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	
Mounting, Type, Location		Other Seismic Performance Concerns	
Other		Limited Analytical Review	
		Other	

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. SYNCHRO START PRODUCTS - MODEL: ESSB-4AT. SWITCH SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER.. SWITCH CHATTER COULD ADVERSELY IMPACT EDG START SEQUENCE. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93ESS-C

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER SWITCH, COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE SWITCH WITH A SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER SWITCH, OR

4) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY CHATTER (30 SECONDS) OF THE CONTACTS WILL NOT ADVERSELY IMPACT THE EDG START SEQUENCE.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name | Signature | Date

Print or Type Name | Signature | Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 93ESS-D Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column 27/A3 Base Elevation NA

Equipment Description EDG D ELECTRONIC SPEED SWITCH - LOCATED IN PANEL 93ECSP-D

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand		Shell Buckling[1]	
Caveats		Anchor Bolts and Embedment	
Anchorage		Anchorage Connections	
Seismic Interaction		Flexibility of Attached Piping[1]	
Other		Other	
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	
Mounting, Type, Location		Other Seismic Performance Concerns	
		Limited Analytical Review	
Other		Other	

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. SYNCHRO START PRODUCTS - MODEL: ESSB-4AT. SWITCH SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER.. SWITCH CHATTER COULD ADVERSELY IMPACT EDG START SEQUENCE. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93ESS-D

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER SWITCH. COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE SWITCH WITH A SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER SWITCH, OR

4) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY CHATTER (30 SECONDS) OF THE CONTACTS WILL NOT ADVERSELY IMPACT THE EDG START SEQUENCE.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name / Signature / Date

Print or Type Name / Signature / Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 93TD1-1EDGA12 Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column 24/A3 Base Elevation NA

Equipment Description EDG A GOVERNOR SOLENOID TIME DELAY RELAY - LOCATED IN PANEL 93ECP-A

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand	____	Shell Buckling[1]	____
Caveats	____	Anchor Bolts and Embedment	____
Anchorage	____	Anchorage Connections	____
Seismic Interaction	____	Flexibility of Attached Piping[1]	____
Other	____	Other	____
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	____
Mounting, Type, Location	____	Other Seismic Performance Concerns	____
Other	____	Limited Analytical Review	____
		Other	____

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. AMERACE/AGASTAT - MODEL: E7022PK. GERS RELAY SEISMIC CAPACITY IS EXCEEDED BY DEMAND. RELAY CHATTER COULD ADVERSELY IMPACT EDG DURING STARTING BY CYCLING THE GOVERNOR SOLENOID. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93TD1-1EDGA12

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) REPLACE THE RELAY WITH A SEISMICALLY QUALIFIED EQUIVALENT, OR

2) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY CHATTER (30 SECONDS) OF THE RELAY CONTACTS WILL NOT ADVERSELY IMPACT EDG START.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name | Signature | Date

Print or Type Name | Signature | Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 93TD1-1EDGB12 Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column 26/A3 Base Elevation NA

Equipment Description EDG B GOVERNOR SOLENOID TIME DELAY RELAY - LOCATED IN PANEL 93ECP-B

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand		Shell Buckling[1]	
Caveats		Anchor Bolts and Embedment	
Anchorage		Anchorage Connections	
Seismic Interaction		Flexibility of Attached Piping[1]	
Other		Other	
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	
Mounting, Type, Location		Other Seismic Performance Concerns	
		Limited Analytical Review	
Other		Other	

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. AMERACE/AGASTAT - MODEL: E7022PK. GERS RELAY SEISMIC CAPACITY IS EXCEEDED BY DEMAND. RELAY CHATTER COULD ADVERSELY IMPACT EDG DURING STARTING BY CYCLING THE GOVERNOR SOLENOID. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93TD1-1EDGB12

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

   a. Define proposed method(s) for resolving outlier.

