The attached report has been reviewed by the Duane Arnold Energy Center Safety Committee and the DAEC Operations Committee. We will be pleased to meet with you to review the enclosures and to furnish any additional information which may be desired.

Very truly yours,

Larry D. Root

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DUANE ARNOLD ENERGY CENTER

SEMIANNUAL REPORT

ON THE

ENVIRONMENTAL QUALIFICATION PROGRAM FOR SAFETY-RELATED

ELECTRICAL EQUIPMENT

IOWA ELECTRIC LIGHT AND POWER COMPANY

DOCKET NUMBER 50-331

Prepared by
Bechtel Associates Professional Corporation
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I. INTRODUCTION

This report provides the semiannual equipment qualification summary update as committed in Reference 1. As committed, only equipment which is required to perform a safety function in a harsh environment produced by the effects of a loss-of-coolant accident or high-energy line break is addressed in this report.

Where our evaluation has indicated incomplete documentation to support environmental qualification, an action item is assigned for further resolution. A description of these action items, their resolution status, and justification for continued operation are provided in Section II of this report.

The Duane Arnold Energy Center (DAEC) environmental qualification program is subject to ongoing evaluation as a result of refinement of post-accident environmental conditions, ongoing design changes resulting from regulatory direction (e.g., NUREG 0737), and self-audits leading to improvements in the quality of the summary information. The information in Section III is provided to support the resulting environmental qualification review program which is described in this report.

Instruments considered necessary because of their reference in the plant emergency procedures have been classified as safety display instrumentation. Environmental qualification of these instruments is addressed in Section IV.

Section V describes the format and information contained in the equipment qualification summary sheets of Appendix B3.

Appendix A is a listing of all electrical equipment included in the environmental qualification program sorted by system. It is provided for ease of reference relative to and supercedes Appendix A of Reference 1, which provided similar information.

Appendix B contains three parts. Appendix B1 provides a list of general notes which are referenced in the equipment qualification summary sheets. Appendix B2 contains a cross index to the summary sheets which list equipment by plant identification number and corresponding equipment identification number. Appendix B3 contains the equipment qualification summary sheets for harsh environment equipment arranged by equipment identification number (the first part of which corresponds to manufacturer model type).

II. ACTION PLAN

The information provided in this section is an item-by-item description of intended action to correct or resolve cases of incomplete documentation supporting environmental qualification. In each case, a description of the action item, its resolution status, and justification for continued operation are provided.

The first 18 action items were identified in Reference 5 and evaluated in Reference 1. An update of the resolution status on these action items is provided below. All sections which have been duplicated from Reference 1 are identified with an asterisk (*).

Action Items 19 through 27 have been identified as a result of our continuing evaluation of the DAEC environmental qualification program. This evaluation has included refinement analysis of post-accident environmental conditions, evaluations of ongoing design changes resulting from regulatory direction (e.g., NUREG 0737), and self-audits leading to improvements in the quality of the summary information.

1. ASCO SOLENOID VALVES

   Action complete (see Reference 1).

2. MAIN STEAM SAFETY RELIEF SOLENOID VALVES

   Action complete (see Reference 1).

3. TERMINAL BLOCKS

   Action complete (see Reference 1).

4. SOLENOID VALVE SV-4310

* a. Action

   Solenoid valve SV-4310 is located in the heating and ventilating valve control room and experiences a high normal operating temperature estimated to be 150F. Documentation to show that this temperature will not cause deleterious thermal aging during 40 years of normal operation was not available.

   b. Resolution

   The subject valve was replaced (DCR 986) during the 1981 refueling outage by an ASCO valve, Catalog Number NP831665E, qualified for a normal temperature environment of 150F.

5. MAIN STEAM ISOLATION VALVE POSITION SWITCHES

   Action complete (see Reference 1).

6. PRESSURE TRANSMITTERS PDT-2046, -1947

* a. Action

These pressure transmitters sense differential pressure between the tubes and shell of the RHR heat exchanger and function to maintain service water pressure greater than RHR system pressure to prevent radioactive leakage into RHR service water. These transmitters must be qualified for a radiation dose of 5.9×10^6 rads. Documentation demonstrating qualification is not available.

* b. Resolution

These components are included in the scope of the analog transmitter/trip system discussed in Section II-A of Reference 1. The replacement part will be qualified to NUREG 0588 Category I and will be installed on a schedule consistent with installation of the analog transmitter/trip system.

* c. Justification for Continued Operation

Radiation doses were calculated using conservative, nonmechanistic models. Mechanistic release models will result in radiation releases which occur several hours after the postulated accident. During this time, action will be taken to shut down redundant systems beyond those needed for coolant injection. This will result in radiation exposures to only one of two redundant equipment trains. Also, actual doses will be less than those calculated using such conservative assumptions. Finally, if the operating equipment suffers degradation due to radiation exposure, the shutdown redundant system will be activated. During time available after stabilization of core cooling, additional coolant injection paths will be established, if necessary, to ensure long-term cooling.

7. RHR PUMP MOTORS 1P-229A,B,C,D

a. Action

These motors are General Electric Model 5K6336XC213A. They are located in the RHR rooms and must qualify for a radiation dose of 4.26×10^6 rads. Qualification for pressure, temperature, and humidity is not required. Qualification is being pursued with General Electric and the Environmental Qualification BWR Owners Group.

b. Resolution

Iowa Electric is currently participating in efforts with General Electric and the Environmental Qualification BWR Owners Group to document the qualification of these motors. Qualification documentation to be supplied by General Electric under Proposal 424-TY527-KE1 (GE-KE-1-100 dated August 11, 1981) is being pursued as expeditiously as possible; no specific schedule for completion of this program has been established.

* c. Justification for Continued Operation

Continuing station operation is justified for the following reasons:

1) General Electric provided the following justification for continued operation: Continued plant operation can be justified by the fact that General Electric-made pump motor Model 5K6336XC213A is the 5K type series and can be compared to a similar motor tested.

2) Radiation doses were calculated using conservative, nonmechanistic models. Mechanistic release models will result in radiation releases which occur several hours after the postulated accident. During this time, action will be taken to shut down redundant systems beyond those needed for coolant injection. This will result in radiation exposures to only one of two redundant equipment trains. Also, actual doses will be less than those calculated using such conservative assumptions. Finally, if the operating equipment suffers degradation due to radiation exposure, the shutdown redundant system will be activated. During the time available after stabilization of core cooling, additional coolant injection paths will be established, if necessary, to ensure long-term cooling.

3) The core spray and RHR systems are equally independent and redundant. Only one of these systems is necessary to achieve and maintain adequate core cooling. A single failure of a pump in either system will not degrade the mutual redundancy of the systems.

8. CORE SPRAY PUMP MOTORS 1P-211A,B

a. Action

These motors are General Electric Model 5K6336XC229A. They are located in the RHR rooms and must qualify for a radiation dose of 4.26×10^6 rads. Qualification for pressure, temperature, and humidity is not required. Qualification is being pursued with General Electric and the Environmental Qualification BWR Owners Group.

b. Resolution

Iowa Electric is currently participating in efforts with General Electric and the Environmental Qualification BWR Owners Group to document the qualification of these motors. Qualification documentation to be supplied by General Electric under Proposal 424-TY527-KI1 (G-KE-1-100 dated August 11, 1981) is being pursued as expeditiously as possible; no specific schedule for completion of this program has been established.

* c. Justification for Continued Operation

Continuing station operation is justified for the following reasons:

1) General Electric provided the following justification for continued operation: Continued plant operation can be justified by the fact that General Electric-made pump motor Model 5K6336XC229A is the 5K type series and can be compared to a similar motor tested.

2) Radiation doses were calculated using conservative, nonmechanistic models. Mechanistic release models will result in radiation releases which occur several hours after the postulated accident. During this time, action will be taken to shut down redundant systems beyond those needed for coolant injection. This will result in radiation exposures to only one of two redundant equipment trains. Also, actual doses will be less than those calculated using such conservative assumptions. Finally, if the operating equipment suffers degradation due to radiation exposure, the shutdown redundant system will be activated. During the time available after stabilization of core cooling, additional coolant injection paths will be established, if necessary, to ensure long-term cooling.

3) The core spray and RHR systems are equally independent and redundant. Only one of these systems is necessary to achieve and maintain adequate core cooling. A single failure of a pump in either system will not degrade the mutual redundancy of the systems.

9. LEVEL SWITCHES LS-1861A,B,C,D,

* a. Action

These level switches function for reactor shutdown on scram discharge volume high level. They are Magnetrol Model SL5.0-751, but were supplied by General Electric. They are located in the reactor building and must be qualified for a radiation dose of 2.82×10^5 rads (1-hour dose following a LOCA due to operational requirement of only first few seconds following an accident). General Electric has qualified these items for 1.7×10^5 rads. Qualification for pressure, temperature, and humidity is not required. Additional justification for qualification is required.

* b. Resolution

In response to IE Bulletin 80-17, Iowa Electric is installing new redundant and diverse scram discharge volume level sensors via DCR 1047. These sensors are being procured in accordance with NUREG 0588, Category I requirements. While these sensors will not replace LS-1861A,B,C,D, they will perform the same function and be environmentally qualified. These instruments are scheduled to be installed during the fall 1982 refueling outage.

* c. Justification for Continued Operation

Continued station operation is justified for the following reasons:

1) The function of these components is only important prior to a reactor scram. It is realistic to assume that a reactor scram will occur prior to any significant fuel damage. This, and the fact that these components are arranged in four independent and redundant safety channels, ensures that these components will perform their function prior to any significant radiation dose.

2) Radiation doses were calculated using conservative, nonmechanistic models. Mechanistic release models will result in radiation releases which occur several hours after the postulated accident. Therefore, actual doses will be less than those calculated using such conservative assumptions. This conservatism applies to the 1-hour dose quoted above (2.83×10^5 rads).

10. FLOWMETERS FM-8408A,B,C,D,

* a. Action

These flowmeters monitor main steam line leakage flow. They are S.K. Instrument Model 20-9651-8550, but were supplied by General Electric. These flowmeters provide a signal to their respective flow switches which cause system isolation on high flow. The flow switches are located in the control room (mild environment). The flowmeters and associated transmitter circuitry are located in the steam tunnel and must be qualified for a total dose of 3.2×10^6 rads (40-year normal operating dose plus 1-hour post-accident dose). Qualification for temperature, pressure, and humidity is not required. S.K. Instrument has qualified the flowmeter for 1×10^6 rads. Additional qualification documentation is required.

b. Resolution

Flow switches qualified to NUREG 0588, Category I will be installed in the steam tunnel to perform the safety function of system isolation on high flow. The new qualified flow switches will be installed during the next regularly scheduled refueling outage in fall 1982. Installation of the new flow switches negates the need to environmentally qualify the flowmeters.

* c. Justification for Continued Operation

Continued station operation is justified for the following reasons:

1) Radiation doses were calculated using conservative, nonmechanistic models. Mechanistic release models will result in radiation releases which occur several hours after the postulated accident. Therefore, actual doses will be less than those calculated using such conservative assumptions.

2) Failure of these components could, at worst, cause the failure of the MSIV leakage control system to function properly. In this case, radioactive leakage past the MSIVs, which is expected to be minimal, will normally be contained by the main steam piping outside the drywell.

11. HEATERS 1S-122A,B,C,D

* a. Action

These heaters function for vaporization of main steam line leakage. They are General Electric Model 5A356W020. They are located in the steam tunnel and must qualify

for a total dose of 1.54×10^7 rads (40-year normal operating dose plus 30-day accident dose). Qualification for pressure, temperature, and humidity is not required. Additional radiation qualification documentation is required.

b. Resolution

These heaters have been qualified by analysis using a materials analysis procedure consistent with IEEE 323-1974. By careful consideration of all radiation-sensitive materials comprising the heaters and essential for operation, it was shown that the heaters can successfully withstand the effects of radiation dosage in excess of 1.6×10^7 rads.

12. EXHAUST UNITS 1K-25A,B

* a. Action

These motor-operated blowers exhaust main steam line leakage. They are Siemens Model 2CHG-041-IO, but were supplied by General Electric. They are located in the reactor building and must be qualified for a total dose of 2.74×10^6 rads. Qualification for pressure, temperature, and humidity is not required. Additional qualification documentation is required.

* b. Resolution

Iowa Electric has initiated efforts with Siemens Allis and General Electric to obtain sufficient information on these components to perform an engineering analysis that will demonstrate environmental qualification. If insufficient information is available to perform an analysis, these components will be replaced with components procured to NUREG 0588, Category I requirements. In that event, and dependent on procurement lead time, these components will be replaced during one of the next two refueling outages scheduled for fall 1982 and spring 1984.

* c. Justification for Continued Operation

Continued station operation is justified for the following reasons:

1) Radiation doses were calculated using conservative, nonmechanistic models. Mechanistic release models will result in radiation releases which occur several hours after the postulated accident. Therefore, actual doses will be less than those calculated using such conservative assumptions.

2) Failure of these components could, at worst, cause the failure of the MSIV leakage control system to function properly. In this case, radioactive leakage past the MSIVs, which is expected to be minimal, will normally be contained by the main steam piping outside the drywell.

13. MOTOR CONTROL CENTER 1D41

a. Action

This motor control center (MCC) supplies dc power to the HPCI system (see Section III.A). It is an ITE-Imperial (currently Gould-Brown Boveri) 9600 line type MCC. It is located in the reactor building and was initially required to be conservatively qualified for a total dose of 2.74×10^6 rads (Reference 1). This was based on a 30-day post-LOCA operating dose.

b. Resolution

Further analysis consistent with the safety function and operating time of equipment powered by this MCC indicates that radiation qualification in excess of 1×10^5 rads is not required. This MCC will not be required to operate for more than 1 hour (includes margin) post-LOCA. Also, failures cannot occur in the MCC during the time frame in excess of 1 hour post-LOCA, which will be detrimental to safety and which would mislead the operators. The environmental qualification of this MCC will be further addressed as part of the mild environment equipment qualification review program.

14. AIR COOLING UNITS 1V-AC-11,12

* a. Action

The motors for these air cooling units are Westinghouse Model 7302. These units function to provide post-accident room cooling for the RHR rooms. These units are located in the RHR rooms and must be qualified for a total dose of 4.26×10^6 rads. Qualification for pressure, temperature, and humidity is not required. Additional qualification documentation is required.

* b. Resolution

Subsequent investigation and evaluation indicate that it is not feasible to document qualification of these motors. These motors will be replaced with new motors procured in accordance with NUREG 0588, Category I requirements. Iowa Electric is currently locating a supplier for these motors. Depending on procurement lead time, these motors will be replaced during one of the next two refueling outages scheduled for fall 1982 and spring 1984.

* c. Justification for Continued Operation

Continued station operation is justified for the following reasons:

1) Radiation doses were calculated using conservative, nonmechanistic models. Mechanistic release models will result in radiation releases which occur several hours after the postulated accident. Therefore, actual doses will be less than those calculated using such conservative assumptions.

2) Failure of the room cooling unit would, at worst, result in elevated room temperatures during emergency conditions. A study was recently completed to evaluate the effect of loss of room cooling in the HPCI room. The results of this study, which are conservatively analogous to the RHR corner rooms, show a temperature rise of approximately 13F in 2 hours using conservative assumptions. Under realistic room and environmental conditions, it is expected that the room temperature will remain near or below the maximum design room temperature.

3) Although each RHR corner room contains one cooling unit, the corner rooms and their associated safety-related equipment provide redundant safety trains.

15. AIR COOLING UNITS 1V-AC-14A,B

* a. Action

The motors for these air cooling units are Westinghouse Model 7302. These units function to provide post-accident room cooling for the HPCI room. These items must qualify for a total dose of 8.1×10^6 rads. Qualification for pressure, temperature, and humidity is not required. Additional qualification documentation is required.

* b. Resolution

Subsequent investigation and evaluation indicate that it is not feasible to document qualification of these motors. These motors will be replaced with new motors procured in accordance with NUREG 0588, Category I requirements. Iowa Electric is currently locating a supplier for these motors. Depending on procurement lead time, these motors will be replaced during one of the next two refueling outages scheduled for fall 1982 and spring 1984.

* c. Justification for Continued Operation

Continued station operation is justified for the following reasons:

1) Justification for continued operation with respect to the HPCI system is addressed in Note 12 to the Appendix D introduction.

2) Justification for continued operation with respect to the safety-related components in the HPCI room other than the HPCI system is as follows:

   a) Radiation doses were calculated using conservative, nonmechanistic models. Mechanistic release models will result in radiation releases which occur several hours after the postulated accident. Therefore, actual doses will be less than those calculated using such conservative assumptions.

   b) Failure of the room cooling units would, at worst, result in an elevated room temperature during emergency conditions. A study was recently completed to evaluate the effect of loss of room cooling in the HPCI room. The results of this study show a temperature rise of approximately 13F in 2 hours using conservative assumptions. Under realistic room and environmental conditions, it is expected that the room temperature will remain near or below the maximum design room temperature.

   c) The HPCI room cooling units are redundant and would require failure of both units to affect the ability to control the room temperature.

16. MOTOR-OPERATED VALVES

* a. Action

The following motor operators are Limitorque Type SMB with dc motors manufactured by Peerless. The motors have Class B insulation.

MO-1901	MO-2247	MO-2316	MO-2510
MO-1909	MO-2300	MO-2318	MO-2512
MO-1937	MO-2311	MO-2321	MO-2517
MO-2202	MO-2312	MO-2322	MO-2701
MO-2239	MO-2315	MO-2401	MO-4424

These motor operators are located in various plant areas and must qualify for differing levels of temperature, pressure, humidity, and radiation. Qualification test data specifically for Limitorque dc motor operators with Class B insulation are not available.

b. Resolution

Consistent with efforts initiated by the utility environmental qualification BWR Owners Group, these motor operators are qualified by analysis using testing data available for other similar Limitorque valve operators. All Limitorque valve operators are of similar basic construction and method of operation. See Appendix B for further details on the environmental qualification of the following motor operators from the above list.

MO-1909	MO-2321	MO-2701	MO-1937
MO-2401	MO-4424	MO-2239	MO-2512
MO-2312	MO-2517		

The remaining motor operators are part of the HPCI system and do not perform any harsh environment safety functions (see Section III). The environmental qualification of these motor operators will be further addressed as part of the mild environment equipment qualification review program.

17. FLOW SWITCHES FIS-2111, 2131

* a. Action

These flow switches are Barton Model 289 and are qualified for an integrated radiation dose of 3×10^6 rads (References 2 and 3). These items are located in the RHR rooms and must be qualified for a total dose of 4.26×10^6 rads. These flow switches will either be replaced or shielded.

* b. Resolution

These instruments will be replaced with Barton Model 581 switches procured in accordance with NUREG 0588, Category I requirements. The estimated procurement lead time is 52 weeks after vendor acceptance of order; therefore, these instruments will be installed during the next scheduled refueling outage in the fall of 1982.

* c. Justification for Continued Operation

Continued station operation is justified for the following reasons:

1) Radiation doses were calculated using conservative, nonmechanistic models. Mechanistic release models will result in radiation releases which occur several hours after the postulated accident. During this time, action will be taken to shut down redundant systems beyond those needed for coolant injection. This will result in radiation exposures to only one of two redundant equipment trains. Also, actual doses will be less than those calculated using such conservative assumptions. Finally, should the operating equipment suffer degradation due to radiation exposure, the shutdown redundant system will be activated. During the time available after stabilization of core cooling, additional coolant injection paths will be established, if necessary, to ensure long-term cooling.

2) Failure of the flow switch could affect the operation of core spray miniflow control valves MO-2104 and MO-2124. If the valve remains open longer than intended, the result would be a slight reduction in core spray system flow to the reactor vessel until operator action is taken to manually close the valve. If the valve remains closed longer than intended, operator action will be taken to either open the valve or shut off the affected core spray pump.

3) Automatic operation of miniflow bypass control is intended for initial startup of the HPCI immediately after an accident. Because it is already known that the switches are qualified to 70% of the 30-day integrated dose, they can be expected to operate through the initial stages of an accident. In the longer term, startup and shutdown of the core spray system will be performed manually under close operator supervision to ensure that adequate flowpaths are available.

18. PRESSURE SWITCHES PDIS-1971A,B

* a. Action

These pressure switches are Barton Model 289 and are qualified for an integrated radiation dose of 3×10^6 rads (References 2 and 3). These items are located in the RHR rooms and must be qualified for a total dose of 5.9×10^6 rads. These pressure switches will either be replaced or shielded.

* b. Resolution

These components are included in the scope of the analog transmitter/trip system discussed in Section II.A of Reference 1. The existing switches will be replaced with components qualified in accordance with NUREG 0588, Category I requirements on a schedule consistent with installation of the analog transmitter/trip system.

* c. Justification for Continued Operation

Continued station operation is justified for the following reasons:

1) Radiation doses were calculated using conservative, nonmechanistic models. Mechanistic release models will result in radiation releases which occur several hours after the postulated accident. During this time, action will be taken to shut down redundant systems beyond those needed for coolant injection. This will result in radiation exposures to only one of two redundant equipment trains. Also, actual doses will be less than those calculated using such conservative assumptions. Finally, if the operating equipment suffers degradation due to radiation exposure, the shutdown redundant system will be activated. During the time available after stabilization of core cooling, additional coolant injection paths will be established, if necessary, to ensure long-term cooling.

2) Failure of the flow switch could affect the operation of RHR miniflow control valves MO-2009 and MO-1935. If the valve remains open longer than intended, the result would be a slight reduction in RHR system flow to the reactor vessel until operator action is taken to manually close the valve. If the valve remains closed longer than intended, operator action will be tkan to either open the valve or shut off the affected RHR pumps.

3) Automatic operation of miniflow bypass control is intended for initial startup of the LPCI immediately after an accident. Because it is already known that the switches are qualified to 70% of the 30-day integrated dose, they can be expected to operate through the initial stages of an accident. In the longer term, startup and shutdown of the RHR system will be performed manually under close operator supervision to ensure that adequate flowpaths are available.

19. LIMITORQUE VALVE

a. Action

As discussed in General Note 11 of Appendix B1, environmental qualification documentation is not available to support a post-accident function capability of motor brakes contained in Limitorque valve operators if the motor brake is not of the Dings model type. Also, ongoing evaluations, testing, and review of Limitorque motor operators by the nuclear industry may result in the identification of additional Limitorque qualifications concerns.

b. Resolution

Limitorque valve operator records are being reviewed to confirm the list of harsh environment valve operators containing motor brakes. Most Limitorque motor operators do not include motor brakes and some may contain motor breaks of a qualified model type. Conversations with Limitorque Corporation indicate that only large, fast acting, earlier valve operator models are likely to contain motor brakes. This is conservatively assumed to include all isolation valves (greater than 2 inches) with an automatic protection function and valve speed greater than 20 inches per minute (unless vendor records or Limitorque correspondence indicate otherwise). All Limitorque motor operators potentially containing motor brakes are being investigated for possible motor brake replacement. The following three motor operators are known to contain motor brakes: MO-1909, MO-1908, and MO-2238. The following 16 motor operators may also contain motor brakes: MO-2239, MO-2312, MO-1903, MO-1902, MO-2135, MO-2115, MO-2117, MO-2137, MO-2003, MO-2001, MO-2000, MO-1905, MO-2006, MO-1933, MO-4627, and MO-4628. Confirmation of valve operators containing motor brakes and identification of valve operators with unqualified motor breaks will be accomplished by December 1982. Qualified motor brakes will be in place by the end of the refueling outage scheduled for spring 1984. Any additional Limitorque qualification concerns identified by the nuclear industry will be investigated for applicability to DAEC and corrective action, if necessary, will be initiated.

c. Justification for Continued Operation

Continued station operation is justified for the following reasons:

1) As was demonstrated during Limitorque valve operator qualification tests, the weather proof operator housing minimizes the effect of all harsh environmental parameters except for radiation. Therefore, the primary concern of an unqualified motor brake would be radiation induced failure of the motor brake solenoid (resulting in locking the valve in its position at the time of failure). All valve operators identified above perform their safety function immediately upon detection of accident initiation and prior to being subjected to a radiation dose of a valve likely to cause motor brake failure.

2) Radiation doses were calculated using conservative, nonmechanistic models. Mechanistic release models will result in radiation releases which occur several hours after the postulated accident. Therefore, actual doses will be less than those calculated using such conservative assumptions.

3) Additional justification is provided below:

   a) Valves MO-1905 and MO-2003 are containment isolation valves in the LPCI injection lines. These valves are normally closed and will remain so following an accident until it becomes necessary to initiate core cooling with the LPCI system. In the event that these valves fail to open at that time, this will cause a loss of all LPCI capability. An analogous scenerio has been evaluated in response to FSAR question 9-6.4 on page 9-6.4-1 of the DAEC FSAR. The conclusion for case three of that question wherein "no LPCI flow will enter the vessel" is that it "will not result in a peak cladding temperature greater than that presented in the FSAR." Therefore, the consequences of a potential failure of these valves has been evaluated and found acceptable.

   b) Valves MO-2238, MO-2239, and MO-2312 are containment isolation valves in the HPCI system. As discussed in Section III-A of this report, the HPCI system need not be environmentally qualfied for the HPCI function. Should these valves be required to perform their containment isolation function, the HPCI function will no longer be required and containment isolation will occur prior to the valves receiving a significant radiation dose. Following closure for containment isolation, the valves need not reopen.

c) Valves MO-1902, MO-1903, MO-1933, MO-2000, MO-2001, and MO-2006 are containment isolation valves for the containment atmosphere spray headers in the RHR system. These valves are normally closed and will remain so unless the operator elects to manually initiate drywell or suppression pool spray. In the event that the valves fail to open, the operator will be denied containment spray capability. In evaluating the design basis accident, the DAEC FSAR does not take credit for operation of the containment spray system, therefore inability to initiate containment spray will not impair the ability for safe shutdown following a DBA.

d) MO-2115, MO-2117, MO-2135, and MO-2137 are core spray pump discharge isolation valves. These valves must be open to provide core spray flow to reactor vessel. The environment surrounding these valves does not become harsh until after the valves perform their safety function. The radiation dose to these valve operators is primarily a result of the radioactive process fluid flowing through the valves after they open.

e) MO-4627 and MO-4628 are recirculation pump discharge isolation valves (one for each loop). These valves are normally open but shut in the event of a high drywell pressure or low reactor vessel level. This directs flow from the LPCI system through the intact recirculation loop directly to the reactor vessel. In the event of a failure of these valves to close, core cooling flow continues to be provided, although a portion of the flow will be through the suction side of the intact loop backwards through the recirculation pump and into the reactor vessel. Additional cooling is also provided by the redundant core spray system.

f) Valves MO-1908 and MO-1909 are containment isolation valves in the RHR letdown line. These valves are normally closed and will remain so following a design basis accident. The shutdown cooling mode of the RHR system is not required following a DBA with high radiation source terms, therefore, the valves remain in the closed position and will be unaffected by a brake failure.

20. GENERAL ELECTRIC ELECTRICAL PENETRATIONS NS02, NS02-I, NS03, NS04

a. Action

The following electrical penetrations (General Electric Models NS02, NS02-E, NS03, NS04) provide cable penetrations into the drywell.

JX-103	JX-105A	JX-105B	JX-105C
JX-105D	JX-101A	JX-101B	JX-104A
JX-104B	JX-104C	JX-104D	

The penetrations are required to be qualified for LOCA conditions inside drywell. The penetrations have qualification documentation for all required parameters except demineralized water spray.

b. Resolution

An engineering analysis will be performed for these electrical penetrations to demonstrate environmental qualification for demineralized water spray. This analysis will be performed based on information that is available from Iowa Electric engineering and maintenance files and the equipment supplier. The engineering analysis will be completed by June 30, 1982.

c. Justification for Continued Operation

Continued station operation is justified for the following reasons:

1) The subject penetrations have been tested and environmentally qualified for severe LOCA environmental conditions including high humidity and superheated steam. The penetration assemblies are inherently designed to prevent the intrusion of moisture into critical components. Therefore, a demineralized water spray can be expected to not impact the environmental capability of the penetrations.

21. AUTOMATIC VALVE COMPANY SOLENOID VALVE C5450-5

a. Action

Solenoid valves SV-4400, SV-4402, SV-4405, and SV-4406 (Automatic Valve Company Model C5450-5) are located in the drywell and are required to function as part of the automatic depressurization system (ADS). The solenoid valves are required to be qualified for LOCA conditions inside drywell. The valves have qualification documentation for all required parameters except demineralized water spray.

b. Resolution

An engineering analysis will be performed for these solenoid valves to demonstrate environmental qualification for demineralized water spray. This analysis will be performed based on information that is available from Iowa Electric engineering and maintenance files and the equipment supplier. The engineering analysis will be completed by June 30, 1982.

c. Justification for Continued Operation

Continued station operation is justified for the following reasons:

1) The subject valves have been tested and environmentally qualified for severe LOCA environmental conditions including high humidity and steam. The valve assemblies are inherently designed to prevent the intrusion of moisture into critical components. Therefore, a demineralized water spray can be expected to not impact the environmental capability of the valves.

22. FENWAL CONTROL UNITS 35003-0

a. Action

Control units CU-5835A1, A2, B1, B2 and CU-5837A1, A2, B1, B2 (Fenwal Model 35003-0) are located in the standby gas treatment system (SGTS) room at elevation 786' in the reactor building. They are required to function as part of the SGTS. The control units must be qualified for a 30-day integrated radiation dose of 1.6×10^8 rads. Qualification for pressure, temperature, and humidity is not required.

b. Resolution

These control units are the subject of ongoing investigation with respect to environmental qualification. Qualified control units will be in place not later than the first refueling outage in 1984.

c. Justification for Continued Operation

Continued station operation is justified for the following reasons:

1) Radiation doses were calculated using conservative, nonmechanistic models. Mechanistic release models will result in radiation releases which occur several hours after the postulated accident. Therefore, actual doses will be less than those calculated using such conservative assumptions.

2) At the start of an accident, both trains of the SGTS will be automatically started. Plant operating procedures require that one train be manually isolated such that only one train is operated at a time. The dominant radiation source for the SGTS is the loading of the SGTS filters. Therefore, the train which is isolated initially following an accident will not experience the same radiation doses as the operating train. Should the initially operated train fail, the redundant train can be restarted to maintain the SGTS function.

23. ELECTRODYNE VALVE OPERATOR TN-24-400

a. Action

Valve operators MO-1904 and MO-2004 (Electrodyne Model TN-24-400) are located in the RHR valve room and are required to function as part of the residual heat removal system (RHR). These operators are required to be qualified for a temperature of 277F, a pressure of 1.2 psig, a relative humidity of 100%, and a 30-day integrated radiation dose of 5.6×10^6 rads.

b. Resolution

These valve operators are the subject of ongoing investigation with respect to environmental qualification. Qualified valve operators will be in place not later than the first refueling outage in 1984.

c. Justification for Continued Operation

Continued station operation is justified for the following reasons:

1) Radiation doses were calculated using conservative, nonmechanistic models. Mechanistic release models will result in radiation releases which occur several hours after the postulated accident. Therefore, actual doses will be less than those calculated using such conservative assumptions.

2) The room in which the valves are located does not contain a high-energy line; however, it does communicate with the torus room in which a HELB is postulated. Therefore, the HELB conditions in the torus room have been conservatively applied to the room containing these valves. Due to the remoteness of these valves from the source of the HELB, the actual environmental conditions at the valve's location will be less than specified.

3) Failure of the subject motor operators could lead to improper operation of the RHR system through an inability to control the rate of RHR flow into the reactor vessel. The worst case situation would result in a fail closed configuration of both MO-1904 and MO-2004 and cause a loss of all LPCI capability. An analogous scenerio has been evaluated in response to FSAR question 9-6.4 on page 9-6.4-1 of the DAEC FSAR. The conclusion for case three of the question wherein "no LPCI flow will enter the vessel" is that it "will not result in a peak cladding temperature greater than that presented in the FSAR." Therefore, the consequences of a potential failure of these valves has been evaluated and found acceptable.

24. ASCO SOLENOID VALVES AT831665, 8320A6

a. Action

The following solenoid valves (ASCO Models AT831665, 8320A6, and 8302C25) are located in various areas at the DAEC and are required to perform safety functions in several different systems.

SV-1963	SV-1966	SV-2033	SV-2037
SV-5815A	SV-5815B	SV-5825A	SV-5825B
SV-5801A	SV-5801B	SV-7602A	SV-7602B
SV-4303	SV-4306	SV-4307	SV-4308
SV-4311	SV-4312	SV-4313	SV-4640

The solenoid valves are all located in areas which are harsh for radiation only, with the required doses ranging from 2.9×10^5 rads to 1.6×10^8 rads.

b. Resolution

Depending on procurement lead time, these valves will be replaced during one of the next two refueling outages scheduled for fall 1982 and spring 1984. The Model AT831665 valves will be replaced by ASCO Model NP831665E; the Model 8320A6 will be replaced by ASCO Model NP8320A173E; and the Model 8302C25 will be replaced by ASCO Model 206-831-2. All of these models are qualified for a radiation dose in excess of 1.6×10^8 rads to the requirements of NUREG 0588, Category I.

c. Justification for Continued Operation

Continued station operation is justified for the following reasons:

1) Radiation doses were calculated using conservative, nonmechanistic models. Mechanistic release models will result in radiation releases which occur several hours after the postulated accident. Therefore, actual doses will be less than those calculated using such conservative assumptions.

2) The following applies to the identified valves in the SGTS (SV-5815A, B, SV-5825, A, B, SV-5801A, B, SV-7602A, B): At the start of an accident, both trains of the SGTS will be automatically started. Plant operating procedures require that one train be manually isolated such that only one train is operated at a time. The dominant radiation source for the STGS is the loading of the SGTS filters. Therefore, the train which is isolated initially following an accident will not experience the same radiation doses as the operating train. Should the initially operated train fail, the redundant train can be restarted to maintain the SGTS function.

3) The following applies to the identified valves in the RHR system (SV-1963, SV-1966, SV-2033, SV-2037): These solenoid valves control air to their respective control valves to effect isolation of the two independent RHR trains from each other. They are only required to function at long periods of time following an accident in the unlikely event that it is necessary to cross-tie the two independent trains together.

4) The following applies to the identified valves in the containment atmosphere control and primary containment isolation systems (SV-4303, SV-4306, SV-4307, SV-4308, SV-4311, SV-4312, SV-4313, SV-4640): With the exception of SV-4303, the function of these valves is limited to containment isolation which occurs in the first few seconds following an accident. These valves need not function following containment isolation. SV-4303, in addition to the containment isolation function, may also be required to initiate containment purge within 30 days following an accident. This would occur only in the unlikely event of worst-case hydrogen generation combined with minimum drywell leakage.

25. PENN TEMPERATURE SWITCH A-19ABB-6

a. Action

Temperature switches TS-5808A and TS-5808B (Penn Model A-19ABB-6) are located in the standby gas treatment system (SGTS) room at elevation 786' in the reactor building. They are required to function as part of the SGTS. The temperature switches are required to be qualified for a 30-day integrated radiation dose of 1.6×10^8 rads. Qualification for pressure, temperature, and humidity is not required.

b. Resolution

Subsequent investigation and evaluation indicate that it is not feasible to document qualification of these temperature switches. These temperature switches will be replaced with new temperature switches procured in accordance with NUREG 0588, Category I requirements. Depending on procurement lead time, these temperature switches will be replaced during one of the next two refueling outages scheduled for fall 1982 and spring 1984.

c. Justification for Continued Operation

Continued station operation is justified for the following reasons:

1) Radiation doses were calculated using conservative, nonmechanistic models. Mechanistic release models will result in radiation releases which occur several hours after the postulated accident. Therefore, actual doses will be less than those calculated using such conservative assumptions.

2) At the start of an accident, both trains of the SGTS will be automatically started. Plant operating procedures require that one train be manually isolated such that only one train is operated at a time. The dominant radiation source for the SGTS is the loading of the SGTS filters. Therefore, the train which is isolated initially following an accident will not experience the same radiation doses as the operating train. Should the initially operated train fail, the redundant train can be restarted to maintain the SGTS function.

26. GULTON INDUSTRIES COMPANY TEMPERATURE ELEMENT TCA-0646

a. Action

Temperature elements TE-5805A, B, U, V, W, and X (Gulton Industries Company TCA-0646) are located in the standby gas treatment system (SGTS) room at elevation 786' in the reactor building. They are required to function as part of the SGTS. The temperature elements are required to be qualified for a 30-day integrated radiation dose of 1.6×10^8 rads. Qualification for pressure, temperature, and humidity is not required.

b. Resolution

An engineering analysis will be performed for these temperature elements to demonstrate environmental qualification. This analysis will be performed based on information that is available from the Iowa Electric engineering and maintenance files. Should this analysis show that the temperature elements are not qualified for their radiation environment, they will be replaced with qualified components. The engineering analysis will be completed by June 30, 1982. Any subsequent replacement will be completed by the spring 1984 refueling outage.

c. Justification for Continued Operation

Continued station operation is justified for the following reasons:

1) Radiation doses were calculated using conservative, nonmechanistic models. Mechanistic release models will result in radiation releases which occur several hours after the postulated accident. Therefore, actual doses will be less than those calculated using such conservative assumptions.

2) At the start of an accident, both trains of the SGTS will be automatically started. Plant operating procedures require that one train be manually isolated such that only one train is operated at a time. The dominant radiation source for the SGTS is the loading of the SGTS filters. Therefore, the train which is isolated initially following an accident will not experience the same radiation doses as the operating train. Should the initially operated train fail, the redundant train can be restarted to maintain the SGTS function.

27. INDUSTRIAL ENGINEERING EQUIPMENT COMPANY TEMPERATURE SWITCH CT32-23

a. Action

Temperature switches TS-5836A, B (Industrial Engineering Equipment Company Model CT32-23) are located in the standby gas treatment system (SGTS) room at elevation 786' in the reactor building. They are required to function as part of the SGTS. The temperature switches are required to be qualified for a 30-day integrated radiation dose of 1.6×10^8 rads. Qualification for pressure, temperature, and humidity is not required.

b. Resolution

An engineering analysis will be performed for these temperature switches to demonstrate environmental qualification. This analysis will be performed based on information that is available from the Iowa Electric engineering and maintenance files. Should this analysis show that the temperature switches are not qualified for their radiation environment, they will be replaced with qualified components. The engineering analysis will be completed by June 30, 1982. Any subsequent replacement will be completed by the spring 1984 refueling outage.

c. Justification for Continued Operation

Continued station operation is justified for the following reasons:

1) Radiation doses were calculated using conservative, nonmechanistic models. Mechanistic release models will result in radiation releases which occur several hours after the postulated accident. Therefore, actual doses will be less than those calculated using such conservative assumptions.

2) At the start of an accident, both trains of the SGTS will be automatically started. Plant operating procedures require that one train be manually isolated such that only one train is operated at a time. The dominant radiation source for the SGTS is the loading of the SGTS filters. Therefore, the train which is isolated initially following an accident will not experience the same radiation doses as the operating train. Should the initially operated train fail, the redundant train can be restarted to maintain the SGTS function.

III. SUPPLEMENTAL INFORMATION

Appendix A provides a master list of Class 1E electrical equipment required to function under postulated accident conditions. This list and the corresponding data base supporting the summary sheets have been reviewed and modified as a result of Iowa Electric's ongoing comprehensive program developed to address environmental qualification.

This comprehensive program included evaluation as a result of refinement of post-accident environmental conditions and incorporation of ongoing design changes resulting from regulatory direction (e.g., NUREG 0737), and to improve the detail and quality of information presented on the summary sheets. As a result, changes to the DAEC equipment qualification data base submitted in Reference 1 have occurred. These changes include:

reclassification of an equipment's mild or harsh environment status where appropriate, consistent with harsh/mild criteria (see Section V, Item 24) and as described below in Subsections III.A and III.B; reclassification of an equipment's system to more accurately reflect the equipment's safety function; and equipment deletions from the data base where a determination is made that no post-accident safety function exists or because of equipment deletions resulting from design changes.

A. HIGH-PRESSURE COOLANT INJECTION SYSTEM

The following statement was included in the response to IE Bulletin 79-01B (Reference 5).

> An analysis of the high-pressure coolant injection (HPCI) system operation under the postulated accidents defined by NRC IE Bulletin 79-01B has shown that HPCI system components are not subjected to a harsh environment for those accidents requiring the HPCI system to function. The results of the analysis are as follows:
>
> 1. The postulated accident for which the HPCI system must function is a LOCA. Due to containment of the LOCA, the environmental effects on the HPCI system under LOCA are limited to exposure to increased radiation dose.
>
> 2. For a large-break LOCA, reactor coolant system (RCS) depressurization would initiate HPCI rapidly. However, HPCI would not contribute significantly to core cooling due to the rapid RCS depressurization, resulting in low HPCI flow, and the subsequent initiation of LPCI and core spray systems to achieve the core cooling function. Because the HPCI function is only momentary for a large-break LOCA, the radiation exposure of HPCI components due to this size LOCA for the period permitting HPCI flow would not exceed the present HPCI equipment qualification envelope.
>
> 3. For a small-break LOCA, HPCI system operation is initiated by gradual reduction of reactor vessel level or containment high pressure. The HPCI initiation setpoint of low reactor vessel level will cause HCPI flow to reestablish reactor vessel level and prevent fuel exposure and subsequent fuel damage. If fuel damage is prevented, the radiation dose to which the HPCI components are exposed under a sustained small-break LOCA is less than 1×10^4 rads. Because this integrated dose is less than our harsh/nonharsh environment boundary condition of 1×10^5 rads, the HPCI system can be considered to be in a nonharsh environment under small-break LOCA conditions.

4. A study by General Electric on the effects of loss of dc power on the emergency core cooling function was transmitted to the NRC on November 1, 1978. This study demonstrates that BWR-4 plants with the LPCI configuration at the DAEC will not experience fuel damage, even assuming a loss of the HPCI function is coupled with a dc power source failure. This report reinforces our contention that fuel damage and subsequent high-radiation exposure to the HPCI components under small-break LOCA conditions are improbable events, and need not be considered in the environmental conditions for which the HPCI system must function.

5. Although the above concludes that the HPCI system exists in a nonharsh environment for LOCA, the HPCI components were included in the scope of our current review because of their importance as a major safety system.

Because we believe the above analysis to be realistic, we have classified all HPCI system components except containment isolation valves and those needed to isolate a HPCI steam line break as being in mild environments. Accordingly, except for those components mentioned above, HPCI system components are not included in this report.

B. DELETION OF HELB IN RHR CORNER ROOMS

As discussed in Section III.B and illustrated in Table III-2 and Figure III-4 of Reference 1, the original high-energy line break analysis for the DAEC evaluated a break in the RHR corner rooms. Subsequent investigation indicates that the high-energy line in the RHR corner rooms is operated at high-energy conditions only during the RHR steam-condensing mode of operation. This mode of operation, as described in Section 4.8.6.3 of the DAEC FSAR, is an alternate shutdown mode where steam is condensed using an RHR heat exchanger. In the commercial operation of the DAEC to date, this mode of operation has been used rarely. Any future use of this operating mode is limited to specific special case applications and represents a situation where the pipe in the RHR corner room is operated at high-energy conditions less than 1% of the time that the plant is in operation. Accordingly, it is not considered appropriate to evaluate a HELB and its associated environment effects in the RHR system condensing piping. In accordance with this position, the equipment located in the RHR corner rooms will not be environmentally qualified for HELB conditions. This is reflected in the Appendix B3 equipment qualification summary sheets.

IV. SAFETY DISPLAY INSTRUMENTATION

As committed in Iowa Electric's response to the SER (Reference 1), component evaluation sheets have been prepared for all safety display instrumentation located in harsh environments. These sheets are included in Appendix B3 of this report.

As stated in Reference 1, finalization of safety display instrumentation is being pursued as expeditiously as possible. Iowa Electric has developed a schedule for resolution of safety display instrumentation concerns based on implementation of the revised emergency procedures at the time of the fall 1982 refueling outage. This will allow the final list of safety display instruments which must be environmentally qualified to be completed by January 1, 1983. A component evaluation sheet demonstrating environmental qualification or identifying an action item for each component on the final list will be completed by March 1, 1983. Resolution of all action items identified will be complete by the spring 1984 refueling outage based on the availability of qualified components.

The component evaluation sheets included in this report have been completed to the extent possible with available information. As stated above, the component evaluation sheets for all safety display instrumentation will be completed by March 1, 1983.

A. INSTRUMENTS NOT CONSIDERED SAFETY-RELATED

The following instruments are mentioned in the DAEC emergency procedures but are not considered to be safety-related. The instruments listed are only those that are located in harsh environments; however, the justification for why they are not safety-related applies to all components of the associated instrument loops (i.e., associated nonsafety-related instruments located in mild environments).

TE-4328A	TE-4328B	TE-4328C	TE-4328D
TE-4328E	TE-4328F	TE-4328G	TE-4328H
TE-4328J	TE-4328K	TE-4328L	TE-4328M
TE-4386A	TE-4386B	TE-4386C	TE-4386D
TE-4386E	TE-4386F	TE-4386G	TE-4386H
TE-4386J	TE-4386K	TE-4386L	TE-4386M
TE-4400	TE-4401	TE-4402	TE-4403
TE-4404	TE-4405	TE-4406	TE-4407

B. JUSTIFICATION OF NONSAFETY-RELATED INSTRUMENTS

1. Temperature elements TE-4328A through M and TE-4386A through M measure the temperature in the drywell and torus. They perform no automatic safety functions, but are mentioned in the emergency procedures as a means of indicating abnormal temperatures in the drywell or torus. The temperature elements are located in different regions of the drywell and torus such that the environment is different at each element. The probability of all elements failing simultaneously is small. Because all the elements are measuring temperature inside primary containment, the failure of any one element that causes a grossly erroneous reading would be easily detected by comparison to other nearby elements and would not mislead the operator.