   1) REPLACE THE RELAY WITH A SEISMICALLY QUALIFIED EQUIVALENT, OR

   2) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY CHATTER (30 SECONDS) OF THE RELAY CONTACTS WILL NOT ADVERSELY IMPACT EDG START.

   b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

   NA

4. CERTIFICATION:

   The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

   Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name | Signature | Date

Print or Type Name | Signature | Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 93TD1-1EDGC12 Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column 25/A3 Base Elevation NA

Equipment Description EDG C GOVERNOR SOLENOID TIME DELAY RELAY - LOCATED IN PANEL 93ECP-C

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand	____	Shell Buckling[1]	____
Caveats	____	Anchor Bolts and Embedment	____
Anchorage	____	Anchorage Connections	____
Seismic Interaction	____	Flexibility of Attached Piping[1]	____
Other	____	Other	____
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	____
Mounting, Type, Location	____	Other Seismic Performance Concerns	____
		Limited Analytical Review	____
Other	____	Other	____

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. AMERACE/AGASTAT - MODEL: E7022PK. GERS RELAY SEISMIC CAPACITY IS EXCEEDED BY DEMAND. RELAY CHATTER COULD ADVERSELY IMPACT EDG DURING STARTING BY CYCLING THE GOVERNOR SOLENOID. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93TD1-1EDGC12

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) REPLACE THE RELAY WITH A SEISMICALLY QUALIFIED EQUIVALENT, OR

2) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY CHATTER (30 SECONDS) OF THE RELAY CONTACTS WILL NOT ADVERSELY IMPACT EDG START.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name — Signature — Date

Print or Type Name — Signature — Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 93TD1-1EDGD12 Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column 27/A1 Base Elevation NA

Equipment Description EDG D GOVERNOR SOLENOID TIME DELAY RELAY - LOCATED IN PANEL 93ECP-D

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand	____	Shell Buckling[1]	____
Caveats	____	Anchor Bolts and Embedment	____
Anchorage	____	Anchorage Connections	____
Seismic Interaction	____	Flexibility of Attached Piping[1]	____
Other	____	Other	____
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	____
Mounting, Type, Location	____	Other Seismic Performance Concerns	____
Other	____	Limited Analytical Review	____
		Other	____

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. AMERACE/AGASTAT - MODEL: E7022PK. GERS RELAY SEISMIC CAPACITY IS EXCEEDED BY DEMAND. RELAY CHATTER COULD ADVERSELY IMPACT EDG DURING STARTING BY CYCLING THE GOVERNOR SOLENOID. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93TD1-1EDGD12

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) REPLACE THE RELAY WITH A SEISMICALLY QUALIFIED EQUIVALENT, OR

2) ESTABLISH THROUGH FURTHER ANALYSIS THAT MOMENTARY CHATTER (30 SECONDS) OF THE RELAY CONTACTS WILL NOT ADVERSELY IMPACT EDG START.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/1/95

Print or Type Name — Signature — Date

Print or Type Name — Signature — Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 93VR-2A Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column 24/A1 Base Elevation NA

Equipment Description EDG A VOLT REGULATOR - LOCATED IN PANEL 93EGP-A

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand	____	Shell Buckling[1]	____
Caveats	____	Anchor Bolts and Embedment	____
Anchorage	____	Anchorage Connections	____
Seismic Interaction	____	Flexibility of Attached Piping[1]	____
Other	____	Other	____
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	____
Mounting, Type, Location	____	Other Seismic Performance Concerns	____
		Limited Analytical Review	____
Other	____	Other	____

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. BASLER ELECTRIC CO. - MODEL: SBHV. DEVICE (RELAY) SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER.. CONTACT CHATTER COULD ADVERSELY IMPACT EDG OUTPUT ACB VIA INADVERTENT TRIPPING. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93VR-2A

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER DEVICE. COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE DEVICE WITH A SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER DEVICE, OR

4) PROVIDE PROCEDURAL STEPS TO VERIFY EDG AND OUTPUT BREAKER STATUS IMMEDIATELY DURING AND/OR FOLLOWING A SEISMIC EVENT DURING EDG STARTUP.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name | Signature | Date