2. Temperature elements TE-4400 through TE-4407 are used to provide indication of relief valve opening and closing. These temperature elements are not the primary means to determine relief valve position. Pressure switches are installed in the piping downstream of the relief valves that provide this primary indication. Failure of these temperature elements would not mislead the operator because of other means available to determine valve position.

V. DESCRIPTION OF REPORT DATA SHEETS AND EVALUATION SHEETS

Appendix B3 is an updated summary of environmental qualification information for all equipment required to perform a safety function in a harsh environment. This summary takes the form of Equipment Qualification Report Data Sheets (Figure 5-1) and Evaluation Sheets (Figure 5-2). These sheets are in a format similar to that requested in IE Bulletin 79-01B. The data sheets summarize individual equipment data and environment qualification requirements. The evaluation sheets summarize the acceptability of the equipment's environmental qualification program.

The data and evaluation sheets are organized and presented by manufacturer model type (i.e., by the evaluation number described below). Where identical types of equipment exist (i.e., same manufacturer and model), qualification applies generically. For these types of equipment, a complete evaluation sheet has been prepared once for the generic type of equipment.

In Appendix B3, the evaluation sheet precedes the data sheets for all equipment of that generic type.

A description of the information presented on the data sheets is provided below. The numbers refer to the circled numbers on the sample data sheet (Figure 5-1).

1. EVALUATION NO

Number of Form XXXX-YY which is unique for each manufacturer model type of equipment. This is the primary identifying number associated with the evaluation-related data for all equipment of a given manufacturer model type. The "XXXX" is the EPRI data bank number (from Reference 4) associated with the manufacturer of the equipment. The "YY" is a two-digit number associated with the equipment model.

1A. EQUIPMENT NO

Number of Form XXXX-YY-ZZZ which is unique for each piece of equipment. This is the primary identifying number for equipment-related data. The "XXXX" and "YY" are formed consistent with the evaluation number. The "ZZZ" is an arbitrarily assigned three-digit number unique to each piece of equipment of that manufacturer and model type.

2. COMPONENT

Generic name for the piece of equipment (e.g., motor-operated valve, pressure transmitter).

3. MANUFACTURER

Name of actual manufacturer (not necessarily supplier) of the equipment as determined from vendor drawings, nameplate data during walkdowns, or vendor contacts.

4. MODEL NO

Manufacturer-supplied model number as determined from vendor drawings, nameplate data during walkdowns, or vendor contacts. If a model number is not available, then a serial number or vendor drawing number is provided.

5. SHEET NO, REVISION, DATE

Self-explanatory information provided for control purposes.

6. PLANT ID

Identification number consistent with that appearing on the plant's piping and instrument diagram, instrument index, and equipment lists.

7. SYSTEM

Name of system in which the equipment is physically located and for which the equipment performs its safety function. A list of all safety-related systems is provided in Table 5-1. Equipment not belonging to any one system (e.g., electric cable) is included in the system referred to as ancillary components.

8. PURCHASE ORDER

The word "APED" (if a General Electric purchase), the Bechtel purchase order number (if a Bechtel purchase), a DCR number, or the word "field" (for field purchases) as determined from the instrument index, equipment list, or vendor documents.

9. FUNCTION/SERVICE

Chosen consistent with the system function, to be one of the following: achieve cold reactor shutdown, containment isolation, reactor core cooling, and containment heat removal; components added as a result of NUREG 0578; or required to prevent the release of radioactive material to the environment in excess of the guidelines of 10 CFR 100. This information is being developed and not final at this time.

10. ACCURACY: SPEC

Required or specified accuracy as determined from the FSAR or the equipment's technical specification. This is applicable to instruments only.

11. ACCURACY: DEMO

Demonstrated accuracy as determined from qualification test reports or vendor information. This is applicable to instruments only.

12. LOCATION

Abbreviation of room or area location containing the equipment as determined by location drawings or by walkdown. A list of locations is provided in Table 5-2.

13. FLOOR ELEVATION

Floor elevation of the room or location containing the piece of equipment. The combination of location and floor elevation sufficiently locates the equipment for determining environmental condition requirements.

14. FLOOD LEVEL ELEVATION

Post-accident flood level for the equipment's location as determined from an approved calculation. For locations not subject to post-accident flooding, NA (not applicable) is indicated.

15. ABOVE FLOOD LEVEL

"Yes" or "no," indicating whether the equipment will be above the post-accident flood level. This is determined from a review of equipment location design drawings and a review of project design criteria.

Note: For the following accidents (Items 16 through 22), an "X" indicates the equipment is both exposed to the effects of the accident and is essential to either mitigating the accident or achieving safe shutdown.

16. LOCA

Design basis loss-of-coolant accident (worst-case recirculation line break within drywell)

17. MSLB

Main steam line break (pipe break in main steam system outside drywell)

18. FWLB

Feedwater line break (pipe break in main feedwater system)

19. HPCI

High-pressure coolant injection (pipe break in high-pressure coolant injection system steam supply)

20. RCIC

Reactor core isolation cooling (pipe break in reactor core isolation cooling system steam supply)

21. RWCU

Reactor water cleanup (pipe break in reactor water cleanup system)

22. SCRM

Scram discharge volume (pipe break in scram discharge volume system). This is for potential future use.

23. WALKDOWN

(Future use)

24. ENVIRONMENT

"Harsh" or "mild" describing the type of environment the equipment is subjected to before or during the time the equipment performs its safety function. To be classified as a harsh environment, a location must meet either of the following two criteria:

1. The post-LOCA integrated radiation dose over the required operating time exceeds 1×10^5 rads.

2. The nonradiation parameters as a result of a HELB (temperature, pressure, humidity, etc) exceed the values established as design parameters for the HVAC design at that location. The design parameters for the HVAC are defined by the existing plant design specifications.

All other plant locations are designated as mild environments.

25. SYSTEM

A two-digit system code determined from Item 7 and Table 5-1.

26. P&ID

Piping and instrument diagram drawing number and grid coordinates describing functional location of the equipment.

27. LOC DWG

Location drawing number and grid coordinates showing physical plant location of the equipment.

28. ELEC SCHEME

Electrical scheme and sheet number showing electrical power supply schematic for the equipment. The scheme and sheet number should be separated by a slash (e.g., E122/4).

29. VDR ID

Vendor identification number (applicable to General Electric-supplied equipment, Target Rock solenoid valves, and ASCO solenoid valves).

30. REMARKS (OPTIONAL)

Additional equipment-related information, such as a vendor drawing number which indicates manufacturer and model number.

31. REQUIRED OPERATING TIME

Required post-accident operability period (either 1 hour or 30 days) as determined from knowledge of the equipment's safety function. Equipment which must operate only once early in the accident or for a very short period post-accident (such as automatic protection systems which quickly place the plant in a stabilized condition) will have an operating time of 1 hour. (The 1 hour is chosen to provide substantial margin.) Equipment whose function requires long-term operation (beyond the point of reaching the initial stabilized condition) will have an operating time of 30 days.

32. TEMP (F)

Post-accident temperature (time-dependent curve for drywell, peak for other locations) to which the equipment is subjected before or during the performance of its safety function.

33. PRESSURE

Post-accident pressure in psig (time-dependent curve for drywell, peak for other locations) to which the equipment is subjected before or during the performance of its safety function.

34. RELATIVE HUMIDITY

Peak post-accident relative humidity (%) to which the equipment is subjected before or during the performance of its safety function.

35. CHEMICAL SPRAY

Description of spray ("demin water" for inside drywell or "Not Applicable Outside Drywell" for outside drywell) to which equipment is subjected before or during the performance of its safety function.

36. SEISMIC

(Future use)

37. RADIATION

Integrated radiation dosage in rads consistent with operating time (Item 31).

38. AGING

(Future use)

39. SUBMERGENCE

"Yes" or "Not Applicable" consistent with Item 15.

40. REMARKS (OPTIONAL)

Any explanatory remarks related to Items 31 through 39 may be provided here.

A description of the information presented on the evaluation sheets is provided below. The numbers refer to the circled numbers on the sample evaluation sheet (Figure 5-2).

1 THROUGH 5. Refer to description of information appearing on data sheet.

31W THROUGH 39W. REQUIRED ENVIRONMENT

The most limiting (worst-case) value of the environmental parameter as determined from a review of Items 31 through 39 of the associated data sheets for all equipment of that manufacturer model type.

40. Not used.

41 THROUGH 49. DOCUMENTATION REFERENCE REQD

A three-digit number associated with the last three numbers of the equipment number which determined the worst-case environmental parameter (Items 31W through 39W).

50. Not used.

51 THROUGH 59. QUALIFICATION

The value or explanatory note describing the environmental parameter for which the equipment has been demonstrated (by test or analyses) to remain operable.

60. Not used.

61 THROUGH 69. DOCUMENTATION REFERENCE QUAL

A letter reference corresponding to a qualification document in the reference list.

70. Not used.

71 THROUGH 79. QUALIFICATION METHOD

Method (type test, analysis, or combination) by which qualification for the environmental parameter being considered was demonstrated.

80. Not used.

81 THROUGH 89. OUTSTANDING ITEMS

"None" or a note reference describing the environmental qualification deficiency.

90. REFERENCE

Description of document referenced in Items 61 through 69.

91. NOTES

Explanatory notes referenced in Items 51 through 59 or 81 through 89.

VI. LIST OF REFERENCES

1. Iowa Electric letter L.D. Root to H. Denton LDR-81-257 dated September 3, 1981, transmitting the DAEC Response to the NRC Safety Evaluation Report on Environmental Qualification of Safety-Related Electrical Equipment

2. ITT Barton Report R3-288A-1 dated May, 1980

3. Barton Letter to Bechtel dated June 10, 1980

4. EPRI Equipment Qualification Data Bank Users Manual Project 1707-2, Revision 0, January, 1981

5. Iowa Electric letter L.D. Root to J. Keppler LDR-80-310 dated October 31, 1980, transmitting the DAEC Response to NRC IE Bulletin 79-01B Environmental Qualification of Class 1E Equipment

Sheet No.
Revision: (5)
Date:

(1)
Owner:
Facility:
Unit:
Docket No:
Equip ID: (1A)

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks (40)
System: (7)	Operating Time	(31)	
Plant I.D. Number: (6)	Temperature (°F)	(32)	
Component: (2)	Pressure (PSIG)	(33)	
Manufacturer: (3)	Relative Humidity (%)	(34)	
Model Number: (4)	Chemical Spray	(35)	
Purchase Order Number: (8)	Seismic	(36)	
Function/Service: (9)	Radiation (Rad)	(37)	
Accuracy: Spec: (10) Demo: (11)	Aging	(38)	
Location: (12)	Submergence	(39)	
Floor Elevation: (13)			
Flood Level Elevation: (14) Above Flood Level: Yes: No: (15)			

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System:	Operating Time		
Plant I.D. Number:	Temperature (°F)		
Component:	Pressure (PSIG)		
Manufacturer:	Relative Humidity (%)		
Model Number:	Chemical Spray		
Purchase Order Number:	Seismic		
Function/Service:	Radiation (Rad)		
Accuracy: Spec: Demo:	Aging		
Location:	Submergence		
Floor Elevation:			
Flood Level Elevation: Above Flood Level: Yes: No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	(16)	(17)	(18)	(19)	(20)	(21)	(22)

Walkdown: (23) Environment: (24) System: (25) P&ID: (26)
Loc Dwg: (27) Elec Scheme: (28) VDR ID: (29)
Remarks: (30)

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM

Walkdown: Environment: System: P&ID:
Loc Dwg: Elec Scheme: VDR ID:
Remarks:

EQDS-06

EQUIPMENT QUALIFICATION REPORT DATA SHEET (SAMPLE)

Figure 5-1

Owner: (1)
Facility:
Unit
Docket No:

Sheet No:
Revision (5)
Date:

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: (2) Manufacturer: (3) Model Number: (4)	Operating Time	31W		51	41		61	71	81
	Temperature (°F)	32W		52	42		62	72	82
	Pressure (PSIG)	33W		53	43		63	73	83
	Relative Humidity (%)	34W		54	44		64	74	84
	Chemical Spray	35W		55	45		65	75	85
	Seismic	36W		56	46		66	76	86
	Radiation (Rad)	37W		57	47		67	77	87
	Aging	38W		58	48		68	78	88
	Submergence	39W		59	49		69	79	89

DOCUMENTATION REFERENCES	NOTES
90	91

EQ05 04

EQUIPMENT QUALIFICATION REPORT EVALUATION SHEET (SAMPLE)

Figure 5-2

DUANE ARNOLD ENERGY CENTER

MASTER LIST
OF
ALL ENGINEERED SAFETY FEATURES SYSTEMS
REQUIRED TO FUNCTION UNDER POSTULATED ACCIDENT CONDITIONS
(IN ACCORDANCE WITH IE BULLETIN 79-01B)

The applicable systems are listed below.

1. Deleted
2. Control Rod Drive System
3. Primary Containment Isolation and Nuclear Steam Supply Shutoff System
4. Deleted
5. Main Steam Line Isolation Valve Leakage Control
6. High-Pressure Coolant Injection System
7. Automatic Depressurization System
8. Core Spray System
9. Residual Heat Removal System
10. Standby Gas Treatment System
11. Standby AC Power Supply
12. DC Power Supply
13. Residual Heat Removal Service Water System
14. Emergency Service Water System
15. Deleted
16. Reactor Protection System
17. Reactor Core Isolation Cooling System (Alternative Use Only)
18. Engineered Safeguard Rooms Heating and Ventilating System
19. Control Building Heating and Ventilating System
20. Standby Diesel Generator Room Ventilation System

21. Emergency Service Water Pump Room Heating and Ventilating System
22. Intake Structure Heating and Ventilating System
23. Deleted
24. River Water Supply
25. Electrical and Control Panels
26. Pumphouse Drain Sump
27. Leak Detection Systems
28. Deleted
29. Containment Atmosphere Control
30. Deleted
31. Main Feedwater (Alternative Use Only)
32. Ancillary Components
33. Area Radiation Monitoring (Alternative Use Only)
34. Nuclear Boiler/Containment Systems
35. NUREG 0578 Modifications
36. Safety Display Instrumentation

Table 5-2

LIST OF LOCATIONS CONTAINING SAFETY-RELATED EQUIPMENT

Description of Location	Name of Location As It Appears on Report Data Sheet
Above CRD repair room	A CRD rr
Control building, control room	CB ctl rm
Control building H&V room	CB H&V rm
Diesel generator room	DG room
Drywell	Drywell
Essential switchgear room	E SWGR rm
H&V control valve room	H&V control valve rm
HPCI room	HPCI room
Intake structure	Intake str
Northeast corner room	NE crnr rm
Northwest corner room	NW crnr rm
Offgas stack building	Offgas stack
Outside turbine building	Outside TB
Pumphouse	Pumphouse
RCIC room	RCIC room
RHR valve room	RHR vlv rm
Radwaste Building	Rad bldg
Radwaste tank room	Radwaste tank room
Reactor building west	RB-W
Reactor building, north	RB-N
Reactor building, south	RB-S
Reactor vessel	RV
Reactor water cleanup pump room	RWCU pump room
Reactor water cleanup heat exchanger room	RWCU heat exch room
Recombiner H&V room	Recombiner H&V room
Southeast corner room	SE crnr rm
Southwest corner room	SW crnr rm
Standby gas treatment room	SGT room
Steam tunnel	Steam tunnel
Torus room, north	Torus room north
Torus room, south	Torus room south
Turbine building	Turbine bldg
Turbine building, north	Turbine bldg north
Turbine building, south	Turbine bldg south
125 V battery room	125V battery room
250 V battery room	250V battery room
24 V battery room	24V battery room
Various	Various

Note: When the equipment is located in a panel or motor control center, the equipment location is followed by the panel or MCC designation.

MASTER LIST CLASS 1E ELECTRICAL EQUIPMENT REQUIRED TO FUNCTION UNDER POSTULATED ACCIDENT CONDITIONS

APPENDIX A

MASTER LIST CLASS 1E ELECTRICAL EQUIPMENT REQUIRED TO FUNCTION UNDER POSTULATED ACCIDENT CONDITIONS

Table of Contents

System Name	System No	Number of Pages
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River Water Supply	24	4
Safety Display Instrumentation	36	22
Standby AC Power Supply	11	3
Standby Diesel Generator Room Vent System	20	1
Standby Gas Treatment System	10	8

Note: This equipment list is sorted by system. The system listings are arranged alphabetically by system name.

SYSTEM: ANCILLARY COMPONENTS

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
JX-101A	ELECTRICAL PENETRATION	GE	NS03	DRYWELL	757' 4"	HARSH	M115/E5	E62	E369
JX-101B	ELECTRICAL PENETRATION	GE	NS03	DRYWELL	757' 4"	HARSH	M115/E5	E62	E369
JX-103	ELECTRICAL PENETRATIO	GE	NS02	DRYWELL	761' 2"	HARSH	M115/E5	E62	E369
JX-104A	ELECTRICAL PENETRATIONS	GE	NS04	DRYWELL	761' -2"	HARSH	M115/E5	E62	E369
JX-104B	ELECTRICAL PENETRATIONS	GE	NS04	DRYWELL	761' -2"	HARSH	M115/E5	E62	E369
JX-104C	ELECTRICAL PENETRATIONS	GE	NS04	DRYWELL	757' -4"	HARSH	M115/E5	E62	E369
JX-104D	ELECTRICAL PENETRATIONS	GE	NS04	DRYWELL	757' -4"	HARSH	M115/E5	E62	E369
JX-105A	ELECTRICAL PENETRATIO	GE	NS02-I	DRYWELL	761' -2"	HARSH	M115/E5	E62	E369
JX-105B	ELECTRICAL PENETRATIO	GE	NS02-I	DRYWELL	761' -2"	HARSH	M115/E5	E62	E369
JX-105C	ELECTRICAL PENETRATIO	GE	NS02-I	DRYWELL	761' -2"	HARSH	M115/E5	E62	E369
JX-105D	ELECTRICAL PENETRATIO	GE	NS02-I	DRYWELL	761' -2"	HARSH	M115/E5	E62	E369
SPECIAL COA XIAL CABLE	SPECIAL COAXIAL CABLE	RAYCHEM	N/A	VARIOUS	V'RIO	HARSH	NA	NA	NA
SPLICING KI TS	SPLICING KITS	RAYCHEM	WCSF-N	VARIOUS	V'RIO	HARSH	NA	NA	NA
TERMINAL BL OCKS	TERMINAL BLOCKS	AMERACE CORP	NQB	VARIOUS	V'RIO	HARSH			
5KV CABLE	5 KV CABLE	KERITE	HT KERITE WIT NS JACKET	OUTSIDE DRYWELL	V'RIO	HARSH	NA	NA	NA
600V CABLE	600V POWER AND CONTROL CABLES	OKONITE	NA	VARIOUS	V'RIO	HARSH	NA	NA	NA

SYSTEM: ANCILLARY COMPONENTS

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
600V CABLE	600V SHIELDED CABLES	OKONITE	1/C#14,4/C#14	VARIOUS	V'RIO	HARSH	NA	NA	NA

SYSTEM: AUTOMATIC DEPRESS- URIZATION SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
HS-4400	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M114/F5	E121/2	E338/D5
HS-4402	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M114/D6	E121/2	E338/D5
HS-4405	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M114/D4	E121/2	E338/D5
HS-4406	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M114/F6	E121/2	E338/D5
KY-4400A	RELAY	GE	CR2820 B414AA	CB CTL RM/1C-45	786' 0"	MILD	M114/F6	E122/2	E338/D6
KY-4400B	RELAY	GE	CR2820 B414AA	CB CTL RM/1C-45	786' 0"	MILD	M114/F4	E122/2	E338/D6
PS-1917A	PRESSURE SWITCH	STATIC-O-RING	5N-AA3	NW CRNR RM/1C-129B	716' 9"	HARSH	M119/B6	E121/56	E316/E7
PS-1917B	PRESSURE SWITCH	STATIC-O-RING	12N-AA5	NW CRNR RM/1C-129B	716' 9"	HARSH	M119/B6	E121/56A	E316/E7
PS-1925A	PRESSURE SWITCH	STATIC-O-RING	5N-AA3	NW CRNR RM/1C-129B	716' 9"	HARSH	M119/B7	E121/56	E316/E7
PS-1925B	PRESSURE SWITCH	STATIC-O-RING	12N-AA5	NW CRNR RM/1C-129B	716' 9"	HARSH	M119/B7	E121/56A	E316/E7
PS-2023A	PRESSURE SWITCH	STATIC-O-RING	5N-AA3	SE CRNR RM/1C-129A	716' 9"	HARSH	M120/B4	E121/56	E316/E7
PS-2023B	PRESSURE SWITCH	STATIC-O-RING	12N-AA5	SE CRNR RM/1C-129A	716' 9"	HARSH	M120/B4	E121/56	E317/E3
PS-2024A	PRESSURE SWITCH	STATIC-O-RING	5N-AA3	SE CRNR RM/1C-129A	716' 9"	HARSH	M120/B2	E121/56	E316/E7
PS-2024B	PRESSURE SWITCH	STATIC-O-RING	5N-AA3	SE CRNR RM/1C-129A	716' 9"	HARSH	M120/B2	E121/56	E316/E7
PS-2107A	PRESSURE SWITCH	STATIC-O-RING	5N-AA3	SE CRNR RM/1C-123	716' 9"	HARSH	M121/E3	E121/9	E317/D3
PS-2107B	PRESSURE SWITCH	STATIC-O-RING	5N-AA3	SE CRNR RM/1C-123	716' 9"	HARSH	M121/D3	E121/9	E317/D3

SYSTEM: AUTOMATIC DEPRESS- URIZATION SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
PS-2127A	PRESSURE SWITCH	STATIC-O-RING	5N-AA3	NW CRNR RM/1C-124	716' 9"	HARSH	M121/C5	E121/10	E316/E7
PS-2127B	PRESSURE SWITCH	STATIC-O-RING	5N-AA3	NW CRNR RM/1C-124	716' 9"	HARSH	M121/C5	E121/10	E316/E7
PS-4310A	PRESSURE SWITCH	STATIC-O-RING	12N-AA5	RB-S/1C-122	757' -6"	MILD	M143/D7	E121/2	E319/E5
PS-4311A	PRESSURE SWITCH	STATIC-O-RING	12N-AA5	SW CRNR RM/1C-58	716' 9"	MILD	M143/E6	E121/2	E317/D7
PS-4312A	PRESSURE SWITCH	STATIC-O-RING	12N-AA5	RB-S/1C-126B	757' -6"	MILD	M143/E6	E121/2	E319/G5
PS-4313A	PRESSURE SWITCH	STATIC-O-RING	12N-AA5	RB-N/1C-121	757' -6"	MILD	M143/F6	E121/2	E318/F4
SV-4400	SOLENOID VALVE	AUTOMATIC VALVE C	C5450-5	DRYWELL	775' 10"	HARSH	M114/F5	E121/2	E330/C4
SV-4402	SOLENOID VALVE	AUTOMATIC VALVE C	C5450-5	DRYWELL	775' 10"	HARSH	M114/D6	E121/2	E330/B4
SV-4405	SOLENOID VALVE	AUTOMATIC VALVE C	C5450-5	DRYWELL	775' 10"	HARSH	M114/D4	E121/2	E330/F4
SV-4406	SOLENOID VALVE	AUTOMATIC VALVE C	C5450-5	DRYWELL	775' 10"	HARSH	M114/F5	E121/2	E330/F4