Print or Type Name | Signature | Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 93VR-2B Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column 26/A1 Base Elevation NA

Equipment Description EDG B VOLT REGULATOR - LOCATED IN PANEL 93EGP-B

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand	____	Shell Buckling[1]	____
Caveats	____	Anchor Bolts and Embedment	____
Anchorage	____	Anchorage Connections	____
Seismic Interaction	____	Flexibility of Attached Piping[1]	____
Other	____	Other	____
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	____
Mounting, Type, Location	____	Other Seismic Performance Concerns	____
		Limited Analytical Review	____
Other	____	Other	____

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. BASLER ELECTRIC CO. - MODEL: SBHV. DEVICE (RELAY) SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER.. CONTACT CHATTER COULD ADVERSELY IMPACT EDG OUTPUT ACB VIA INADVERTENT TRIPPING. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93VR-2B

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER DEVICE. COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE DEVICE WITH A SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER DEVICE, OR

4) PROVIDE PROCEDURAL STEPS TO VERIFY EDG OUTPUT BREAKER STATUS IMMEDIATELY DURING AND/OR FOLLOWING A SEISMIC EVENT DURING EDG STARTUP.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name | Signature | Date

Print or Type Name | Signature | Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 93VR-2C Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column 25/A1 Base Elevation NA

Equipment Description EDG C VOLT REGULATOR - LOCATED IN PANEL 93EGP-C

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand	____	Shell Buckling[1]	____
Caveats	____	Anchor Bolts and Embedment	____
Anchorage	____	Anchorage Connections	____
Seismic Interaction	____	Flexibility of Attached Piping[1]	____
Other	____	Other	____
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	____
Mounting, Type, Location	____	Other Seismic Performance Concerns	____
Other	____	Limited Analytical Review	____
		Other	____

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. BASLER ELECTRIC CO. - MODEL: SBHV. DEVICE (RELAY) SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER.. CONTACT CHATTER COULD ADVERSELY IMPACT EDG OUTPUT ACB VIA INADVERTENT TRIPPING. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93VR-2C

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER DEVICE. COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE DEVICE WITH A SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER DEVICE, OR

4) PROVIDE PROCEDURAL STEPS TO VERIFY EDG OUTPUT BREAKER STATUS IMMEDIATELY DURING AND/OR FOLLOWING A SEISMIC EVENT DURING EDG STARTUP.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name | Signature | Date

Print or Type Name | Signature | Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number 93VR-2D Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column 27/A1 Base Elevation NA

Equipment Description EDG D VOLT REGULATOR - LOCATED IN PANEL 93EGP-D

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand	____	Shell Buckling[1]	____
Caveats	____	Anchor Bolts and Embedment	____
Anchorage	____	Anchorage Connections	____
Seismic Interaction	____	Flexibility of Attached Piping[1]	____
Other	____	Other	____
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	____
Mounting, Type, Location	____	Other Seismic Performance Concerns	____
		Limited Analytical Review	____
Other	____	Other	____

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. BASLER ELECTRIC CO. - MODEL: SBHV. DEVICE (RELAY) SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER.. CONTACT CHATTER COULD ADVERSELY IMPACT EDG OUTPUT ACB VIA INADVERTENT TRIPPING. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93VR-2D

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER DEVICE. COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE DEVICE WITH A SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER DEVICE, OR

4) PROVIDE PROCEDURAL STEPS TO VERIFY EDG OUTPUT BREAKER STATUS IMMEDIATELY DURING AND/OR FOLLOWING A SEISMIC EVENT DURING EDG STARTUP.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name — Signature — Date

Print or Type Name — Signature — Date

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number SEE ATTACHED PAGES Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column SEE ATTACHED PAGES Base Elevation NA

Equipment Description GENERAL ELECTRIC CR2811 RELAYS IN EDG CONTROL CIRCUITS - VARIOUS PANELS (SEE ATTACHED PAGES)

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand		Shell Buckling[1]	
Caveats		Anchor Bolts and Embedment	
Anchorage		Anchorage Connections	
Seismic Interaction		Flexibility of Attached Piping[1]	
Other		Other	
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	
Mounting, Type, Location		Other Seismic Performance Concerns	
		Limited Analytical Review	
Other		Other	

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. GENERAL ELECTRIC - MODEL: CR2811. RELAY SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER.. CONTACT CHATTER COULD ADVERSELY IMPACT EDG START AND/OR CONTROL FUNCTION. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93VR-2D

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER DEVICE. COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE DEVICE WITH A SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER DEVICE, OR

4) PROVIDE PROCEDURAL STEPS TO VERIFY EDG STATUS IMMEDIATELY DURING AND/OR FOLLOWING A SEISMIC EVENT DURING EDG STARTUP.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name / Signature / Date

Print or Type Name / Signature / Date

New York Power Authority
James A. Fitzpatrick Nuclear Power Plant
Unresolved Safety Issue A-46
List of Outlier (General Electric Model CR2811) Relays

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
93-74C-1EDGA 13	GENERAL ELECTRIC	CR2811	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS.
						93EDG-C	Y	*	CR	Y	
93-74C-1EDGB 13	GENERAL ELECTRIC	CR2811	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS.
						93EDG-D	Y	*	CR	Y	
93-ESR200-1E DGA12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS.
93-ESR200-1E DGB12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS.
93-ESR200-1E DGC12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS.
93-ESR200-1E DGD12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS.
93-ESR40-1ED GA12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS.
93-ESR40-1ED GB12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS.
93-ESR40-1ED GC12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS.
93-ESR40-1ED GD12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS.
93-ESR400-1E DGA12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS.
93-ESR400-1E DGB12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS.
93-ESR400-1E DGC12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS.
93-ESR400-1E DGD12	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS.
93-K8-1EDGA0 2	GENERAL ELECTRIC	CR2811	RLY	N	93FPAC	71-10504	Y	*	CR	Y	NO APPLICABLE GERS.
93-K8-1EDGB0	GENERAL	CR2811	RLY	N	93FPBD	71-10604	Y	*	CR	Y	NO APPLICABLE GERS.

New York Power Authority
James A. Fitzpatrick Nuclear Power Plant
Unresolved Safety Issue A-46
List of Outlier (General Electric Model CR2811) Relays

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
2	ELECTRIC										
93-K9-1EDGA0 2	GENERAL ELECTRIC	CR2811	RLY	N	93FPAC	71-10504	Y	*	CR	Y	NO APPLICABLE GERS.
93-K9-1EDGB0 2	GENERAL ELECTRIC	CR2811	RLY	N	93FPBD	71-10604	Y	*	CR	Y	NO APPLICABLE GERS.
93FFR-1EDGA1 2	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS.
93FFR-1EDGB1 2	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS.
93FFR-1EDGC1 2	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS.
93FFR-1EDGD1 2	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS.
93SDR-1EDGA1 2	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS.
93SDR-1EDGB1 2	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS.
93SDR-1EDGC1 2	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS.
93SDR-1EDGD1 2	GENERAL ELECTRIC	CR2811	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS.
93TD9X-1EDGA 13	GENERAL ELECTRIC	CR2811	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS.
						93EDG-C	Y	*	CR	Y	
93TD9X-1EDGB 13	GENERAL ELECTRIC	CR2811	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS.
						93EDG-D	Y	*	CR	Y	
93-K10-1EDGA 01	GENERAL ELECTRIC	CR2811A211G	RLY	N	93ECP-A	71-10502	Y	*	CR	Y	NO APPLICABLE GERS.
93-K10-1EDGB 01	GENERAL ELECTRIC	CR2811A211G	RLY	N	93ECP-B	71-10602	Y	*	CR	Y	NO APPLICABLE GERS.
93-K10-1EDGC 01	GENERAL ELECTRIC	CR2811A211G	RLY	N	93ECP-C	71-10512	Y	*	CR	Y	NO APPLICABLE GERS.