SYSTEM: CONTAINMENT ATMOSPHERE CONTROL

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
MO-4320A	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	TORUS ROOM NORTH	716' 9"	HARSH	M143/C3	E122/31	E317/B4
MO-4320B	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	HPCI ROOM	731' 9"	HARSH	M143/C4	E122/31	E317/B3
MO-4323A	MOTOR OPERATED VALVE	LIMITORQUE	SMB-00, AC-CL	CAD VALVE HOUSE	757' -6"	MILD	M143/B3	E122/30	E354/F1
MO-4323B	MOTOR OPERATED VALVE	LIMITORQUE	SMB-00, AC-CL	CAD VALVE HOUSE	757' -6"	MILD	M143/B4	E122/30	E354/F1
PDIS-4304	DIFF,PRESS. IND. SWIT	BARTON	288	NE CRNR RM	735' 7"	HARSH	M143/B7	E122/23	M405-1/6
PDIS-4305	DIFF,PRESS. IND. SWIT	BARTON	288	NE CRNR RM	735' 7"	HARSH	M143/B8	E122/23	M405-1/6
PS-4348	PRESSURE SWITCH	BARTON	289	RB-N	757' 6"	HARSH	M143/C4	E122/12	E318/A5
PS-4365A	PRESSURE SWITCH	BARKSDALE	D1T-A80	RB-S	757' 6"	MILD	M143/F6	E122/31	E319/E5
PS-4365B	PRESSURE SWITCH	BARKSDALE	D1T-A80	RB-N	786' 0"	MILD	M143/D5	E122/31	E320-D3
SV-4129A	SOLENOID VALVE	ASCO	8030A71	OFFGAS STACK/1C-132	740'	MILD	M141/F2	E122/27	E370/E3
SV-4129B	SOLENOID VALVE	ASCO	8030A17	OFFGAS STACK/1C-132	740'	MILD	M141/F2	E122/27	E338/C4
SV-4300	SOLENOID VALVE	ASCO	AT831665	NE CRNR RM	735' 7"	MILD	M143/D7	E122/12	E316/E2
SV-4301	SOLENOID VALVE	ASCO	AT831665	NE CRNR RM	735' 7"	MILD	M143/C8	E122/13	E316/E2
SV-4302	SOLENOID VALVE	ASCO	AT831665	H&V CONTROL VALVE RM	812' 0"	MILD	M143/D7	E122/12	E322/D4
SV-4303	SOLENOID VALVE	ASCO	AT831665	H&V CONTROL VALVE RM	812' 0"	HARSH	M143/D7	E122/13	E322/D4
SV-4304	SOLENOID VALVE	ASCO	AT831665	NE CRNR RM	735' 7"	MILD	M143/B7	E122/23	E316/F3

SYSTEM: CONTAINMENT ATMOSPHERE CONTROL

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
SV-4305	SOLENOID VALVE	ASCO	AT831665	NE CRNR RM	735' 7"	MILD	M143/B7	E122/23	E316/F3
SV-4306	SOLENOID VALVE	ASCO	AT831665	RHR VALVE ROOM	757' 6"	HARSH	M143/F1	E122/13	E318/E6
SV-4307	SOLENOID VALVE	ASCO	AT831665	RHR VALVE ROOM	757' 6"	HARSH	M143/F2	E122/12	E318/D6
SV-4308	SOLENOID VALVE	ASCO	AT831665	RHR VALVE ROOM	757' 6"	HARSH	M143/E3	E122/12	E318/D6
SV-4309	SOLENOID VALVE	ASCO 8	8302625	NE CRNR RM	716' 9"	HARSH	M143/C7	E122/12	E316/E2
SV-4310	SOLENOID VALVE	ASCO	NP831665E	H&V CONTROL VALVE RM	812' 0"	HARSH	M143/D7	E122/12	E322/D4
SV-4311	SOLENOID VALVE	ASCO	AT831665	RHR VALVE ROOM	757' 6"	HARSH	M143/F3	E122/13	E318/D6
SV-4312	SOLENOID VALVE	ASCO	AT831665	RHR VALVE ROOM	757' 6"	HARSH	M143/F3	E122/12	E318/D6
SV-4313	SOLENOID VALVE	ASCO	AT831665	RHR VALVE ROOM	757' 6"	HARSH	M143/F3	E122/12	E318/D6
SV-4331A	SOLENOID VALVE	TARGET ROCK	72V AND 81K	RHR VALVE ROOM	757' 6"	HARSH	M143/C2	E122/34	E319/G6
SV-4331B	SOLENOID VALVE	TARGET ROCK	72V AND 81K	RHR VALVE ROOM	757' 6"	HARSH	M143/C2	E122/34	E319/G6
SV-4332A	SOLENOID VALVE	TARGET ROCK	72V AND 81K	RB-S	786' 0"	HARSH	M143/C2	E122/33	E321/F6
SV-4332B	SOLENOID VALVE	TARGET ROCK	72V AND 81K	RB-S	786' 0"	HARSH	M143/C2	E122/33	E321/F6
SV-4333A	SOLENOID VALVE	TARGET ROCK	72V AND 81K	TORUS ROOM NORTH	716' 9"	HARSH	M143/C2	E122/34	E317/F6
SV-4333B	SOLENOID VALVE	TARGET ROCK	72V AND 81K	TORUS ROOM NORTH	716' 9"	HARSH	M143/C2	E122/34	E317/E6
SV-4334A	SOLENOID VALVE	TARGET ROCK	72V AND 81K	TORUS ROOM NORTH	716' 9"	HARSH	M143/C2	E122/33	E316/D6

SYSTEM: CONTAINMENT ATMOSPHERE CONTROL

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
SV-4334B	SOLENOID VALVE	TARGET ROCK	72V AND 81K	TORUS ROOM NORTH	716' 9"	HARSH	M143/C2	E122/33	E316/D6
SV-8101A	SOLENOID VALVE	TARGET ROCK	72V AND 81K	RB-S	757' 6"	HARSH	M181/F5	E122/29	E319/E6
SV-8101B	SOLENOID VALVE	TARGET ROCK	72V AND 81K	RB-N	757' 6"	HARSH	M181/F4	E122/29	E318/E4
SV-8102A	SOLENOID VALVE	TARGET ROCK	72V AND 81K	RB-S	757' 6"	HARSH	M181/G5	E122/29	E319/E6
SV-8102B	SOLENOID VALVE	TARGET ROCK	72V AND 81K	RB-N	757' 6"	HARSH	M181/G4	E122/29	E318/E4
SV-8103A	SOLENOID VALVE	TARGET ROCK	72V AND 81K	RB-S	757' 6"	HARSH	M181/F5	E122/29	E319/E6
SV-8103B	SOLENOID VALVE	TARGET ROCK	72V AND 81K	RB-N	757' 6"	HARSH	M181/F4	E122/29	E318/E4
SV-8104A	SOLENOID VALVE	TARGET ROCK	72V AND 81K	RB-S	757' 6"	HARSH	M181/F5	E122/29	E319/E6
SV-8104B	SOLENOID VALVE	TARGET ROCK	72V AND 81K	RB-N	757' 6"	HARSH	M181/F4	E122/29	E318/F4
SV-8105A	SOLENOID VALVE	TARGET ROCK	72V AND 81K	RB-S	757' 6"	HARSH	M181/E5	E122/29	E319/E6
SV-8105B	SOLENOID VALVE	TARGET ROCK	72V AND 81K	RB-N	757' 6"	HARSH	M181/E4	E122/29	E318/E5
SV-8106A	SOLENOID VALVE	TARGET ROCK	72V AND 81K	RB-S	757' 6"	HARSH	M181/E5	E122/29	E319/E6
SV-8106B	SOLENOID VALVE	TARGET ROCK	72V AND 81K	RB-N	757' 6"	HARSH	M181/E4	E122/29	E318/E5
SV-8107A	SOLENOID VALVE	TARGET ROCK	72V AND 81K	TORUS ROOM NORTH	716' 9"	HARSH	M181/D5	E122/29	E316/D3
SV-8107B	SOLENOID VALVE	TARGET ROCK	72V AND 81K	TORUS ROOM SOUTH	716' 9"	HARSH	M181/D4	E122/29	E317/F7
SV-8108A	SOLENOID VALVE	TARGET ROCK	72V AND 81K	TORUS ROOM NORTH	716' 9"	HARSH	M181/E5	E122/29	E316/D3

SYSTEM: CONTAINMENT ATMOSPHERE CONTROL

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
SV-8108B	SOLENOID VALVE	TARGET ROCK	72V AND 81K	TORUS ROOM SOUTH	716' 9"	HARSH	M181/E4	E122/29	E317/F7
SV-8109A	SOLENOID VALVE	TARGET ROCK	72V AND 81K	TORUS ROOM SOUTH	716' 9"	HARSH	M181/D5	E122/29	E317/E4
SV-8109B	SOLENOID VALVE	TARGET ROCK	72V AND 81K	TORUS ROOM NORTH	716' 9"	HARSH	M181/D4	E122/29	E316/E6
SV-8110A	SOLENOID VALVE	TARGET ROCK	72V AND 81K	TORUS ROOM SOUTH	716' 9"	HARSH	M181/D5	E122/29	E317/E4
SV-8110B	SOLENOID VALVE	TARGET ROCK	72V AND 81K	TORUS ROOM NORTH	716' 9"	HARSH	M181/D4	E122/29	E316/E6
SV-8114A	SOLENOID VALVE	ATKOMATIC	31840	RB-S	757' 6"	HARSH	M181/G6	E122/26	E319/E6
SV-8114B	SOLENOID VALVE	ATKOMATIC	31840	RB-N	757' 6"	HARSH	M181/G3	E122/26	E318/F6
SV-8115A	SOLENOID VALVE	ATKOMATIC	31840	RB-S	757' 6"	HARSH	M181/F6	E122/26	E319/E6
SV-8115B	SOLENOID VALVE	ATKOMATIC	31840	RB-N	757' 6"	HARSH	M181/F3	E122/26	E318/F6
SV-8116A	SOLENOID VALVE	ATKOMATIC	31840	RB-S	757' 6"	HARSH	M181/E6	E122/26	E319/E6
SV-8116B	SOLENOID VALVE	ATKOMATIC	31840	RB-N	757' 6"	HARSH	M181/E3	E122/26	E318/F6
SV-8117A	SOLENOID VALVE	ATKOMATIC	31840	RB-S	757' 6"	HARSH	M181/C7	E122/26	M405/C6
SV-8117B	SOLENOID VALVE	ATKOMATIC	31840	RB-N	757' 6"	HARSH	M181/C2	E122/26	M405/F6
SV-8117C	SOLENOID VALVE	ATKOMATIC	31840	RB-S	757' 6"	HARSH	M181/D6	E122/26	M405-2/*
SV-8117D	SOLENOID VALVE	ATKOMATIC	31840	RB-N	757' 6"	HARSH	M181/D3	E122/26	M405/F6
1P-28A	PUMP MOTOR	TOKYO SHIBAURA	MB-301	RB-S/1C-219A	757' -6"	MILD	M181/H6	E122/27	E319/E6

SYSTEM: CONTAINMENT ATMOSPHERE CONTROL

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
1P-28B	PUMP MOTOR	TOKYO SHIBAURA	MB-301	RB-N/1C-219A	757' -6"	MILD	M181/H6	E122/27	E319/E6
1P-29A	PUMP MOTOR	TOKYO SHIBAURA	MB-302	RB-S/1C-219B	757' -6"	MILD	M181/H3	E122/27	E318/G6
1P-29B	PUMP MOTOR	TOKYO SHIBAURA	MB-301	RB-N/1C-219B	757' -6"	MILD	M181/H3	E122/27	E318/G6

SYSTEM: CONTROL BUILDING H&V SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
CS-6132A		DAZIC	CI2120	CB H&V RM	800' -4"	MILD	M161/E1	E113/40	E341/G6
CS-6132B		DAZIC	CI2120	CB H&V RM	800' -4"	MILD	M161/F1	E113/40	E341/G6
CS-6132C		DAZIC	CI2120	CB H&V RM	800' -4"	MILD	M161/F1	E113/40	E341/G6
CU-7327A	CONTROL UNIT	FENWAL	35003-0	CB H&V RM	807' -8"	MILD	M173/G5	E113/34	E341/G3
CU-7327B	CONTROL UNIT	FENWAL	35003-0	CB H&V RM	800' -4"	MILD	M173/D4	E113/34	E341/G7
CU-7329A	CONTROL UNIT	FENWAL	35003-0	CB H&V RM	807' -8"	MILD	M173/G4	E113/34	E341/G3
CU-7329B	CONTROL UNIT	FENWAL	35003-0	CB H&V RM	800' -4"	MILD	M173/C4	E113/34	E341/G7
DPS-7304A	DIFFERENTIAL PRESSURE SWITCH	DWYER	1636-25	CB H&V RM	800' -4"	MILD	M173/G6	E113/37	E341/F3
DPS-7304B	DIFFERENTIAL PRESSURE SWITCH	DWYER	1636-25	CB H&V RM	800' -4"	MILD	M173/D6	E113/37	E341/F8
EC-7304A		PACIFIC CHROMALOX	3C5CR-025-348	CB H&V RM	800' -4"	MILD	M173/H3	E113/37	E341/G3
EC-7304B		PACIFIC CHROMALOX	3C5CR-025-348	CB H&V RM	800' -4"	MILD	M173/E6	E113/37	E341/G7
E/PC-7320A		JOHNSON CONTROLS	N-6810	CB H&V RM/1C-162	807' -8"	MILD	M173/F2	E113/99	E341/G3
E/PC-7320B		JOHNSON CONTROLS	N-6810	CB H&V RM/1C-163	800' -4"	MILD	M173/E2	E113/99	E341/G7
FIC-7320A	FLOW INDICATING CONTROL	GE	540-01	CB CTL RM/1C-26A	786' 0"	MILD	M173/F5	E113/99	E338/E4
FIC-7320B	FLOW INDICATING CONTROL	GE	540-01	CB CTL RM/1C-26B	786' 0"	MILD	M173/F5	E113/99	E338/E4
FS-6924A	FLOW SWITCH	CUSTOM COMPONENT	642D	RB-N	812' 0"	MILD	M169/C3	E113/30	E322/G4

SYSTEM: CONTROL BUILDING H&V SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
FS-6924B	FLOW SWITCH	CUSTOM COMPONENT	642D	RB-N	812' 0"	MILD	M169/C2	E113/31	E322/F4
FS-6925A	FLOW SWITCH	CUSTOM COMPONENT	642D	RB-N	812' 0"	MILD	M169/D2	E113/30	E322/G4
FS-6925B	FLOW SWITCH	CUSTOM COMPONENT	642D	RB-N	812' 0"	MILD	M169/D2	E113/31	E322/F4
FS-7321A	FLOW SWITCH	GE	560	CB CTL RM/1C-26A	786' 0"	MILD	M173/F5	E113/35	E338/E4
FS-7321B	FLOW SWITCH	GE	560	CB CTL RM/1C-26B	786' 0"	MILD	M173/E5	E113/35	E338/E4
FT-7320A	FLOW TRANSMITTER	GE	554	CB H&V RM	800' -4"	MILD	M173/E7	E113/99	E341/G3
FT-7320B	FLOW TRANSMITTER	GE	554	CB H&V RM	800' -4"	MILD	M173/E7	E113/99	E341/G7
HS-6102	HAND SWITCH	GE	CR2940	CB CTL RM/1C-26A	786' 0"	MILD	M161/F7	E113/19	E338/E4
HS-6104A	HAND SWITCH	GE	CR2940-US203E	CB CTL RM/1C-26A	786' 0"	MILD	M161/G5	E113/27	E338/E4
HS-6104B	HAND SWITCH	GE	CR2940-US203E	CB CTL RM/1C-26B	786' 0"	MILD	M161/E5	E113/27	E338/E4
HS-6104U	HAND SWITCH	GE	CR2940-US203E	ESS SWITCHGEAR ROOM	757' -6"	MILD	M161/H5	E113/27	E335/NS
HS-6104V	HAND SWITCH	GE	CR2940-US203E	ESS SWITCHGEAR ROOM	757' -6"	MILD	M161/E6	E133/27	E335/NS
HS-6113A	HAND SWITCH	GE	CR2940-US203E	CB CTL RM/1C-26A	786' 0"	MILD	M161/F6	E113/26	E338/E4
HS-6113B	HAND SWITCH	GE	CR2940-US203E	CB CTL RM/1C-26B	786' 0"	MILD	M161/D6	E113/26	E338/E4
HS-6113U	HAND SWITCH	GE	CR2940-US203E	ESS SWITCHGEAR ROOM	757' -6"	MILD	M161/S6	E113/26	E335/NS
HS-6113V	HAND SWITCH	GE	CR2940-US203E	ESS SWITCHGEAR ROOM	757' -6"	MILD	M161/D6	E113/26	E335/NS

SYSTEM: CONTROL BUILDING H&V SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
HS-6131	HAND SWITCH	GE	CR2940-UB202A	CB CTL RM/1C-26A	786' 0"	MILD	M161/E7	E113/20	E338/E4
HS-6132A	HAND SWITCH	GE	CR2940-UB202A	CB CTL RM/1C-26A	786' 0"	MILD	M161/E1	E113/40	E328/E4
HS-6132B	HAND SWITCH	GE	CR2940-UB202A	CB CTL RM/1C-26B	786' 0"	MILD	M161/F1	E113/40	E338/E4
HS-6132C	HAND SWITCH	GE	CR2940-UB202A	CB CTL RM/1C-26A	786' 0"	MILD	M161/F1	E113/40	E338/E4
HS-6924A	HAND SWITCH	GE	SBM	CB CTL RM/1C-26A	786' 0"	MILD	M169/D4	E113/32	E338/E4
HS-6924B	HAND SWITCH	GE	SBM	CB CTL RM/1C-26B	786' 0"	MILD	M169/D1	E113/32	E338/E4
HS-6924U	HAND SWITCH	GE	CR2940-UB203A	RB-N	812' 0"	MILD	M169/D4	E113/30	E322/F5
HS-6924V	HAND SWITCH	GE	CR2940-UB203A	RB-N	812' 0"	MILD	M161/D1	E113/31	E335/G5
HS-6924X	HAND SWITCH	GE	CR2940-UN200D	RB-N	812' 0"	MILD	M169/D4	E113/30	E322/F5
HS-6924Y	HAND SWITCH	GE	CR2940-UN200D	RB-N	812' 0"	MILD	M169/D1	E113/31	E322/G5
HS-7301A	HAND SWITCH	GE	CR2940-UB203A	CB CTL RM/1C-26A	786' 0"	MILD	M173/H7	E113/35	E338/E4
HS-7301B	HAND SWITCH	GE	CR2940-UB203A	CB CTL RM/1C-26B	786' 0"	MILD	M173/D7	E113/35	E338/E4
HS-7304A	HAND SWITCH	GE	CR2940-UB202A	CB CTL RM/1C-26A	786' 0"	MILD	M173/H6	E113/37	E338/E4
HS-7304B	HAND SWITCH	GE	CR2940-UB202A	CB CTL RM/1C-26B	786' 0"	MILD	M173/E6	E113/37	E338/E4
HS-7318A	HAND SWITCH	GE	CR2940-UB202A	CB CTL RM/1C-26A	786' 0"	MILD	M173/G3	E113/35	E338/E4
HS-7318B	HAND SWITCH	GE	CR2940-UB202A	CB CTL RM/1C-26B	786' 0"	MILD	M173/D3	E113/35	E338/E4

SYSTEM: CONTROL BUILDING H&V SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
HS-7319A	HAND SWITCH	GE	CR2940-UB202A	CB CTL RM/1C-26A	786' 0"	MILD	M173/H2	E113/35	E338/E4
HS-7319B	HAND SWITCH	GE	CR2940-UB202A	CB CTL RM/1C-26B	786' 0"	MILD	M173/E2	E113/35	E338/E4
HS-7322A	HAND SWITCH	GE	CR2940-UB202A	CB CTL RM/1C-26A	786' 0"	MILD	M173/F4	E113/39	E338/E4
HS-7322B	HAND SWITCH	GE	CR2940-UB202A	CB CTL RM/1C-26B	786' 0"	MILD	M173/C4	E113/39	E338/E4
HS-7328A	HAND SWITCH	GE	CR2940-UB202D	CB H&V RM	800' -4"	MILD	M173/F5	E113/152	E341/G3
HS-7328B	HAND SWITCH	GE	CR2940-UB202D	CB H&V RM	800' -4"	MILD	M173/C5	E113/152	E341/G7
LC-7328A	LEVEL CONTROL	SQUARE D	DG-253	CB H&V RM	807' -8"	MILD	M173/F5	E113/152	E341/G3
LC-7328B	LEVEL CONTROL	SQUARE D	DG-253	CB H&V RM	800' -4"	MILD	M173/C5	E113/152	E341/G7
LR-7315A	LEVEL RECORDER	WESTINGHOUSE	WL-3573A45-GO	CB CTL RM/1C-26A	786' 0"	MILD	M173/H4	E113/36	E338/E4
LR-7315B	LEVEL RECORDER	WESTINGHOUSE	WL-3573A45-GO	CB CTL RM/1C-26B	786' 0"	MILD	M173/E4	E113/36	E338/E4
OT-7304A	TORQUE TRANSMITTER	CHANNEL MASTER	CFEI-74C	CB H&V RM	807' -8"	MILD	M173/F5	E113/39	E341/G3
OT-7304B	TORQUE TRANSMITTER	CHANNEL MASTER	CFEI-74C	CB H&V RM	800' -4"	MILD	M173/C5	E113/39	E341/G7
PB-7316A		GE	CR2940U201	CB CTL RM/1C-26A	786' 0"	MILD	M173/H3	E113/35	E338/E4
PB-7316B		GE	CR2940U201	CB CTL RM/1C-26B	786' 0"	MILD	M173/E3	E113/35	E338/E4
PB-7328A		GE	CR2940U201	CB CTL RM/1C-26A	786' 0"	MILD	M173/F4	E113/34	E338/E4
PB-7328B		GE	CR2940U201	CB CTL RM/1C-26B	786' 0"	MILD	M173/C4	E113/34	E338/E4