New York Power Authority
James A. Fitzpatrick Nuclear Power Plant
Unresolved Safety Issue A-46
List of Outlier (General Electric Model CR2811) Relays

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
93-K10-1EDGD 01	GENERAL ELECTRIC	CR2811A211G	RLY	N	93ECP-D	71-10612	Y	*	CR	Y	NO APPLICABLE GERS.

32 records listed.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

1. OUTLIER IDENTIFICATION, DESCRIPTION, AND LOCATION

Equipment ID Number SEE ATTACHED PAGES Equipment Class RELAY

Equipment Location: Building EG Floor Elevation 272EL

Room or Row/Column SEE ATTACHED PAGES Base Elevation NA

Equipment Description SQUARE D KPD-13 RELAYS IN EDG CONTROL CIRCUITS - VARIOUS PANELS (SEE ATTACHED PAGES)

2. OUTLIER ISSUE DEFINITION

a. Identify all the screening guidelines which are not met. (Check more than one if several guidelines could not be satisfied.)

Mechanical and Electrical Equipment		Tanks and Heat Exchangers	
Capacity vs. Demand	____	Shell Buckling[1]	____
Caveats	____	Anchor Bolts and Embedment	____
Anchorage	____	Anchorage Connections	____
Seismic Interaction	____	Flexibility of Attached Piping[1]	____
Other	____	Other	____
Essential Relays		**Cable and Conduit Raceways**	
Capacity vs. Demand	X	Inclusion Rules	____
Mounting, Type, Location	____	Other Seismic Performance Concerns	____
		Limited Analytical Review	____
Other	____	Other	____

1 Shell buckling and flexibility of attached piping only applies to large, flat-bottom, vertical tanks.

b. Describe all the reasons for the outlier (i.e., if all the listed outlier issues were resolved, then the signatories would consider this item of equipment to be verified for seismic adequacy):

MFG. SQUARE D - MODEL: KPD-13. RELAY SEISMIC CAPACITY IS NOT AVAILABLE FOR THIS MODEL NUMBER.. CONTACT CHATTER COULD ADVERSELY IMPACT EDG START AND/OR CONTROL FUNCTION. A-46 ASSUMES THAT THE EDG MAY START AT ANY TIME DURING OR AFTER THE 30 SECOND SSE.

OUTLIER SEISMIC VERIFICATION SHEET (OSVS)

Equipment ID Number 93VR-2D

3. PROPOSED METHOD OF OUTLIER RESOLUTION (OPTIONAL)

a. Define proposed method(s) for resolving outlier.

1) QUERY THE INDUSTRY FOR ANY EXISTING SEISMIC QUALIFICATION DOCUMENTATION SPECIFIC TO THIS MODEL NUMBER DEVICE. COMPARE CAPACITY TO DEMAND, OR

2) REPLACE THE DEVICE WITH A SEISMICALLY QUALIFIED EQUIVALENT, OR

3) SEISMICALLY QUALIFY THIS MODEL NUMBER DEVICE, OR

4) PROVIDE PROCEDURAL STEPS TO VERIFY EDG STATUS IMMEDIATELY DURING AND/OR FOLLOWING A SEISMIC EVENT DURING EDG STARTUP.

b. Provide information needed to implement proposed method(s) for resolving outlier (e.g., estimate of fundamental frequency).

NA

4. CERTIFICATION:

The information on this OSVS is, to the best of our knowledge and belief, correct and accurate, and resolution of the outlier issues listed on the previous page will satisfy the requirements for this item of equipment to be verified for seismic adequacy:

Approved by: (For Equipment Classes #0 - #22, all the Seismic Capability Engineers on the Seismic Review Team (SRT) should sign; there should be at least two on the SRT. One signatory should be a licensed professional engineer. For Relays, the Lead Relay Reviewer should sign.)