SYSTEM: CONTROL BUILDING H&V SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
PB-7329A		GE	CR2940U201	CB CTL RM/1C-26A	786' 0"	MILD	M173/F4	E113/34	E338/E4
PB-7329B		GE	CR2940U201	CB CTL RM/1C-26B	786' 0"	MILD	M173/C4	E113/34	E338/E4
PS-7333A	PRESSURE SWITCH	UNITED ELECTRIC C	270	SGT ROOM	786' 0"	MILD	M173/B6	E113/144	E315/G6
PS-7333B	PRESSURE SWITCH	UNITED ELECTRIC C	270	SGT ROOM	786' 0"	MILD	M173/B8	E113/144	E315/F6
PS-7334A	PRESSURE SWITCH	UNITED ELECTRIC C	270	SGT ROOM	786' 0"	MILD	M173/B6	E113/144	E315/G6
PS-7334B	PRESSURE SWITCH	UNITED ELECTRIC C	270	SGT ROOM	786' 0"	MILD	M173/B8	E113/144	E315/F6
PS-7335A	PRESSURE SWITCH	MERCOND CORP.	DA7031-153	SGT ROOM	786' 0"	MILD	M173/B5	E113/144	E315/G6
PS-7335B	PRESSURE SWITCH	MERCOND CORP.	DA7031-153	SGT ROOM	786' 0"	MILD	M173/B7	E113/144	E315/F6
P/ER-7334A		PENN	P47BA-6	CB H&V RM/1C-133A	800' -4"	MILD	M173/C6	E113/144	E341/G4
P/ER-7334B		PENN	P47BA-6	CB H&V RM/1C-133B	800' -4"	MILD	M173/C7	E113/144	E341/F4
RE-6101A	RADIATION ELEMENT	NMC	GA-2TO	CB H&V RM	800' -4"	MILD	M161/H8	E113/102	E341/F8
RE-6101B	RADIATION ELEMENT	NMC	GA-2TO	CB H&V RM	800' -4"	MILD	M161/G8	E113/102	E341/F8
RIM-6101A	RADIATION INDICATOR	NMC	GA-2TMO	CB CTL RM/1C-26A	786' 0"	MILD	M161/H7	E113/35	E338/E4
RIM-6101B	RADIATION INDICATOR	NMC	GA-2TMO	CB CTL RM/1C-26B	786' 0"	MILD	M161/G7	E113/35	E338/E4
SQ-7321A		GE	565	CB CTL RM/1C-162	807' -8"	MILD	M173/F6	E113/99	E341/G3
SQ-7321B		GE	565	CB H&V RM/1C-163	800' -4"	MILD	M173/F6	E113/99	E341/G7

SYSTEM: CONTROL BUILDING H&V SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
SV-6107A	SOLENOID VALVE	ASCO	FT8321A5	CB H&V RM/1C-133A	800' -4"	MILD	M161/G2	E113/82	E341/F5
SV-6107B	SOLENOID VALVE	ASCO	FT8321A5	CB H&V RM/1C-133A	800' -4"	MILD	M161/G2	E113/83	E341/F5
SV-6109A	SOLENOID VALVE	ASCO	8221A1	CB H&V RM/1C-133A	800' -4"	MILD	M161/G3	E113/82	E341/G5
SV-6109B	SOLENDID VALVE	ASCO	FT8321A5	CB H&V RM/1C-133B	800' -4"	MILD	M161/D3	E113/83	E341/G5
SV-6110A	SOLENOID VALVE	ASCO	FT8321A5	CB H&V RM/1C-133A	800' -4"	MILD	M161/B2	E113/82	E341/F7
SV-6110B	SOLENOID VALVE	ASCO	FT8321A5	CB H&V RM/1C-133B	800' -4"	MILD	M161/B2	E113/83	E341/F7
SV-6113A	SOLENOID VALVE	JOHNSON CONTROLS	V-24	CB H&V RM/1C-133A	800' -4"	MILD	M161/H6	E113/26	E341/F4
SV-6113B	SOLENOID VALVE	JOHNSON CONTROLS	V-24	CB H&V RM/1C-133B	800' -4"	MILD	M161/E6	E113/26	E341/F4
SV-6127A	SOLENOID VALVE	ASCO	FT8321A5	CB H&V RM/1C-133A	800' -4"	MILD	M161/H5	E113/27	E341/F4
SV-6127B	SOLENOID VALVE	ASCO	FT8321A5	CB H&V RM/1C-133B	800' -4"	MILD	M161/E6	E113/27	E341/F4
SV-7301A	SOLENOID VALVE	ASCO	FT8321A5	CB H&V RM	807' -8"	MILD	M173/H6	E113/35	E341/G4
SV-7301B	SOLENOID VALVE	ASCO	FT8321A5	CB H&V RM	800' -4"	MILD	M173/D7	E113/35	E341/G7
SV-7318A	SOLENOID VALVE	ASCO	HT-8300B9U	CB H&V RM	807' -8"	MILD	M173/G3	E113/35	E341/G3
SV-7318B	SOLENOID VALVE	ASCO	HT-8300B9U	CB H&V RM	800' -4"	MILD	M173/D2	E113/35	E341/G7
SV-7322A	SOLENOID VALVE	ASCO	FT8321A5	CB H&V RM	807' -8"	MILD	M173/F3	E113/39	E341/G3
SV-7322B	SOLENOID VALVE	ASCO	FT8321A5	CB H&V RM	800' -4"	MILD	M173/C3	E113/39	E341/G7

SYSTEM: CONTROL BUILDING H&V SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
SV-7328A	SOLENOID VALVE	ASCO	AT831665	CB H&V RM	807' -8"	MILD	M173/F5	E113/34	E341/G3
SV-7328B	SOLENOID VALVE	ASCO	AT831665	CB H&V RM	800' -4"	MILD	M173/C5	E113/34	E341/G7
SV-7333A	SOLENOID VALVE	ASCO	8210B27	CB H&V RM	800' -4"	MILD	M173/B6	E113/144	E341/G4
SV-7333B	SOLENOID VALVE	ASCO	8210B27	CB H&V RM	800' -4"	MILD	M173/C7	E113/144	E341/F4
SV-7334A	SOLENOID VALVE	ASCO	8210B27	CB H&V RM	800' -4"	MILD	M173/C5	E113/144	E341/G4
SV-7334B	SOLENOID VALVE	ASCO	8210B27	CB H&V RM	800' -4"	MILD	M173/C7	E113/144	E341/F4
TE-7304A	TEMPERATURE ELEMENT	CHANNEL MASTER	CNOF-76D	CB H&V RM	807' -8"	MILD	M173/G6	E113/37	E341/G3
TE-7304B	TEMPERATURE ELEMENT	CHANNEL MASTER	CNOF-76D	CB H&V RM	800' -4"	MILD	M173/D6	E113/37	E341/G7
TS-6124A	TEMPERATURE SWITCH	PENN	A-19AAF-20	CB H&V RM	800' -4"	MILD	M161/A2	E113/35	E341/F7
TS-6124B	TEMPERATURE SWITCH	PENN	A-19AAF-20	CB H&V RM	800' -4"	MILD	M161/A3	E113/35	E341/F7
TS-7304A	TEMPERATURE SWITCH	CHANNEL MASTER	ARC290	CB H&V RM	807' -8"	MILD	M173/G5	E113/37	E341/G3
TS-7304B	TEMPERATURE SWITCH	CHANNEL MASTER	ARC290	CB H&V RM	800' -4"	MILD	M173/D5	E113/37	E341/G7
1T-6924A		GE	9173028	RB-N	812' 0"	MILD	M169/C3	E113/30	E322/G5
1T-6924B		GE	9173029	RB-N	812' 0"	MILD	M169/C2	E113/31	E322/F5
1V-AC-30A	FAN MOTOR	H.K. PORTER	F1R-(P270)-23	CB H&V RM	800' -4"	MILD	M161/G6	E113/26	M5/E2
1V-AC-30B	FAN MOTOR	H.K. PORTER	F1R-(P270)-23	CB H&V RM	800' -4"	MILD	M161/D6	E113/26	M5/E2

SYSTEM: CONTROL BUILDING H&V SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
1V-AC-32	FAN MOTOR	H.K. PORTER	C1H-447APR	CB H&V RM	800' -4"	MILD	M161/G7	E113/19	M5/D3
1V-CP-30A		GOULD PUMPS, INC.	3196MT	RB-N	812' 0"	MILD	M169/D3	E113/30	M4/F5
1V-CP-30B		GOULD PUMPS, INC.	3196MT	RB-N	812' 0"	MILD	M169/D2	E113/31	M4/F5
1V-EF-30A	FAN MOTOR	GE	K32EG273	CB H&V RM	800' -4"	MILD	M161/E1	E113/40	M5/E3
1V-EF-30B	FAN MOTOR	GE	K32EG273	CB H&V RM	800' -4"	MILD	M161/F1	E113/40	M5/E3
1V-EF-30C	FAN MOTOR	GE	K32EG273	CB H&V RM	800' -4"	MILD	M161/F1	E113/40	M5/D3
1V-EF-33	FAN MOTOR	LOUIS-ALLIS COMPA	C064B	CB H&V RM	800' -4"	MILD	M161/E7	E113/20	M5/E3
1V-RF-30A	FAN MOTOR	H.K. PORTER	N1R	CB H&V RM	800' -4"	MILD	M161/H5	E113/27	M5/D2
1V-RF-30B	FAN MOTOR	H.K. PORTER	N1R	CB H&V RM	800' -4"	MILD	M161/E5	E113/27	M5/D2
1V-SF-30A	FAN MOTOR	ALLIS-CHALMERS	COC64B	CB H&V RM	800' -4"	MILD	M173/G2	E113/35	M5/E5
1V-SF-30B	FAN MOTOR	ALLIS-CHALMERS	COC64B	CB H&V RM	800' -4"	MILD	M173/D2	E113/35	M5/E3

SYSTEM: CONTROL ROD DRIVE SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
HS-1804A	HAND SWITCH	GE	CR2940	CB CTL RM	786' 0"	MILD	M117/A5	E122/12	E338/D5
HS-1804B	HAND SWITCH	GE	CR2940	CB CTL RM	786' 0"	MILD	M117/A5	E122/13	E338/D5
LS-1861A	LEVEL SWITCH	MAGNETROL	SL5.0-751	RB-S	757' 6"	MILD	M118/F5	E66	E319/E5
LS-1861B	LEVEL SWITCH	MAGNETROL	SL5.0-751	RB-S	757' 6"	MILD	M118/F4	E66	E319/E5
LS-1861C	LEVEL SWITCH	MAGNETROL	SL5.0-751	RB-N	757' 6"	MILD	M118/F3	E66	E318/E5
LS-1861D	LEVEL SWITCH	MAGNETROL	SL5.0-751	RB-N	757' 6"	MILD	M118/F3	E66	E318/E5
SV-1804A	SOLENOID VALVE	ASCO	8320A6	RB-S	757' 6"	MILD	M117/A5	E122/12	M405/D6
SV-1804B	SOLENOID VALVE	ASCO	8320A6	RB-S	757' 6"	MILD	M117/A5	E122/13	M405/D6
SV-1840A	SOLENOID VALVE	ASCO	8320A6	RB-N	757' 6"	MILD	M117/G6	E66	E319/E3
SV-1840B	SOLENOID VALVE	ASCO	8320A6	RB-N	757' 6"	MILD	M117/G6	E66	E319/E3
SV-1855	SOLENOID VALVE	ASCO	HVA-90-405	RB-N	757' 6"	MILD	M118/E6	E66	M2/F6
SV-1856	SOLENOID VALVE	ASCO	HVA-90-405	RB-N	757' 6"	MILD	M118/E6	E66	M2/F6
SV-1868	SOLENOID VALVE	ASCO	8323-22	RB-S	757' 6"	MILD	M118/D4	E66	E319/E4
SV-1869	SOLENOID VALVE	ASCO	8323-22	RB-S	757' 6"	MILD	M118/D4	E66	E319/E4

SYSTEM: CORE SPRAY SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
FIS-2111	PRESSURE SWITCH	BARTON	289	SE CRNR RM/1C-123	716' 9"	HARSH	M121/F5	E121/6	E317/E3
FIS-2131	PRESSURE SWITCH	BARTON	289	NW CRNR RM/1C-124	716' 9"	HARSH	M121/G5	E121/6	E316/E7
HS-2100	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M121/B5	E121/4	E338/D5
HS-2103	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M121/C3	E121/3	E338/D5
HS-2104	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M121/D3	E121/6	E338/D5
HS-2112	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M121/F5	E121/7	E338/D5
HS-2115	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M121/G5	E121/8	E338/D5
HS-2117	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M121/G6	E121/5	E338/D5
HS-2120	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M121/B5	E121/4	E338/D5
HS-2123	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M121/C4	E121/3	E338/D5
HS-2124	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M121/D4	E121/6	E338/D5
HS-2132	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M123/E5	E121/7	E338/D5
HS-2135	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M121/E5	E121/8	E338/D5
HS-2137	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M121/E6	E121/5	E338/D5
HS-2146	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M121/C5	E121/4	E338/D5
HS-2147	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M121/B5	E121/4	E338/D5

SYSTEM: CORE SPRAY SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
MO-2100	MOTOR OPERATED VALVE	LIMITORQUE	SMB-00, AC-CL	SE CRNR RM	716' 9"	HARSH	M121/B5	E121/4	E317/D3
MO-2104	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	TORUS ROOM SOUTH	716' 9"	HARSH	M121/D4	E121/6	E317/E5
MO-2112	MOTOR OPERATED VALVE	LIMITORQUE	SMB-1, AC-CLA	TORUS ROOM SOUTH	746' 3"	HARSH	M121/F5	E121/7	E317/D5
MO-2115	MOTOR OPERATED VALVE	LIMITORQUE	SMB-0,AC-CLAS	RB-S	786' 0"	HARSH	M121/G5	E121/8	E321/D5
MO-2117	MOTOR OPERATED VALVE	LIMITORQUE	SMB-2, AC-CLA	RWCU HEAT EXCH ROOM	786' 0"	HARSH	M121/G6	E121/5	E321/E5
MO-2120	MOTOR OPERATED VALVE	LIMITORQUE	SMB-00, AC-CL	NW CRNR RM	716' 9"	HARSH	M121/B5	E121/4	E316/D8
MO-2124	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	TORUS ROOM NORTH	746' 3"	HARSH	M121/D4	E121/6	E316/F6
MO-2132	MOTOR OPERATED VALVE	LIMITORQUE	SMB-1, AC-CLA	TORUS ROOM NORTH	746' 3"	HARSH	M121/E5	E121/7	E316/F5
MO-2135	MOTOR OPERATED VALVE	LIMITORQUE	SMB-0,AC-CLAS	RB-N	786' 0"	HARSH	M121/E5	E121/8	E320/F5
MO-2137	MOTOR OPERATED VALVE	LIMITORQUE	SMB-2, AC-CLA	RB-N	786' 0"	HARSH	M121/E6	E121/8	E320/E5
MO-2146	MOTOR OPERATED VALVE	LIMITORQUE	SMB-00, AC-CL	TORUS ROOM NORTH	716' 9"	HARSH	M121/C5	E121/4	E316/C7
MO-2147	MOTOR OPERATED VALVE	LIMITORQUE	SMB-00, AC-CL	TORUS ROOM SOUTH	716' 9"	HARSH	M121/B5	E121/4	E317/D5
1P-211A	PUMP MOTOR	GE	5K6336XC229A	SE CRNR RM	716' 9"	HARSH	M121/C3	E121/3	E317/D2
1P-211B	PUMP MOTOR	GE	5K6336XC229A	NW CRNR RM	716' 9"	HARSH	M121/C4	E121/3	E316/F8

SYSTEM: DC POWER SUPPLY

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
1D1	MOTOR CONTROL CENTER	GOULD	FPS-13	125V BATTERY ROOM	757' -6"	MILD	N/A	E27	M2/G5
1D10	MOTOR CONTROL CENTER	DELTA SWITCHBOARD	33431 TYPE CD	ESS SWITCHGEAR ROOM	757' -6"	MILD	N/A	E27	M2/G5
1D11	MOTOR CONTROL CENTER	DELTA SWITCHBOARD	33431 TYPE CD	ESS SWITCHGEAR ROOM	757' -6"	MILD	N/A	E27	M2/G5
1D12	MOTOR CONTROL CENTER	POWER CON-VERSION	3M-130-75	ESS SWITCHGEAR ROOM	757' -6"	MILD	N/A	E27	M2/G5
1D120	MOTOR CONTROL CENTER	POWER CON-VERSION	3M-130-75	ESS SWITCHGEAR ROOM	757' -6"	MILD	N/A	E27	M2/F5
1D13	MOTOR CONTROL CENTER	DELTA SWITCHBOARD	33431 TYPE CD	ESS SWITCHGEAR ROOM	757' -6"	MILD	N/A	E27	M2/G5
1D14	DC MOTOR CONTROL CENT	ITE	85-71170	RB-S	786' 0"	MILD	N/A	E27	E321/D5
1D2	MOTOR CONTROL CENTER	GOULD	FPS-13	125V BATTERY ROOM	757' -6"	MILD	N/A	E27	M2/G6
1D20	MOTOR CONTROL CENTER	DELTA SWITCHBOARD	33431 TYPE CD	ESS SWITCHGEAR ROOM	757' -6"	MILD	N/A	E27	M2/G6
1D21	MOTOR CONTROL CENTER	DELTA SWITCHBOARD	33431 TYPE NH	ESS SWITCHGEAR ROOM	757' -6"	MILD	N/A	E27	M2/G6
1D22	MOTOR CONTROL CENTER	POWER CON-VERSION	3M-130-75	ESS SWITCHGEAR ROOM	757' -6"	MILD	N/A	E27	M2/F6
1D23	MOTOR CONTROL CENTER	DELTA SWITCHBOARD	33431 TYPE NH	ESS SWITCHGEAR ROOM	757' -6"	MILD	N/A	E27	M2/G6
1D4	MOTOR CONTROL CENTER	GOULD	FPS-A	250V BATTERY ROOM	757' -6"	MILD	N/A	E28	M2/G5
1D40	MOTOR CONTROL CENTER	DELTA SWITCHBOARD	33431 TYPE CD	ESS SWITCHGEAR ROOM	757' -6"	MILD	N/A	E28	M2/G6
1D41	DC MOTOR CONTROL CENTER	ITE	SERIES 9600	RB-S	757' 6"	MILD	N/A	E28	M2/C6
1D42	DC MOTOR CONTROL CENT	ITE	85-71170	RB-N	757' -6"	MILD	N/A	E28	M2/F5

SYSTEM: DC POWER SUPPLY

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
1D43	MOTOR CONTROL CENTER	POWER CON-VERSION	3M-260-75	ESS SWITCHGEAR ROOM	757' -6"	MILD	N/A	E28	M2/G5
1D44	MOTOR CONTROL CENTER	POWER CON-VERSION	3M-280-75	ESS SWITCHGEAR ROOM	757' -6"	MILD	N/A	E28	M2/G6
1D5	MOTOR CONTROL CENTER	GOULD	DPR11	24V BATTERY ROOM	757' -6"	MILD	N/A	E28	M2/G5
1D50	MOTOR CONTRDL CENTER	DELTA SWITCHBOARD	33431 TYPE NA	ESS SWITCHGEAR ROOM	757' -6"	MILD	N/A	E28	M2/G5
1D51	MOTOR CONTROL CENTER	POWER CON-VERSION	S-24-25	ESS SWITCHGEAR ROOM	757' -6"	MILD	N/A	E28	M2/G5
1D52	MOTOR CONTROL CENTER	POWER CON-VERSION	S-24-25	ESS SWITCHGEAR ROOM	757' -6"	MILD	N/A	E28	M2/G5
1D6	MOTOR CONTROL CENTER	GOULD	FPS-13	24V BATTERY ROOM	757' -6"	MILD	N/A	E28	M2/G6
1D60	MOTOR CONTROL CENTER	DELTA SWITCHBOARD	33431 TYPE NA	ESS SWITCHGEAR ROOM	757' -6"	MILD	N/A	E28	M2/G6
1D61	MOTOR CONTROL CENTER	POWER CON-VERSION	S-24-25	ESS SWITCHGEAR ROOM	757' -6"	MILD	N/A	E28	M2/G6
1D62	MOTOR CONTROL CENTER	POWER CON-VERSION	S-24-25	ESS SWITCHGEAR ROOM	757' -6"	MILD	N/A	E28	M2/G6

SYSTEM: EMERGENCY SERVICE WATER SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
HS-2039A	HAND SWITCH	GE	SBM	CB CTL RM/1C-06	786' 0"	MILD	M113/H4	E111/5	E338/E4
HS-2039B	HAND SWITCH	GE	SBM	CB CTL RM/1C-06	786' 0"	MILD	M113/H2	E111/5	E338/E4
HS-2077	HAND SWITCH	GE	SBM	CB CTL RM/1C-06	786' 0"	MILD	M113/H3	E111/24	E338/E4
HS-2078	HAND SWITCH	GE	SBM	CB CTL RM/1C-06	786' 0"	MILD	M113/H1	E111/24	E338/E4
HS-2080	HAND SWITCH	GE	SBM	CB CTL RM/1C-91	786' 0"	MILD	M113/H5	E111/8	E338/B5
HS-2081	HAND SWITCH	GE	SBM	CB CTL RM/1C-92	786' 0"	MILD	M113/G5	E111/8	E338/B5
HS-4927A	HAND SWITCH	GE	CR2940	ESS SWITCHGEAR ROOM	757' -6"	MILD	M146/B7	E111/8	E335/E4
HS-4927B	HAND SWITCH	GE	CR2940	ESS SWITCHGEAR ROOM	757' 6"	MILD	M146/B6	E111/8	E335/E6
HS-4928A	HAND SWITCH	GE	SBM	CB CTL RM/1C-06	786' 0"	MILD	M146/B7	E111/8	E338/E4
HS-4928B	HAND SWITCH	GE	SBM	CB CTL RM/1C-06	786' 0"	MILD	M146/B6	E111/8	E338/E4
MO-2039A	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	RB-N	812' 0"	MILD	M113/H4	E111/5	E322/G3
MO-2039B	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	RB-N	812' 0"	MILD	M113/H3	E111/5	E322/G4
MO-2077	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	RB-N	812' 0"	MILD	M113/H3	E111/24	E322/G4
MO-2078	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	RB-N	812' 0"	MILD	M113/H1	E111/24	E322/G4
SV-1956A	SOLENOID VALVE	ASCO	8300A203U	RB-N	812' 0"	MILD	M113/H3	E111/8	E322/G4
SV-1956B	SOLENOID VALVE	ASCO	8300A203U	RB-N	812' 0"	MILD	M113/H2	E111/8	E322/G4

SYSTEM: EMERGENCY SERVICE WATER SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
SV-2080	SOLENOID VALVE	ASCO	FT8321A5	DG ROOM	757' -6"	MILD	M113/G5	E111/8	E310/C2
SV-2081	SOLENOID VALVE	ASCO	FT8321A5	DG ROOM	757' 6"	MILD	M113/G5	E111/8	E310/C4
1P-99A	PUMP MOTOR	LAYNE & BOWLER	D30839	PUMPHOUSE	757' -6"	MILD	M146/A7	E111/8	M15/G7
1P-99B	PUMP MOTOR	LAYNE & BOWLER	D30839	PUMPHOUSE	757' -6"	MILD	M146/A6	E111/8	M15/G7