Print or Type Name	Signature	Date
N. DEINHA	N. Deinha	9/11/95

Print or Type Name | Signature | Date

Print or Type Name | Signature | Date

New York Power Authority
James A. Fitzpatrick Nuclear Power Plant
Unresolved Safety Issue A-46
List of Outlier (Square D Model KPD-13) Relays

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
93-32/SI-1ED GA12	SQUARE D CO	KPD-13	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS.
93-32/SI-1ED GB12	SQUARE D CO	KPD-13	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS.
93-32/SI-1ED GC12	SQUARE D CO	KPD-13	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS.
93-32/SI-1ED GD12	SQUARE D CO	KPD-13	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS.
93-32X1-1EDG A12	SQUARE D CO	KPD-13	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93-32X1-1EDG B12	SQUARE D CO	KPD-13	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
93-32X1-1EDG C12	SQUARE D CO	KPD-13	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS
93-32X1-1EDG D12	SQUARE D CO	KPD-13	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS
93-40X1-1EDG A12	SQUARE D CO	KPD-13	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93-40X1-1EDG B12	SQUARE D CO	KPD-13	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
93-40X1-1EDG C12	SQUARE D CO	KPD-13	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS
93-40X1-1EDG D12	SQUARE D CO	KPD-13	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS
93-86X1-1EDG A12	SQUARE D CO	KPD-13	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93-86X1-1EDG B12	SQUARE D CO	KPD-13	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
93-86X1-1EDG C12	SQUARE D CO	KPD-13	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS
93-86X1-1EDG D12	SQUARE D CO	KPD-13	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS

New York Power Authority
James A. Fitzpatrick Nuclear Power Plant
Unresolved Safety Issue A-46
List of Outlier (Square D Model KPD-13) Relays

Main. Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
93-GFR-1EDGA 13	SQUARE D CO	KPD-13	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-C	Y	*	CR	Y	
93-GFR-1EDGB 13	SQUARE D CO	KPD-13	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-D	Y	*	CR	Y	
93-K3-1EDGA1 2	SQUARE D CO	KPD-13	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93-K3-1EDGB1 2	SQUARE D CO	KPD-13	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS.
93-K3-1EDGC1 2	SQUARE D CO	KPD-13	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS
93-K3-1EDGD1 2	SQUARE D CO	KPD-13	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS
93-K4-1EDGA1 2	SQUARE D CO	KPD-13	RLY	N	93EGP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93-K4-1EDGB1 2	SQUARE D CO	KPD-13	RLY	N	93EGP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
93-K4-1EDGC1 2	SQUARE D CO	KPD-13	RLY	N	93EGP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS
93-K4-1EDGD1 2	SQUARE D CO	KPD-13	RLY	N	93EGP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS
93-SDRX-1EDG A12	SQUARE D CO	KPD-13	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93-SDRX-1EDG B12	SQUARE D CO	KPD-13	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
93-SDRX-1EDG C12	SQUARE D CO	KPD-13	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS
93-SDRX-1EDG D12	SQUARE D CO	KPD-13	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS
93-TBR-1EDGA 12	SQUARE D CO	KPD-13	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93-TBR-1EDGB	SQUARE D CO	KPD-13	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS

New York Power Authority
James A. Fitzpatrick Nuclear Power Plant
Unresolved Safety Issue A-46
List of Outlier (Square D Model KPD-13) Relays

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
12											
93-TBR-1EDGC 12	SQUARE D CO	KPD-13	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS
93-TBR-1EDGD 12	SQUARE D CO	KPD-13	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS
93-TBRX1-1ED GA13	SQUARE D CO	KPD-13	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-C	Y	*	CR	Y	
93-TBRX1-1ED GB13	SQUARE D CO	KPD-13	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-D	Y	*	CR	Y	
93-TBRX2-1ED GA13	SQUARE D CO	KPD-13	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-C	Y	*	CR	Y	
93-TBRX2-1ED GB13	SQUARE D CO	KPD-13	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-D	Y	*	CR	Y	
93-VSRX1-1ED GA13	SQUARE D CO	KPD-13	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-C	Y	*	CR	Y	
93-VSRX1-1ED GB13	SQUARE D CO	KPD-13	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-D	Y	*	CR	Y	
93-VSRX2-1ED GA13	SQUARE D CO	KPD-13	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS.
						93EDG-C	Y	*	CR	Y	
93-VSRX2-1ED GB13	SQUARE D CO	KPD-13	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-D	Y	*	CR	Y	
93ESL-1EDGA1 1	SQUARE D CO	KPD-13	RLY	N	93EGP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93ESL-1EDGB1 1	SQUARE D CO	KPD-13	RLY	N	93EGP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
93ESL-1EDGC1 1	SQUARE D CO	KPD-13	RLY	N	93EGP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS

New York Power Authority
James A. Fitzpatrick Nuclear Power Plant
Unresolved Safety Issue A-46
List of Outlier (Square D Model KPD-13) Relays

Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
93ESL-1EDGD1 1	SQUARE D CO	KPD-13	RLY	N	93EGP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS
93ESR-1EDGA1 1	SQUARE D CO	KPD-13	RLY	N	93EGP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93ESR-1EDGB1 1	SQUARE D CO	KPD-13	RLY	N	93EGP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
93ESR-1EDGC1 1	SQUARE D CO	KPD-13	RLY	N	93EGP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS
93ESR-1EDGD1 1	SQUARE D CO	KPD-13	RLY	N	93EGP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS
93FTS1A-1EDG A13	SQUARE D CO	KPD-13	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-C	Y	*	CR	Y	
93FTS1A-1EDG B13	SQUARE D CO	KPD-13	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-D	Y	*	CR	Y	
93FTS2A-1EDG A13	SQUARE D CO	KPD-13	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-C	Y	*	CR	Y	
93FTS2A-1EDG B13	SQUARE D CO	KPD-13	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-D	Y	*	CR	Y	
93TD8X-1EDGA 13	SQUARE D CO	KPD-13	RLY	N	93FPAC	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-C	Y	*	CR	Y	
93TD8X-1EDGB 13	SQUARE D CO	KPD-13	RLY	N	93FPBD	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
						93EDG-D	Y	*	CR	Y	
93VLR-1EDGA1 1	SQUARE D CO	KPD-13	RLY	N	93EGP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93VLR-1EDGB1 1	SQUARE D CO	KPD-13	RLY	N	93EGP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
93VLR-1EDGC1 1	SQUARE D CO	KPD-13	RLY	N	93EGP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS

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Main..... Equipment... Designation.	Manufacturer Designation.	Manufacturer... Part\model..... Number.....	Relay. type..	Low..... ruggedness. relay.....	Rack/Panel:	Component..... For equipment..	Essential.	Satisfactory	Reason. code...	Outlier	Remarks.....
93VLR-1EDGD1 1	SQUARE D CO	KPD-13	RLY	N	93EGP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS
93VRR-1EDGA1 1	SQUARE D CO	KPD-13	RLY	N	93EGP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93VRR-1EDGB1 1	SQUARE D CO	KPD-13	RLY	N	93EGP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
93VRR-1EDGC1 1	SQUARE D CO	KPD-13	RLY	N	93EGP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS
93VRR-1EDGD1 1	SQUARE D CO	KPD-13	RLY	N	93EGP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS
93VSR-1EDGA1 2	SQUARE D CO	KPD-13	RLY	N	93ECP-A	93EDG-A	Y	*	CR	Y	NO APPLICABLE GERS
93VSR-1EDGB1 2	SQUARE D CO	KPD-13	RLY	N	93ECP-B	93EDG-B	Y	*	CR	Y	NO APPLICABLE GERS
93VSR-1EDGC1 2	SQUARE D CO	KPD-13	RLY	N	93ECP-C	93EDG-C	Y	*	CR	Y	NO APPLICABLE GERS
93VSR-1EDGD1 2	SQUARE D CO	KPD-13	RLY	N	93ECP-D	93EDG-D	Y	*	CR	Y	NO APPLICABLE GERS

68 records listed.

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&
Associates

New York Power Authority
James A. FitzPatrick Nuclear Power Plant

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