SYSTEM: ENGINEERED SAFEGUARDS ROOMS H AND V

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
1V-AC-11	FAN MOTOR	WESTINGHOUSE	7302	NW CRNR RM	747' 6"	HARSH	M171/A6	E113/147	M646/E7
1V-AC-12	FAN MOTOR	WESTINGHOUSE	7302	SE CRNR RM	747' 0"	HARSH			M660/E3
1V-AC-14A	FAN MOTOR	WESTINGHOUSE	7302	HPCI ROOM	747' 0"	HARSH	M171/G3	E113/42	M660/C3
1V-AC-14B	FAN MOTOR	WESTINGHOUSE	7302	HPCI ROOM	747' 0"	HARSH	M171/F3	E113/42	M660/C3

SYSTEM: ENGINEERED SAFEGUARD ROOMS H&V SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
HS-7108A	HAND SWITCH	GE	CR2940-UB202A	CB CTL RM/1C-23A	786' 0"	MILD	M171/E4	E113/42	E338/E4
HS-7108B	HAND SWITCH	GE	CR2940-UB202A	CB CTL RM/1C-23B	786' 0"	MILD	M171/E3	E113/42	E338/E4
HS-7116	HAND SWITCH	GE	CR2940-UB202D	CB CTL RM/1C-23B	786' 0"	MILD	M171/B5	E113/147	E338/E4
HS-7119	HAND SWITCH	GE	CR2940-UB202D	CB CTL RM/1C-23A	786' 0"	MILD	M171/B5	E113/147	E338/E4

SYSTEM: ESW PUMP ROOM H&V SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
HS-7538A	HAND SWITCH	GE	CR2940-UB2037	PUMPHOUSE/1C-160	761'	MILD	M175/E7	E113/79	E347/G7
HS-7538B	HAND SWITCH	GE	CR2940-UB2037	PUMPHOUSE/1C-161	761'	MILD	M175/E8	E113/79	E347/G7
SV-7536	SOLENOID VALVE	JOHNSON CONTROLS	V-24	PUMPHOUSE	761' 0"	MILD	M175/H7	E113/79	E347/G7
SV-7537	SOLENOID VALVE	JOHNSON CONTROLS	V-24	PUMPHOUSE	761' 0"	MILD	M175/G8	E113/79	E347/G7
SV-7538A	SOLENOID VALVE	JOHNSON CONTROLS	V-24	PUMPHOUSE	761' 0"	MILD	M175/E7	E113/79	E347/G7
SV-7538B	SOLENOID VALVE	JOHNSON CONTROLS	V-24	PUMPHOUSE	761' 0"	MILD	M175/E8	E113/79	E347/G7
SV-7539A	SOLENOID VALVE	JOHNSON CONTROLS	V-24	PUMPHOUSE	761' 0"	MILD	M175/F7	E113/79	E347/G7
SV-7539B	SOLENOID VALVE	JOHNSON CONTROLS	V-24	PUMPHOUSE	761' 0"	MILD	M175/F8	E113/79	E347/G7
TIC-7538A		PENN	T2J-1	PUMPHOUSE	747' 6"	MILD	M175/E7	E113/79	M679/E7
TIC-7538B		PENN	T2J-1	PUMPHOUSE	747' 6"	MILD	M175/E8	E113/79	M679/E7
TS-7538C		PENN	T2J-1	PUMPHOUSE/1C-160	747' -6"	MILD	M175/E7	E113/79	E347/G7
TS-7538D		PENN	T2J-1	PUMPHOUSE/1C-161	747' -6"	MILD	M175/E8	E113/79	E347/G7
TS-7540A	TEMPERATURE SWITCH	PENN	A-19ABB-6	PUMPHOUSE/1C-160	761'	MILD	M175/E7	E113/79	E347/G7
TS-7540B	TEMPERATURE SWITCH	PENN	A-19ABB-6	PUMPHOUSE/1C-161	761'	MILD	M175/E8	E113/79	E347/G7
1V-SF-56A	FAN MOTOR	JOY	SF-29448, SER	PUMPHOUSE	761'	MILD	M175/G7	E113/79	M679/G7
1V-SF-56B	FAN MOTOR	JOY	SF-29448, SER	PUMPHOUSE	761'	MILD	M175/G8	E113/79	M679/G7

SYSTEM: HIGH PRESSURE COOLANT INJECTION

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
E/S-2257	POWER SUPPLY	GE	570062BAA1	CB CTL RM/1C-03	786' 0"	MILD	M122/A6	E121/25	E338/D5
E/S-2309		GE	54C	CB CTL RM/1C-18	786' 0"	MILD	M123/C5	E121/25	E338/C5
FIC-2309	FLOW INDICATING CONTR	GE	45001	CB CTL RM/1C-03	786' 0"	MILD	M123/C5	E121/25	E338/D5
FS-2310	PRESSURE SWITCH	BARTON	289	HPCI ROOM/1C-120	716' 9"	MILD	M123/C5	E121/24	E317/B4
FT-2309	FLOW TRANSMITTER	G.E.	555-111BCAA3P	HPCI ROOM/1C-120	716' 9"	MILD	M123/C6	E121/25	E338/E4
FY-2309		GE	565	CB CTL RM/1C-03	786' 0"	MILD	M123/C5	E121/25	E338/D5
HS-2202	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M122/F3	E121/16	E338/D5
HS-2206	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M122/E2	E121/25	E338/D5
HS-2211	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M122/D2	E121/25	E338/D5
HS-2212	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M122/D2	E121/25	E338/D5
HS-2219	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M122/D4	E121/26	E338/D5
HS-2221	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M122/B2	E121/11	E338/D5
HS-2222	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M122/B2	E121/12	E328/D5
HS-2234	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M122/B5	E121/25	E338/D5
HS-2235	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M122/B6	E121/25	E338/D5
HS-2238	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M122/H6	E121/14	E338/D5

SYSTEM: HIGH PRESSURE COOLANT INJECTION

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
HS-2239	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M122/H5	E121/15	E338/D5
HS-2247	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M122/D5	E121/16	E338/D5
HS-2253	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M122/B7	E121/25	E338/D5
HS-2256	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M122/H4	E121/13	E338/D5
HS-2257	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M122/B6	E121/25	E338/D5
HS-2258	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M122/A7	E121/25	E338/D5
HS-2259	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M122/B5	E121/25	E338/D5
HS-2273	HAND SWITCH	BOURNS		CB CTL RM/1C-03	786' 0"	MILD	M122/A6	E121/25	E338/D5
HS-2299	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M122/A5	E121/25	E338/D5
HS-2300	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M123/F3	E121/17	E338/D5
HS-2311	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M123/D6	E121/16	E338/D5
HS-2312	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M123/D6	E121/18	E338/D5
HS-2315	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M123/E6	E121/19	E338/D5
HS-2316	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M123/E6	E121/20	E338/D5
HS-2318	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M123/C5	E121/21	E338/D5
HS-2321	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M123/A7	E121/23	E338/D5

SYSTEM: HIGH PRESSURE COOLANT INJECTION

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
HS-2322	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M123/F4	E121/22	E338/D5
LS-2206	LEVEL SWITCH	ROBERT SHAW	82938-G-1	HPCI ROOM	716' 9"	MILD	M122/E2	E121/25	E317/C3
LS-2219	LEVEL SWITCH	ROBERT SHAW	82938-G-1	HPCI ROOM	716' 9"	MILD	M122/D4	E121/25	E317/B3
LS-2222A	LEVEL SWITCH	ROBERT SHAW	83841-A2	HPCI ROOM	716' 9"	MILD	M122/C3	E121/24	E317/C3
LS-2222B	LEVEL SWITCH	ROBERT SHAW	83841-A2	HPCI ROOM	716' 9"	MILD	M122/C3	E121/25	E317/C3
LS-2319	LEVEL SWITCH	ROBERT SHAW	83841-A2	TORUS ROOM NORTH	716' 9"	MILD	M123/A8	E121/24	E316/D8
LS-2320	LEVEL SWITCH	ROBERT SHAW	83841-A2	TORUS ROOM NORTH	716' 9"	MILD	M123/A8	E121/24	E316/D8
LS-5218	LEVEL SWITCH	B/W CONTROL-LERS	E-IF/SO-201	OUTSIDE TB/1C-215	757' -6"	MILD	M109/E4	E108/18	E354/GH
LS-5219	LEVEL SWITCH	B/W CONTROL-LERS	E-IF/SO-201	OUTSIDE TB/1C-215	757' -6"	MILD	M109/E5	E108/18	E354/GH
MO-2238	MOTOR OPERATED VALVE	LIMITORQUE	SMB-2, AC-CLA	DRYWELL	781'	HARSH	M122/G6	E121/14	E330/B5
MO-2239	MOTOR OPERATED VALVE WITH MOTO	LIMITORQUE	SMB-3, DC-CLA	STEAM TUNNEL	757' 6"	HARSH	M122/G5	E121/15	E328/D4
MO-2247	MOTOR OPERATOR	LIMITORQUE	SMB-000, DC-C	HPCI ROOM	716' 9"	MILD	M122/D5	E121/16	E317/C3
MO-2300	MOTOR OPERATED VALVE	LIMITORQUE	SMB-00,DC-CLA	HPCI ROOM	716' 9"	MILD	M123/F4	E121/17	E317/C4
MO-2311	MOTOR OPERATED VALVE	LIMITORQUE	SMB-3, DC-CLA	HPCI ROOM	716' 9"	MILD	M123/D6	E121/16	E317/C4
MO-2312	MOTOR OPERATED VALVE	LIMITORQUE	SMB-3, DC-CLA	STEAM TUNNEL	757' 6"	HARSH	M123/D6	E121/18	E328/D3
MO-2315	MOTOR OPERATED VALVE	LIMITORQUE	SMB-3, DC-CLA	HPCI ROOM	731' 9"	MILD	M123/E6	E121/19	E317/C4

SYSTEM: HIGH PRESSURE COOLANT INJECTION

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
MO-2316	MOTOR OPERATED VALVE	LIMITORQUE	SMB-O, DC-CLA	HPCI ROOM	716' 9"	MILD	M123/E6	E121/20	E317/C4
MO-2318	MOTOR OPERATED VALVE	LIMITORQUE	SMB-O, DC-CLA	HPCI ROOM	716' 9"	MILD	M123/C5	E121/21	E317/C4
MO-2321	MOTOR OPERATED VALVE	LIMITORQUE	SMB-OO,DC-CLA	TORUS ROOM SOUTH	716' 9"	HARSH	M123/A7	E121/23	E317/D4
MO-2322	MOTOR OPERATED VALVE	LIMITORQUE	SMB-OO,DC-CLA	HPCI ROOM	716' 9"	MILD	M123/F4	E121/22	E317/C4
PS-2215A	PRESSURE SWITCH	STATIC-O-RING	6N-AA2	HPCI ROOM/1C-120	716' 9"	MILD	M122/D6	E121/24	E317/B4
PS-2215B	PRESSURE SWITCH	STATIC-O-RING	6N-AA2	HPCI ROOM/1C-120	716' 9"	MILD	M122/D6	E121/24	E317/B4
PS-2215C	PRESSURE SWITCH	STATIC-O-RING	6N-AA2	HPCI ROOM/1C-120	716' 9"	MILD	M122/D6	E121/24	E317/B4
PS-2215D	PRESSURE SWITCH	STATIC-O-RING	6N-AA2	HPCI ROOM/1C-120	716' 9"	MILD	M122/D6	E121/24	E317/B4
PS-2233A	PRESSURE SWITCH	STATIC-O-RING	5N-AA3	HPCI ROOM/1C-120	716' 9"	MILD	M122/D4	E121/24	E317/B4
PS-2233B	PRESSURE SWITCH	STATIC-O-RING	5N-AA3	HPCI ROOM/1C-120	716' 9"	MILD	M122/D4	E121/24	E317/B4
PS-2288	PRESSURE SWITCH	STATIC-O-RING	6N-AA2	HPCI ROOM	716' 9"	MILD	M122/H3	E121/13	E317/C3
PS-2304A	PRESSURE SWITCH	STATIC-O-RING	6N-AA2	HPCI ROOM/1C-120	716' 9"	MILD	M123/F3	E121/24	E317/B4
PS-2304B	PRESSURE SWITCH	STATIC-O-RING	6N-AA2	HPCI ROOM/1C-120	716' 9"	MILD	M123/E3	E121/25	E317/B4
PS-2324	PRESSURE SWITCH	BARKSDALE	B2T M12SS	HPCI ROOM/1C-120	716' 9"	MILD	M123/C4	E121/21	E317/B4
SV-2206	SOLENOID VALVE	ASCO	206	HPCI ROOM	716' 9"	MILD	M122/E2	E121/26	E317/C3
SV-2211	SOLENOID VALVE	ASCO	206	HPCI ROOM	716' 9"	MILD	M122/D2	E121/26	E317/C3

SYSTEM: HIGH PRESSURE COOLANT INJECTION

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
SV-2212	SOLENOID VALVE	ASCO	206	HPCI ROOM	716' 9"	MILD	M122/D2	E121/26	E317/C3
SV-2219	SOLENOID VALVE	TARGET ROCK	72V AND 81K	HPCI ROOM	716' 9"	MILD	M122/C4	E121/26	E317/C3
SV-2234	SOLENOID VALVE	ASCO	206	HPCI ROOM	716' 9"	MILD	M122/C5	E121/26	E317/A3
SV-2235	SOLENOID VALVE	ASCO	206	HPCI ROOM	716' 9"	MILD	M122/C5	E121/26	E317/A3
SV-2259	SOLENOID VALVE	SKINNER	L2DB5150	HPCI ROOM	716' 9"	MILD	M122/B5	E121/25	E317/C3
ZS-2201	POSITION SWITCH	NAMCO	D1200G-2	HPCI ROOM	716' 9"	MILD	M122/E3	E121/26	E317/C3
1P-218	HPCI TURBINE AUX OIL	GE	1T-1D	HPCI ROOM	716' 9"	MILD	M122/G4	E121/13	E317/C2
1P-219	HPC1TURB CONDONSATE P	GE	L182AY	HPCI ROOM	716' 9"	MILD	M122/B3	E121/12	E317/C3
1P-233	PUMP MOTOR	GE	5CD14D13 A900	HPCI ROOM	716' 9"	MILD	M123/B3	E121/11	E317/C3
1S-201	TURBINE	TERRY TURBINE	G.E. ORDER NO 205AA872 T*	HPCI ROOM	716' 9"	MILD	M122/E3	E121/25	E317/C3
MO-2202	MOTOR OPERATED VALVE	LIMITORQUE	SMB-2, DC-CLA	HPCI ROOM	716' 9"	MILD	M122/F3	E121/16	E317/C3
MO-2290A	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	TORUS ROOM SOUTH	716' 9"	HARSH	M122/B8	E121/23A	E317/D5
MO-2290B	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	TORUS ROOM SOUTH	716' 9"	HARSH	M122/B8	E121/23A	E317/D5

SYSTEM: INTAKE STRUCTURE H&V SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
HS-7714A	HAND SWITCH	GE	CR2940-UB202D	INTAKE STR/1C-156	767'	MILD	M177/F6	E113/63	E348/C7
HS-7714B	HAND SWITCH	GE	CR2940-UB202D	INTAKE STR/1C-157	767'	MILD	M177/F6	E113/63	E348/B7
TS-7701	TEMPERATURE SWITCH	CHROMALOX	972D	INTAKE STR	761' 0"	MILD	M177/H8	E128/3	M667/F6
TS-7702	TEMPERATURE SWITCH	CHROMALOX	972D	INTAKE STR	761' 0"	MILD	M177/H8	E128/7	M667/G6
TS-7703	TEMPERATURE SWITCH	CHROMALOX	972D	INTAKE STR	761' 0"	MILO	M177/H8	E128/3	M667/F7
TS-7704	TEMPERATURE SWITCH	CHROMALOX	972D	INTAKE STR	761' 0"	MILD	M177/H8	E128/7	M667/G7
TS-7705	TEMPERATURE SWITCH	CHROMALOX	972D	INTAKE STR	767' 0"	MILD	M177/H8	E128/3	M667/F2
TS-7706	TEMPERATURE SWITCH	CHROMALOX	972D	INTAKE STR	767' 0"	MILD	M177/H8	E128/7	M667/G2
TS-7707	TEMPERATURE SWITCH	CHROMALOX	972D	INTAKE STR	767' 0"	MILD	M177/H8	E128/3	M667/F4
TS-7708	TEMPERATURE SWITCH	CHROMALOX	972D	INTAKE STR	767' 0"	MILD	M177/H8	E128/7	M667/G4
1V-SF-50	FAN MOTOR	JOY	SF-302060, SE	INTAKE STR	767'	MILO	M177/G6	E113/63	M17/E7
1V-SF-51	FAN MOTOR	JOY	SF-302061, SE	INTAKE STR	767'	MILD	M177/G6	E113/63	M17/D7
1V-UH-52A	HEATER	CHROMALOX	LUH12-18	INTAKE STR	761' 0"	MILD	M117/H8	E128/3	M667/F6
1V-UH-52B	HEATER	CHROMALOX	LUH12-18	INTAKE STR	761' 0"	MILD	M117/H8	E128/7	M667/G6
1V-UH-52C	HEATER	CHROMALOX	LUH12-18	INTAKE STR	761' 0"	MILD	M117/H8	E128/3	M667/F7
1V-UH-52D	HEATER	CHROMALOX	LUH12-18	INTAKE STR	761' 0"	MILD	M117/H8	E128/7	M667/G7
1V-UH-52E	HEATER	CHROMALOX	LUH12-18	INTAKE STR	767' 0"	MILD	M177/H8	E128/3	M667/F2

SYSTEM: INTAKE STRUCTURE H&V SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
1V-UH-52F	HEATER	CHROMALOX	LUH12-18	INTAKE STR	767' 0"	MILD	M177/H8	E128/7	M667/G2
1V-UH-52G	HEATER	CHROMALOX	LUH12-18	INTAKE STR	767' 0"	MILD	M177/H8	E128/3	M667/F4
1V-UH-52H	HEATER	CHROMALOX	LUH12-18	INTAKE STR	767' 0"	MILD	M177/H8	E128/7	M667/G4

SYSTEM: LEAK DETECTION SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
E/S-2725	POWER SUPPLY	GE	145C3016-P001	CB CTL RM/1C-19	786' 0"	MILD	M127/D5	E120/14	E338/D5
E/S-2748	POWER SUPPLY	GE	145C3016-P001	CB CTL RM/1C-19	786' 0"	MILD	M127/G6	E120/14	E338/D5
FS-2749A	FLOW SWITCH	GE	560	CB CTL RM/1C-19	786' 0"	MILD	M127/G6	E120/14	E338/D5
FS-2749B	FLOW SWITCH	GE	560	CB CTL RM/1C-19	786' 0"	MILD	M127/G6	E120/14	E338/D5
FT-2725	FLOW TRANSMITTER	G.E.	555-111BCAA3P	RB-N	812' 0"	MILD	M127/D5	E120/4	E322/D7
FY-2725		GE	565	CB CTL RM/1C-19	786' 0"	MILD	M127/D5	E120/14	E338/D5
FY-2747		GE	565	CB CTL RM/1C-19	786' 0"	MILD	M127/G5	E120/14	E338/D5
FY-2748		GE	565	CB CTL RM/1C-19	786'	MILD	M127/G5	E120/14	E338/D5
FY-2749		GE	565	CB CTL RM/1C-19	786'	MILD	M127/G5	E120/14	E338/D5
HS-2267A	HAND SWITCH	GE	CR2940	CB CTL RM/1C-21	786' 0"	MILD	M122/A3	E124/7	E338/C4
HS-2267B	HAND SWITCH	GE	CR2940	CB CTL RM/1C-21	786' 0"	MILD	M122/A3	E124/7	E338/C4
HS-2449A	HAND SWITCH	GE	CR2940	CB CTL RM/1C-21	786' 0"	MILD	M124/B7	E124/6	E338/C4
HS-2449B	HAND SWITCH	GE	CR2940	CB CTL RM/1C-21	786' 0"	MILD	M124/A7	E124/6	E338/C4
KS-2524A		EAGLE SIGNAL	HP57A607	CB CTL RM/1C-21	786' 0"	MILD	M125/B3	E124/6	E338/C4
KS-2524B		EAGLE SIGNAL	HP57A607	CB CTL RM/1C-21	786' 0"	MILD	M125/A3	E124/6	E338/C4
KS-2525A		EAGLE SIGNAL	HP57A607	CB CTL RM/1C-21	786' 0"	MILD	M125/B3	E124/6	E338/C4

SYSTEM: LEAK DETECTION SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME OWG/SH	LAYOUT/ LOC
KS-2525B		EAGLE SIGNAL	HP57A607	CB CTL RM/1C-21	786' 0"	MILD	M125/A3	E124/6	E338/C4
PDIS-2244	DIFF.PRESS. IND. SWIT	BARTON	288	RB-S/1C-122	757' -6"	MILD	M122/F5	E121/24	E319/E5
PDIS-2245	DIFF.PRESS. IND. SWIT	BARTON	288	RB-S/1C-126B	757' -6"	MILD	M122/F6	E121/24	E319/E4
PDIS-2441	DIFF.PRESS. IND. SWIT	BARTON	288	RB-N/1C-121	757' -6"	MILD	M124/F5	E121/37	E318/F4
PDIS-2442	DIFF.PRESS. IND. SWIT	BARTON	288	NE CRNR RM/1C-57	716' 9"	MILD	M124/F5	E121/37	E316/E2
PDIS-4432A	DIFF.PRESS. IND. SWIT	BARTON	288	RB-N/1C-126A	757' -6"	MILD	M114/E2	E122/9	E318/D3
PDIS-4432B	DIFF.PRESS. IND. SWIT	BARTON	288	RB-N/1C-126A	757' -6"	MILD	M114/E2	E122/9	E318/D3
PDIS-4432C	DIFF.PRESS. IND. SWIT	BARTON	288	RB-S/1C-126B	757' -6"	MILD	M114/E2	E122/9	E319/E4
PDIS-4432D	DIFF.PRESS. IND. SWIT	BARTON	288	RB-S/1C-126B	757' -6"	MILD	M114/E2	E122/9	E319/E4
PDIS-4434A	DIFF.PRESS. IND. SWIT	BARTON	288	RB-S/1C-122	757' -6"	MILD	M114/C8	E122/9	E319/E5
PDIS-4434B	DIFF.PRESS. IND. SWIT	BARTON	288	RB-S/1C-122	757' -6"	MILD	M114/C8	E122/9	E319/E5
PDIS-4434C	DIFF.PRESS. IND. SWIT	BARTON	288	RB-S/1C-126B	757' -6"	MILD	M114/C8	E122/9	E319/E4
PDIS-4434D	DIFF.PRESS. IND. SWIT	BARTON	288	RB-S/1C-126B	757' -6"	MILD	M114/C7	E122/9	E319/E4
PDIS-4436A	DIFF.PRESS. IND. SWIT	BARTON	288	RB-N/1C-126A	757' -6"	MILD	M114/C2	E122/9	E318/D3
PDIS-4436B	DIFF.PRESS. IND. SWIT	BARTON	288	RB-N/1C-126A	757' -6"	MILD	M114/C2	E122/9	E318/D3
PDIS-4436C	DIFF.PRESS. IND. SWIT	BARTON	288	RB-S/1C-126B	757' -6"	MILD	M114/C2	E122/9	E319/E4

SYSTEM: LEAK DETECTION SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&IO/LOC	ELECT SCHEME OWG/SH	LAYOUT/ LOC
PDIS-4436D	DIFF,PRESS. IND. SWIT	BARTON	288	RB-S/1C-126B	757' -6"	MILD	M114/C2	E122/9	E319/E4
PDIS-4438A	DIFF,PRESS. IND. SWIT	BARTON	288	RB-N/1C-126A	757' -6"	MILO	M114/E7	E122/9	E318/D3
PDIS-4438B	DIFF,PRESS. IND. SWIT	BARTON	288	RB-N/1C-126A	757' -6"	MILD	M114/E8	E122/9	E318/D3
PDIS-4438C	DIFF,PRESS. IND. SWIT	BARTON	288	RB-S/1C-126B	757' -6"	MILD	M114/E8	E122/9	E319/E4
PDIS-4438D	DIFF,PRESS. IND. SWIT	BARTON	288	RB-S/1C-126B	757' -6"	MILD	M114/E8	E122/9	E319/E4
PS-1014	PRESSURE SWITCH	BARKSDALE	B2T M12SS	TURBINE BLDG NORTH	734'	MILD	M103/F7	E122/9	E304/B6
PS-1015	PRESSURE SWITCH	BARKSDALE	B2T M12SS	TURBINE BLDG NORTH	734'	MILD	M103/F7	E122/9	E304/B7
PS-1016	PRESSURE SWITCH	BARKSDALE	B2T M12SS	TURBINE BLDG NORTH	734'	MILD	M103/F6	E122/9	E304/B7
PS-1017	PRESSURE SWITCH	BARKSDALE	B2T M12SS	TURBINE BLDG NORTH	734'	MILD	M103/F7	E122/9	E304/B7
PS-2246A	PRESSURE SWITCH	BARKSDALE	B2T M12SS	RB-S/1C-126B	757' -6"	MILD	M122/F5	E121/24	E319/E4
PS-2246B	PRESSURE SWITCH	BARKSDALE	B2T M12SS	RB-S/1C-122	757' -6"	MILO	M122/F5	E121/24	E319/E5
PS-2246C	PRESSURE SWITCH	BARKSDALE	B2T M12SS	RB-S/1C-126B	757' -6"	MILD	M122/E5	E121/24	E319/E4
PS-2246D	PRESSURE SWITCH	BARKSDALE	B2T M12SS	RB-S/1C-122	757' -6"	MILD	M122/E5	E121/24	E319/E5
PS-2443A	PRESSURE SWITCH	BARKSDALE	B2T M12SS	RB-N/1C-121	757' 6"	MILD	M124/F5	E121/37	F318/F4
PS-2443B	PRESSURE SWITCH	BARKSDALE	B2T M12SS	NE CRNR RM/1C-57	716' 9"	MILD	M124/F5	E121/37	E316/E2
PS-2443C	PRESSURE SWITCH	BARKSDALE	B2T M12SS	RB-N/1C-121	757' -6"	MILD	M124/F5	E121/37	E318/F4
PS-2443D	PRESSURE SWITCH	BARKSDALE	B2T M12SS	NE CRNR RM/1C-57	735' 7"	MILD	M124/F5	E121/37	E316/E2

SYSTEM: LEAK DETECTION SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
TDS-2085A	TEMPERATURE DIFFERENTIAL SWITC	TRANSMATION	630A	CB CTL RM/1C-21	786'	MILD	M120/G7	E124/7	E338/C4
TDS-2085A				CB CTL RM/1C-21	786' 0"	MILD	M120/G7		E337/C4
TDS-2085B				CB CTL RM/1C-21	786' 0"	MILD	M120/G7		E337/C4
TDS-2260A		TRANSMATION	610A	CB CTL RM/1C-21	786' 0"	MILD	M122/A4	E124/6	E338/C4
TDS-2260B		TRANSMATION	610A	CB CTL RM/1C-21	786' 0"	MILD	M122/A4	E124/6	E338/C4
TDS-2445A	TEMPERATURE DIFFERENTIAL SWITC	TRANSMATION	630A	CB CTL RM/1C-21	786' 0"	MILD	M124/B8	E124/6	E338/C4
TDS-2445B	TEMPERATURE DIFFERENTIAL SWITC	TRANSMATION	630A	CB CTL RM/1C-21	786' 0"	MILD	M124/A8	E124/6	E338/C4
TDS-2521A	TEMPERATURE DIFFERENTIAL SWITC	TRANSMATION	630A	CB CTL RM/1C-21	786' 0"	MILD	M125/B4	E124/6	E338/C4
TDS-2521B	TEMPERATURE DIFFERENTIAL SWITC	TRANSMATION	630A	CB CTL RM/1C-21	786' 0"	MILD	M125/B3	E124/6	E338/C4
TDS-2521C	TEMPERATURE DIFFERENTIAL SWITC	TRANSMATION	630A	CB CTL RM/1C-21	786' 0"	MILD	M125/A4	E124/6	E338/C4
TDS-2521D	TEMPERATURE DIFFERENTIAL SWITC	TRANSMATION	630A	CB CTL RM/1C-21	786' 0"	MILD	M125/A3	E124/6	E338/C4
TDS-2743A	TEMPERATURE DIFFERENTIAL SWITC	TRANSMATION	630A	CB CTL RM/1C-21	786' 0"	MILD	M127/B8	E124/7	E338/C4
TDS-2743B	TEMPERATURE DIFFERENTIAL SWITC	TRANSMATION	630A	CB CTL RM/1C-21	786' 0"	MILD	M127/B8	E124/6	E338/C4
TDS-2743C	TEMPERATURE DIFFERENTIAL SWITC	TRANSMATION	630A	CB CTL RM/1C-21	786' 0"	MILD	M127/B8	E124/6	E338/C4
TDS-2743D	TEMPERATURE DIFFERENTIAL SWITC	TRANSMATION	630A	CB CTL RM/1C-21	786' 0"	MILD	M127/B8	E124/6	E338/C4
TDS-2743E	TEMPERATURE DIFFERENTIAL SWITC	TRANSMATION	630A	CB CTL RM/1C-21	786' 0"	MILD	M127/B8	E124/6	E338/C4

SYSTEM: LEAK DETECTION SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
TDS-2743F	TEMPERATURE DIFFERENTIAL SWITC	TRANSMATION	630A	CB CTL RM/1C-21	786' 0"	MILD	M127/B8	E124/6	E338/C4
TE-2082A	TEMPERATURE ELEMENT	NECI	N145C3023	SE CORNER ROOM	716' 9"	MILD	M120/G7	E124/7	M660/E3
TE-2082B	TEMPERATURE ELEMENT	NECI	N145C3023	NW CRNR RM	747' 0"	MILD	M120/G7	E124/7	M646/E7
TE-2083A	TEMPERATURE ELEMENT	NECI	N145C3023	HPCI ROOM	716' 9"	MILD	M120/G7	E124/7	M661/D2
TE-2083B	TEMPERATURE ELEMENT	NECI	N145C3023	RB-N	757' 6"	MILD	M120/G7	E124/7	M644/F7
TE-2084A	TEMPERATURE ELEMENT	NECI	N145C3023	SE CRNR ROOM	747' 0"	MILD	M120/G7	E124/7	M661/E3
TE-2084B	TEMPERATURE ELEMENT	NECI	N145C3023	TORUS ROOM NORTH	716' 9"	MILD	M120/G7	E124/7	M646/E6
TE-2262A	TEMPERATURE ELEMENT	NECI	N145C3023	HPCI ROOM	716' 9"	HARSH	M122/A4	E124/6	E317/C2
TE-2262B	TEMPERATURE ELEMENT	NECI	N145C3023	HPCI ROOM	716' 9"	HARSH	M122/A4	E124/6	E317/C2
TE-2263A	TEMPERATURE ELEMENT	NECI	N145C3023	HPCI ROOM	716' 9"	HARSH	M122/A3	E124/6	M661/D4
TE-2263B	TEMPERATURE ELEMENT	NECI	N145C3023	HPCI ROOM	716' 9"	HARSH	M122/A3	E124/6	M661/D4
TE-2264A	TEMPERATURE ELEMENT	NECI	N145C3023	HPCI ROOM	747' 0"	HARSH	M122/A2	E124/7	E317/C3
TE-2264B	TEMPERATURE ELEMENT	NECI	N145C3023	HPCI ROOM	747' 0"	HARSH	M122/A2	E124/7	E317/C3
TE-2446A	TEMPERATURE ELEMENT	NECI	N145C3023	RCIC ROOM	724' 6"	MILD	M124/B8	E124/6	E317/C6
TE-2446B	TEMPERATURE ELEMENT	NECI	N145C3023	RCIC ROOM	724' 6"	MILD	M124/B8	E124/6	E317/C6
TE-2447A	TEMPERATURE ELEMENT	NECI	N145C3023	RCIC ROOM	716' 9"	MILD	M124/B8	E124/6	E317/D5

SYSTEM: LEAK DETECTION SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME OWG/SH	LAYOUT/ LOC
TE-2447B	TEMPERATURE ELEMENT	NECI	N145C3023	RCIC ROOM	716' 9"	MILD	M124/B8	E124/6	E317/D5
TE-2451A	TEMPERATURE ELEMENT	NECI	N145C3023	RCIC ROOM	716' 9"	MILD	M124/B7	E124/7	E317/C5
TE-2451B	TEMPERATURE ELEMENT	NECI	N145C3023	RCIC ROOM	716' 9"	MILD	M124/B7	E124/7	E317/C5
TE-2522A	TEMPERATURE ELEMENT	NECI	N145C3023	TORUS ROOM NORTH	716' 9"	HARSH	M125/B4	E124/6	M646/C3
TE-2522B	TEMPERATURE ELEMENT	NECI	N145C3023	TORUS ROOM SOUTH	716' 9"	HARSH	M125/B3	E124/6	M660/H8
TE-2522C	TEMPERATURE ELEMENT	NECI	N145C3023	TORUS ROOM SOUTH	746' 3"	HARSH	M125/A4	E124/6	M660/F7
TE-2522D	TEMPERATURE ELEMENT	NECI	N145C3023	TORUS ROOM SOUTH	716' 9"	HARSH	M125/A3	E124/6	M660/D5
TE-2523A	TEMPERATURE ELEMENT	NECI	N145C3023	TORUS ROOM NORTH	716' 9"	HARSH	M125/B4	E124/6	E316/E3
TE-2523B	TEMPERATURE ELEMENT	NECI	N145C3023	TORUS ROOM NORTH	716' 9"	HARSH	M125/B3	E124/6	E316/E3
TE-2523C	TEMPERATURE ELEMENT	NECI	N145C3023	TORUS ROOM NORTH	716' 9"	HARSH	M125/A4	E124/6	E316/E3
TE-2523D	TEMPERATURE ELEMENT	NECI	N145C3023	TORUS ROOM NORTH	716' 9"	HARSH	M125/A3	E124/6	E316/E3
TE-2526A	TEMPERATURE ELEMENT	NECI	N145C3023	TORUS ROOM NORTH	716' 9"	HARSH	M125/B4	E124/6	M646/F4
TE-2526B	TEMPERATURE ELEMENT	NECI	N145C3023	TORUS ROOM NORTH	716' 9"	HARSH	M125/B2	E124/6	M646/B8
TE-2526C	TEMPERATURE ELEMENT	NECI	N145C3023	TORUS ROOM SOUTH	716' 9"	HARSH	M125/A4	E124/6	M660/D4
TE-2526D	TEMPERATURE ELEMENT	NECI	N145C3023	TORUS ROOM NORTH	716' 9"	HARSH	M125/A2	E124/6	M646/B2
TE-2742A	TEMPERATURE ELEMENT	NECI	N145C3224	RWCU PUMP ROOM	786' 0"	HARSH	M127/A8	E124/7	M657/E4

SYSTEM: LEAK DETECTION SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
TE-2742B	TEMPERATURE ELEMENT	NECI	N145C3224	RWCU PUMP ROOM	786' 0"	HARSH	M124/A8	E124/7	M657/E3
TE-2742C	TEMPERATURE ELEMENT	NECI	N145C3224	RWCU HEAT EXCH ROOM	786' 0"	HARSH	M127/A8	E124/7	M657/E3
TE-2742D	TEMPERATURE ELEMENT	NECI	N145C3224	RWCU HEAT EXCH ROOM	786' 0"	HARSH	M127/A8	E124/7	M657/E4
TE-2742E	TEMPERATURE ELEMENT	NECI	N145C3224	RWCU HEAT EXCH ROOM	786' 0"	HARSH	M127/A8	E124/7	E657/E6
TE-2742F	TEMPERATURE ELEMENT	NECI	N145C3224	RWCU HEAT EXCH ROOM	786' 0"	HARSH	M127/A8	E124/7	M657/F5
TE-2743A	TEMPERATURE ELEMENT	NECI	N145C3224	RWCU PUMP ROOM	786' 0"	HARSH	M127/A8	E124/6	M657/E4
TE-2743B	TEMPERATURE ELEMENT	NECI	N145C3224	RWCU PUMP ROOM	786' 0"	HARSH	M127/A8	E124/6	M657/E3
TE-2743C	TEMPERATURE ELEMENT	NECI	N145C3224	RWCU PUMP ROOM	786' 0"	HARSH	M127/A8	E124/6	M657/E4
TE-2743D	TEMPERATURE ELEMENT	NECI	N145C3224	RWCU HEAT EXCH ROOM	786' 0"	HARSH	M127/A8	E124/6	M657/F6
TE-2743E	TEMPERATURE ELEMENT	NECI	N145C3224	RWCU HEAT EXCH ROOM	786' 0"	HARSH	M127/A8	E124/6	M657/F6
TE-2743F	TEMPERATURE ELEMENT	NECI	N145C3224	RWCU HEAT EXCH ROOM	786' 0"	HARSH	M127/A8	E124/6	M657/E5
TE-2744A	TEMPERATURE ELEMENT	NECI	N145C3224	RWCU PUMP ROOM	786' 0"	HARSH	M127/A8	E124/6	M657/F4
TE-2744B	TEMPERATURE ELEMENT	NECI	N145C3224	RWCU PUMP ROOM	786' 0"	HARSH	M127/A8	E124/6	M657/F4
TE-2744C	TEMPERATURE ELEMENT	NECI	N145C3224	RWCU PUMP ROOM	786' 0"	HARSH	M127/A8	E124/6	M657/E4
TE-2744D	TEMPERATURE ELEMENT	NECI	N145C3224	RWCU HEAT EXCH ROOM	786' 0"	HARSH	M127/A8	E124/6	M657/E4
TE-2744E	TEMPERATURE ELEMENT	NECI	N145C3224	RWCU HEAT EXCH ROOM	786' 0"	HARSH	M127/A8	E124/6	M657/E4

SYSTEM: LEAK DETECTION SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
TE-2744F	TEMPERATURE ELEMENT	NECI	N145C3224	RWCU HEAT EXCH ROOM	786' 0"	HARSH	M127/A8	E124/6	M657/F5
TE-4443A	TEMPERATURE ELEMENT	ROSEMOUNT	104MA23ABBB	STEAM TUNNEL	757' 6"	HARSH	M114/H2	E122/9	E328/D3
TE-4443B	TEMPERATURE ELEMENT	ROSEMOUNT	104MA23ABBB	STEAM TUNNEL	757' 6"	HARSH	M114/H2	E122/9	E328/D3
TE-4443C	TEMPERATURE ELEMENT	ROSEMOUNT	104MA23ABBB	STEAM TUNNEL	757' 6"	HARSH	M114/H1	E122/9	E328/D4
TE-4443D	TEMPERATURE ELEMENT	ROSEMOUNT	104MA23ABBB	STEAM TUNNEL	757' 6"	HARSH	M114/H1	E122/9	E328/D4
TE-4444A	TEMPERATURE ELEMENT	ROSEMOUNT	104MA23ABBB	STEAM TUNNEL	757' 6"	HARSH	M114/H1	E122/9	E328/C2
TE-4444B	TEMPERATURE ELEMENT	ROSEMOUNT	104MA23ABBB	STEAM TUNNEL	757' 6"	HARSH	M114/H1	E122/9	E328/C3
TE-4444C	TEMPERATURE ELEMENT	ROSEMOUNT	104MA23ABBB	STEAM TUNNEL	757' 6"	HARSH	M114/H2	E122/9	E328/C3
TE-4444D	TEMPERATURE ELEMENT	ROSEMOUNT	104MA23ABBB	STEAM TUNNEL	757' 6"	HARSH	M114/H2	E122/9	E328/C4
TE-4445A	TEMPERATURE ELEMENT	ROSEMOUNT	104MA23ABBB	STEAM TUNNEL	757' 6"	HARSH	M114/H1	E122/9	E328/E2
TE-4445B	TEMPERATURE ELEMENT	ROSEMOUNT	104MA23ABBB	STEAM TUNNEL	757' 6"	HARSH	M114/H1	E122/9	E328/E3
TE-4445C	TEMPERATURE ELEMENT	ROSEMOUNT	104MA23ABBB	STEAM TUNNEL	757' 6"	HARSH	M114/H2	E122/9	E328/E3
TE-4445D	TEMPERATURE ELEMENT	ROSEMOUNT	104MA23ABBB	STEAM TUNNEL	757' 6"	HARSH	M114/H2	E122/9	E328/E4
TE-4446A	TEMPERATURE ELEMENT	ROSEMOUNT	104MA23ABBB	STEAM TUNNEL	757' 6"	HARSH	M114/H1	E122/9	E328/E2
TE-4446B	TEMPERATURE ELEMENT	ROSEMOUNT	104MA23ABBB	STEAM TUNNEL	757' 6"	HARSH	M114/H1	E122/9	E328/E3
TE-4446C	TEMPERATURE ELEMENT	ROSEMOUNT	104MA23ABBB	STEAM TUNNEL	757' 6"	HARSH	M114/H2	E122/9	E328/E3

SYSTEM: LEAK DETECTION SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
TE-4446D	TEMPERATURE ELEMENT	ROSEMOUNT	104MA23ABBB	STEAM TUNNEL	757' 6"	HARSH	M114/H2	E122/9	E328/E4
TE-4477A	TEMPERATURE ELEMENT	ROSEMOUNT	104MA23ABBB	TURBINE BLDG.	757' 6"	HARSH	M103/E6	E122/9	E309/D8
TE-4477B	TEMPERATURE ELEMENT	ROSEMOUNT	104MA23ABBB	TURBINE BLDG.	757' 6"	HARSH	M103/F8	E122/9	E308/D7
TE-4478A	TEMPERATURE ELEMENT	ROSEMOUNT	104MA23ABBB	TURBINE BLDG.	757' 6"	HARSH	M103/F7	E122/9	E309/D8
TE-4478B	TEMPERATURE ELEMENT	ROSEMOUNT	104MA23ABBB	TURBINE BLDG.	757' 6"	HARSH	M103/F8	E122/9	E308/C7
TE-4479A	TEMPERATURE ELEMENT	ROSEMOUNT	104MA23ABBB	TURBINE BLDG.	757' 6"	HARSH	M103/E6	E122/9	E309/E8
TE-4479B	TEMPERATURE ELEMENT	ROSEMOUNT	104MA23ABBB	TURBINE BLDG.	757' 6"	HARSH	M103/G8	E122/9	E308/D7
TE-4480A	TEMPERATURE ELEMENT	ROSEMOUNT	104MA23ABBB	TURBINE BLDG.	757' 6"	HARSH	M103/G8	E122/9	E308/D7
TE-4480B	TEMPERATURE ELEMENT	ROSEMOUNT	104MA23ABBB	TURBINE BLDG.	757' 6"	HARSH	M103/F8	E122/9	E308/D7
TIS-4443	TEMPERATURE INDICATING SWITCH	ROSEMOUNT	3000A-1-4-2-2	RB-S/1C-193A	757' -6"	MILD	M114/H1	E122/9	E319/F2
TIS-4444	TEMPERATURE INDICATING SWITCH	ROSEMOUNT	3000A-1-4-2-2	RB-N/1C-193B	757' -6"	MILD	M114/H1	E122/9	M405-2
TIS-4445	TEMPERATURE INDICATING SWITCH	ROSEMOUNT	3000A-1-4-2-2	RB-N/1C-193C	757' -6"	MILD	M114/H1	E122/9	M405-2
TIS-4446	TEMPERATURE INDICATING SWITCH	ROSEMOUNT	3000A-1-4-2-2	RB-N/1C-193D	757' -6"	MILD	M114/H1	E122/9	M405-2
TIS-4477	TEMPERATURE INDICATING SWITCH	ROSEMOUNT	3000A-1-4-2-2	TB/1C-194A	734'	MILD	M103/F8	E122/9	M405-1
TIS-4478	TEMPERATURE INDICATING SWITCH	ROSEMOUNT	3000A-1-4-2-2	TB/1C-194B	734'	MILD	M103/F8	E122/9	M405-1
TIS-4479	TEMPERATURE INDICATING SWITCH	ROSEMOUNT	3000A-1-4-2-2	TB/1C-194C	734'	MILD	M103/G8	E122/9	M405-1

SYSTEM: LEAK DETECTION SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
TIS-4480	TEMPERATURE INDICATING SWITCH	ROSEMOUNT	3000A-1-4-2-2	TB/1C-194D	734'	MILD	M103/G8	E122/9	M405-1
TS-2082B				CB CTL RM/1C-21	786' 0"	MILD	M120/G8		E337/C4
TS-2261A		TRANSMATION	610A	CB CTL RM/1C-21	786' 0"	MILD	M122/B3	E124/6	E338/C4
TS-2261B		TRANSMATION	610A	CB CTL RM/1C-21	786' 0"	MILD	M122/B4	E124/6	E338/C4
TS-2450A		TRANSMATION	610A	CB CTL RM/1C-04	786' 0"	MILD	M124/B7	E124/7	E338/D5
TS-2450B		TRANSMATION	610A	CB CTL RM/1C-04	786' 0"	MILD	M124/A7	E124/7	E338/D5
TS-2526A		TRANSMATION	610A	CB CTL RM/1C-21	786' 0"	MILD	M125/B4	E124/6	E338/C4
TS-2526B		TRANSMATION	610A	CB CTL RM/1C-21	786' 0"	MILD	M125/B2	E124/7	E338/C4
TS-2526C		TRANSMATION	610A	CB CTL RM/1C-21	786' 0"	MILD	M125/A4	E124/7	E338/C4
TS-2526D		TRANSMATION	610A	CB CTL RM/1C-21	786' 0"	MILD	M125/A2	E124/7	E338/C4
TS-2742A		TRANSMATION	610A	CB CTL RM/1C-21	786' 0"	MILD	M127/B8	E124/7	E338/C4
TS-2742B		TRANSMATION	610A	CB CTL RM/1C-21	786' 0"	MILD	M127/B8	E124/7	E338/C4
TS-2742C		TRANSMATION	610A	CB CTL RM/1C-21	786' 0"	MILD	M127/B8	E124/7	E338/C4
TS-2742D		TRANSMATION	610A	CB CTL RM/1C-21	786' 0"	MILD	M127/B8	E124/7	E338/C4
TS-2742E		TRANSMATION	610A	CB CTL RM/1C-21	786' 0"	MILD	M127/B8	E127/7	E338/C4
TS-2742F		TRANSMATION	610A	CB CTL RM/1C-21	786' 0"	MILD	M127/B8	E124/7	E338/C4

SYSTEM: LEAK DETECTION SYSTEMS

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
TE-2265	TEMPERATURE ELEMENT	NECI	N145C3023	HPCI ROOM	731' 9"	HARSH	M122/A2	E124/7	M660/C3
TE-2453	TEMPERATURE ELEMENT	NECI	N145C3023	RCIC RDOM	716' 9"	HARSH	M124/C7	E124/7	M661/B5
TE-4447	TEMPERATURE ELEMENT	NECI	N145C3023	STEAM TUNNEL	757' 6"	HARSH	M114/G3	E124/7	E328/E3
TE-4451A	TEMPERATURE ELEMENT	NECI	N145C3023	STEAM TUNNEL	757' 6"	HARSH	M114/G2	E124/6	E328/D3
TE-4451B	TEMPERATURE ELEMENT	NECI	N145C3023	STEAM TUNNEL	757' 6"	HARSH	M114/G2	E124/6	E328/F4

SYSTEM: MAIN STEAM LINE ISOL VALVE LEAKAGE CONT.

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
FM-8408A	FLOW TRANSMITTER	S.K. INSTRUMENT	20-9651-8550	STEAM TUNNEL	757' 6"	HARSH	M184/F4	E122/37	E328/B5
FM-8408B	FLOW TRANSMITTER	S.K. INSTRUMENT	20-9651-8550	STEAM TUNNEL	757' 6"	HARSH	M184/C6	E122/37	E328/B5
FM-8408C	FLOW TRANSMITTER	S.K. INSTRUMENT	20-9651-8550	STEAM TUNNEL	757' 6"	HARSH	M184/C3	E122/37	E328/B5
FM-8408D	FLOW TRANSMITTER	S.K. INSTRUMENT	20-9651-8550	STEAM TUNNEL	757' 6"	HARSH	M184/F8	E122/37	E328/B5
HS-8401A	HAND SWITCH	GE	SBM	CB CTL RM/1C-14	786' 0"	MILD	M184/G3	E122/38	E337/D6
HS-8401B	HAND SWITCH	GE	SBM	CB CTL RM/1C-14	786' 0"	MILD	M184/C8	E122/38	E337/D6
HS-8401C	HAND SWITCH	GE	SBM	CB CTL RM/1C-14	786' 0"	MILD	M184/F3	E122/38	E337/D6
HS-8401D	HAND SWITCH	GE	SBM	CB CTL RM/1C-14	786' 0"	MILD	M184/F8	E122/38	E337/D6
HS-8402A	HAND SWITCH	GE	SBM	CB CTL RM/1C-14	786' 0"	MILD	M184/G3	E122/37	E337/D6
HS-8402B	HAND SWITCH	GE	SBM	CB CTL RM/1C-14	786' 0"	MILD	M184/C8	E122/37	E337/D6
HS-8402C	HAND SWITCH	GE	SBM	CB CTL RM/1C-14	786' 0"	MILD	M184/F3	E122/37	E337/D6
HS-8402D	HAND SWITCH	GE	SBM	CB CTL RM/1C-14	786' 0"	MILD	M184/F8	E122/37	E337/D6
HS-8403A	HAND SWITCH	GE	CR2940	CB CTL RM/1C-14	786' 0"	MILD	M184/G4	E122/37	E337/D6
HS-8403B	HAND SWITCH	GE	CR2940	CB CTL RM/1C-14	786' 0"	MILD	M184/C8	E122/37	E337/D6
HS-8403C	HAND SWITCH	GE	CR2940	CB CTL RM/1C-14	786' 0"	MILD	M184/F3	E122/37	E337/D6
HS-8403D	HAND SWITCH	GE	CR2940	CB CTL RM/1C-14	786' 0"	MILD	M184/F8	E122/37	E337/D6

SYSTEM: MAIN STEAM LINE ISOL VALVE LEAKAGE CONT.

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RDN-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYDUT/ LOC
HS-8410	HAND SWITCH	GE	SBM	CB CTL RM/1C-14	786' 0"	MILD	M184/F5	E122/37	E337/D6
HS-8413	HAND SWITCH	GE	SBM	CB CTL RM/1C-14	786' 0"	MILD	M184/D5	E122/37	E337/D6
HS-8417A	HAND SWITCH	GE	SBM	CB CTL RM/1C-14	786' 0"	MILD	M184/G4	E122/37	E337/D6
HS-8417B	HAND SWITCH	GE	SBM	CB CTL RM/1C-14	786' 0"	MILD	M184/C8	E122/37	E337/D6
HS-8417C	HAND SWITCH	GE	SBM	CB CTL RM/1C-14	786' 0"	MILD	M184/F3	E122/37	E337/D6
HS-8417D	HAND SWITCH	GE	SBM	CB CTL RM/1C-14	786' 0"	MILD	M184/F8	E122/37	E337/D6
HS-8418	HAND SWITCH	GE	SBM	CB CTL RM/1C-14	786' 0"	MILD	M184/G5	E122/37	E337/D6
MO-8401A	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	STEAM TUNNEL	757' 6"	HARSH	M184/F3	E122/38	E328/B6
MO-8401B	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	STEAM TUNNEL	757' 6"	HARSH	M184/C8	E122/38	E328/B6
MO-8401C	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	STEAM TUNNEL	757' 6"	HARSH	M184/C3	E122/38	E328/B6
MO-8401D	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	STEAM TUNNEL	757' 6"	HARSH	M184/F8	E122/38	E328/B6
MO-8402A	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	STEAM TUNNEL	757' 6"	HARSH	M184/F3	E122/38	E328/B6
MO-8402B	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	STEAM TUNNEL	757' 6"	HARSH	M184/C8	E122/38	E328/B6
MO-8402C	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	STEAM TUNNEL	757' 6"	HARSH	M184/C3	E122/38	E328/
MO-8402D	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	STEAM TUNNEL	757' 6"	HARSH	M184/F8	E122/38	E328/B6
MO-8403A	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	STEAM TUNNEL	757' 6"	HARSH	M184/F4	E122/38	E328/B5

SYSTEM: MAIN STEAM LINE ISOL VALVE LEAKAGE CONT.

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
MO-8403B	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	STEAM TUNNEL	757' 6"	HARSH	M184/C8	E122/38	E328/B4
MO-8403C	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	STEAM TUNNEL	757' 6"	HARSH	M184/C3	E122/38	E328/B4
MO-8403D	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	STEAM TUNNEL	757' 6"	HARSH	M184/F8	E122/38	E328/B4
PS-8404A	PRESSURE SWITCH	BARKSDALE	P1H-M85SS-V	A CRD RR/1C-145	771' 10"	HARSH	M184/G3	E122/37	M2/A5
PS-8404B	PRESSURE SWITCH	BARKSDALE	P1H-M85SS-V	A CRD RR/1C-145	771' 10"	HARSH	M184/C8	E122/37	M2/A5
PS-8404C	PRESSURE SWITCH	BARKSDALE	P1H-M85SS-V	A CRD RR/1C-145	771' 10"	HARSH	M184/F3	E122/37	M2/A5
PS-8404D	PRESSURE SWITCH	BARKSDALE	P1H-M85SS-V	A CRD RR/1C-145	771' 10"	HARSH	M184/F8	E122/37	M2/A5
PS-8415A	PRESSURE SWITCH	BARKSDALE	B2T M12SS	RB-N/1C-55A	757' -6"	MILD	M184/G2	E122/37	M2/E6
PS-8415B	PRESSURE SWITCH	BARKSDALE	B2T M12SS	RB-N/1C-55A	757' -6"	MILD	M184/C8	E122/37	M2/E6
PS-8415C	PRESSURE SWITCH	BARKSDALE	B2T M12SS	RB-N/1C-55A	757' -6"	MILD	M184/F3	E122/37	M2/E6
PS-8415D	PRESSURE SWITCH	BARKSDALE	B2T M12SS	RB-N/1C-55A	757' -6"	MILD	M184/F8	E122/37	M2/E6
1K-25A	MOTOR-OPERATED BLOWER	SIEMENS	2CH6 041-U	A CRD RR	771' 10"	HARSH	M184/C5	E122/37	M644/B6
1K-25B	MOTOR-OPERATED BLOWER	SIEMENS	2CH6 041-U	A CRD RR	771' 10"	HARSH	M184/C5	E122/37	M644/C6
1S-122A	HEATER	GE	47C518675	STEAM TUNNEL	757' 6"	HARSH	M184/F4	E122/37	E328/E4
1S-122B	HEATER	GE	47C518675	STEAM TUNNEL	757' 6"	HARSH	M184/B8	E122/37	E328/E4
1S-122C	HEATER	GE	47C518675	STEAM TUNNEL	757' 6"	HARSH	M184/B3	E122/37	E328/E4

SYSTEM: MAIN STEAM LINE ISOL VALVE LEAKAGE CONT.

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
1S-122D	HEATER	GE	47C518675	STEAM TUNNEL	757' 6"	HARSH	M184/E8	E122/37	E328/E4

SYSTEM: NUCLEAR BOILER/ CONTAINMENT SYSTEMS

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
LIS-4531	LEVEL INDICATING SWITCH	YARWAY	4418C	RB-N/1C-56	786' 0"	MILD	M115/F6	E121/2	E320/D4
LIS-4532	LEVEL INDICATING SWITCH	YARWAY	4418C	RB-N/1C-55	757' -6"	MILD	M115/F3	E121/2	E318/E6
LIS-4533	LEVEL INDICATING SWITCH	YARWAY	4418C	RB-N/1C-56	786' 0"	MILD	M115/F7	E121/2	E320/D4
LIS-4534	LEVEL INDICATING SWITCH	YARWAY	4418C	RB-N/1C-55	757' -6"	MILD	M115/F3	E121/2	E318/E6
LIS-4535	LEVEL INDICATING SWITCH	YARWAY	4418C	RB-N/1C-56	786' 0"	MILD	M115/F7	E122/9	E320/D4
LIS-4536	LEVEL INDICATING SWITCH	YARWAY	4418C	RB-N/1C-55	786' 0"	MILD	M115/F3	E122/9	E318/E6
LIS-4537	LEVEL INDICATING SWITCH	YARWAY	4418C	RB-N/1C-56	786' 0"	MILD	M115/F7	E122/9	E320/D4
LIS-4538	LEVEL INDICATING SWITCH	YARWAY	4418C	RB-N/1C-55	757' -6"	MILD	M115/F3	E122/9	E318/E6
LIS-4561	LEVEL INDICATING SWITCH	YARWAY	4418C	RB-N/1C-56	786' 0"	MILD	M115/E6	E121/2	E320/D4
LIS-4562	LEVEL INDICATING SWITCH	YARWAY	4418C	RB-N/1C-55	757' -6"	MILD	M115/E3	E121/2	E318/E6
LITS-4565	LEVEL INDICATING SWITCH	YARWAY	4418C	RB-S/1C-122	757' -6"	MILD	M115/E7	E121/56	E319/E5
LITS-4566	LEVEL INDICATING SWITCH	YARWAY	4418C	RB-N/1C-121	757' -6"	MILD	M115/E3	E121/56	E318/F4
PS-4310B	PRESSURE SWITCH	STATIC-O-RING	12N-AA5	RB-S/1C-122	757' -6"	MILD	M143/D6	E121/2	E319/E5
PS-4311B	PRESSURE SWITCH	STATIC-O-RING	12N-AA5	SW CRNR RM/1C-58	716' 9"	MILD	M143/D6	E121/2	E317/D7
PS-4312B	PRESSURE SWITCH	STATIC-O-RING	12N-AA5	RB-S/1C-126B	757' 6"	MILD	M143/E6	E121/2	E319/E4
PS-4313B	PRESSURE SWITCH	STATIC-O-RING	12N-AA5	RB-N/1C-121	757' -6"	MILD	M143/E6	E121/2	E318/F4

SYSTEM: NUCLEAR BOILER/ CONTAINMENT SYSTEMS

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
PS-4529	PRESSURE SWITCH	BARKSDALE	B2T M12SS	RB-S/1C-122	757' -6"	MILD	M115/D7	E121/56	E319/E5
PS-4530	PRESSURE SWITCH	BARKSDALE	B2T M12SS	RB-N/1C-121	757' -6"	MILD	M115/E3	E121/56	E318/F4
PS-4543	PRESSURE SWITCH	BARKSDALE	B2T M12SS	RB-N/1C-56	786' 0"	MILD	M115/F6	E66	E320/D4
PS-4544	PRESSURE SWITCH	BARKSDALE	B2T M12SS	RB-N/1C-55	757' -6"	MILD	M115/F3	E66	E318/E6
PS-4545	PRESSURE SWITCH	BARKSDALE	B2T M12SS	RB-N/1C-56	786' 0"	MILD	M115/F7	E121/9	E320/D4
PS-4546	PRESSURE SWITCH	BARKSDALE	B2T M12SS	RB-N/1C-55	757' 6"	MILD	M115/F3	E66	E318/E6
PS-4547	PRESSURE SWITCH	BARKSDALE	B2T M12SS	RB-N/1C-56	786' 0"	MILD	M115/F7	E66	E320/D4
PS-4548	PRESSURE SWITCH	BARKSDALE	B2T M12SS	RB-N/1C-55	786' 0"	MILD	M115/F3	E121/10	E318/E6
PS-4549	PRESSURE SWITCH	BARKSDALE	B2T M12SS	RB-N/1C-56	786' 0"	MILD	M115/F7	E66	E320/D4
PS-4550	PRESSURE SWITCH	BARKSDALE	B2T M12SS	RB-N/1C-55	757' -6"	MILD	M115/F2	E66	E318/E6
PS-4551	PRESSURE SWITCH	BARKSDALE	B2T M12SS	RB-N/1C-56	786' 0"	MILD	M115/F7	E66	E320/D4
PS-4552	PRESSURE SWITCH	BARKSDALE	B2T M12SS	RB-N/1C-55	757' -6"	MILD	M115/F2	E66	E318/E6
PS-4555	PRESSURE SWITCH	BARKSDALE	B2T M12SS	RB-N/1C-56	786' 0"	MILD	M115/E8	E121/56	E320/D4
PS-4556	PRESSURE SWITCH	BARKSDALE	B2T M12SS	RB-N/1C-55	757' -6"	MILD	M115/E3	E121/56	E318/E6
PS-4557	PRESSURE SWITCH	BARKSDALE	B2T M12SS	RB-N/1C-56	757' -6"	MILD	M115/E8	E121/56	E320/D4
PS-4558	PRESSURE SWITCH	BARKSDALE	B2T M12SS	RB-N/1C-55	757' -6"	MILD	M115/E2	E121/56	E318/E6

SYSTEM: NUCLEAR BOILER/ CONTAINMENT SYSTEMS

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
PS-4593A	PRESSURE SWITCH	STATIC-O-RING	9N-AA45-(X9)-	RB-N/1C-56A	786' 0"	MILD	M115/E8	E120/5	E320/D4
PS-4593B	PRESSURE SWITCH	STATIC-O-RING	9N-AA45-(X9)-	RB-N/1C56A	786'	MILD	M115/E8	E120/5	E320/D4
PS-4593C	PRESSURE SWITCH	STATIC-O-RING	9N-AA45-(X9)-	RB-N/1C-55A	757' -6"	MILD	M115/E2	E120/5	M2/E6
PS-4593D	PRESSURE SWITCH	STATIC-O-RING	9N-AA45-(X9)-	RB-N/1C-55A	757' -6"	MILD	M115/E2	E120/5	M2/E6

SYSTEM: NUREG 0578 MODIFICATIONS

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
E/S-4599A	POWER SUPPLY			CB CTL RM/1C-09	786' 0"	MILD	M115/F8	E122/19A	E338/G4
E/S-4599B	POWER SUPPLY			CB CTL RM/1C-09	786' 0"	MILD	M115/F2	E122/19A	E338/G4
HS-8772A	HAND SWITCH	GE	CR2940-UB203F	CB CTL RM/1C-29	786' 0"	MILD	M187/E1	E112/19	E338/E4
HS-8772B	HAND SWITCH	GE	CR2940-UB203F	CB CTL RM/1C-29	786' 0"	MILD	M187/E1	E112/19	E338/E4
HS-8773A	HAND SWITCH	GE	CR2940-UB203A	CB CTL RM/1C-24	786' 0"	MILD	M187/C3	E113/64	E338/D4
HS-8773B	HAND SWITCH	GE	CR2940-UB203A	CB CTL RM/1C-24	786' 0"	MILD	M187/C2	E113/64	E338/D4
INSTRUMENT CABLE	CABLE	VICTOREEN	878-1-9	VARIOUS	V'RIO	HARSH			
LI-4396A	LEVEL INDICATOR			CB CTL RM/1C-09	786' 0"	MILD	M143/B7	E122/19A	E338/G4
LI-4396B	LEVEL INDICATOR			CB CTL RM/1C-09	786' 0"	MILD	M143/B5	E122/19A	E338/G4
LI-4397A	LEVEL INDICATOR			CB CTL RM/1C-09	786' 0"	MILD	M143/B6	E122/20	E338/G4
LI-4397B	LEVEL INDICATOR			CB CTL RM/1C-09	786' 0"	MILD	M143/B5	E122/20	E338/G4
LR-4396A	LEVEL RECORDER			CB CTL RM/1C-09	786' 0"	MILD	M143/B6	E122/19A	E338/G4
LR-4396B	LEVEL RECORDER			CB CTL RM/1C-09	786' 0"	MILD	M143/B5	E122/19A	E338/G4
LT-4396A	LEVEL/PRESSURE TRANSMITTER	ITT BARTON	764	TORUS ROOM NORTH	716' 9"	HARSH	M143/B6	E122/19A	E316/F6
LT-4396B	LEVEL/PRESSURE TRANSMITTER	ITT BARTON	764	TORUS ROOM NORTH	716' 9"	HARSH	M143/B4	E122/19A	E316/E3
LT-4396C	LEVEL TRANSMITTER	G.E. SUPPLIED ITT	147D7706P736-	RB-S	757' -6"	MILD	M143/E7	E122/19A	E319/E6

SYSTEM: NUREG 0578 MODIFICATIONS

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
LT-4396D	LEVEL TRANSMITTER	G.E. SUPPLIED ITT	147D7706P736-	RB-S	786' 0"	MILD	M143/D4	E122/19A	E320/C4
LT-4397A	LEVEL/PRESSURE TRANSMITTER	ITT BARTON	764	TORUS ROOM SOUTH	716' 9"	HARSH	M143/B5	E122/20	E316/F6
LT-4397B	LEVEL/PRESSURE TRANSMITTER	ITT BARTON	764	TORUS ROOM SOUTH	716' 9"	HARSH	M143/B5	E122/20	E316/E3
LY-4396A	LEVEL RELAY	BAILEY METER	752210-AAAE1	CB CTL RM	786' 0"	MILD	M143/C7	E122/19A	E338/G4
LY-4396B	LEVEL RELAY	BAILEY METER	752210-AAAE1	CB CTL RM	786' 0"	MILD	M143/B4	E122/19A	E338/G4
PI-4398A	PRESSURE INDICATOR			CB CTL RM/1C-09	786' 0"	MILD	M143/F7	E124/3	E338/G4
PI-4398B	PRESSURE INDICATOR			CB CTL RM/1C-09	786' 0"	MILD	M143/D5	E124/3	E338/G4
PI-4399A	PRESSURE INDICATOR			CB CTL RM/1C-09	786' 0"	MILD	M143/D7	E124/3	E338/G4
PI-4399B	PRESSURE INDICATOR			CB CTL RM/1C-09	786' 0"	MILD	M143/D5	E124/3	E338/G4
PI-4599A	PRESSURE INDICATOR			CB CTL RM/1C-09	786' 0"	MILD	M115/F8	E122/20	E338/G4
PI-4599B	PRESSURE INDICATOR			CB CTL RM/1C-09	786' 0"	MILD	M115/F1	E122/20	E338/G4
PR-4398A	PRESSURE RECORDER			CB CTL RM/1C-09	786' 0"	MILD	M143/F7	E124/3	E338/G4
PR-4398B	PRESSURE RECORDER			CB CTL RM/1C-09	786' 0"	MILD	M143/D5	E124/3	E338/G4
PR-4599A	PRESSURE RECORDER			CB CTL RM/1C-09	786' 0"	MILD	M115/F8	E122/20	E338/G4
PR-4599B	PRESSURE RECORDER			CB CTL RM/1C-09	786' 0"	MILD	M115/F2	E122/20	E338/G4
PS-4400A	PRESSURE SWITCH	PRESSURE CONTROLS	219B4562	DRYWELL	757' 4"	HARSH	M114/	E121/2B	M331/

SYSTEM: NUREG 0578 MODIFICATIONS

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
PS-4400B	PRESSURE SWITCH	PRESSURE CONTROLS	219B4562	DRYWELL	757' 4"	HARSH	M114/	E121/2B	M331/
PS-4400C	PRESSURE SWITCH	PRESSURE CONTROLS	219B4562	DRYWELL	757' 4"	HARSH	M114/	E121/2B	M331/
PS-4401A	PRESSURE SWITCH	PRESSURE CONTROLS	219B4562	DRYWELL	757' 4"	HARSH	M114/	E121/2B	M331/
PS-4401B	PRESSURE SWITCH	PRESSURE CONTROLS	219B4562	DRYWELL	757' 4"	HARSH	M114/	E121/2B	M331/
PS-4401C	PRESSURE SWITCH	PRESSURE CONTROLS	219B4562	DRYWELL	757' 4"	HARSH	M114/	E121/2B	M331/
PS-4402A	PRESSURE SWITCH	PRESSURE CONTROLS	219B4562	DRYWELL	757' 4"	HARSH	M114/	E121/2B	M331/
PS-4402B	PRESSURE SWITCH	PRESSURE CONTROLS	219B4562	DRYWELL	757' 4"	HARSH	M114/	E121/2B	M331/
PS-4402C	PRESSURE SWITCH	PRESSURE CONTROLS	219B4562	DRYWELL	757' 4"	HARSH	M114/	E121/2B	M331/
PS-4403A	PRESSURE SWITCH	PRESSURE CONTROLS	219B4562	DRYWELL	757' 4"	HARSH	M114/	E121/2B	M331/
PS-4403B	PRESSURE SWITCH	PRESSURE CONTROLS	219B4562	DRYWELL	757' 4"	HARSH	M114/	E121/2B	M331/
PS-4403C	PRESSURE SWITCH	PRESSURE CONTROLS	219B4562	DRYWELL	757' 4"	HARSH	M114/	E121/2B	M331/
PS-4404A	PRESSURE SWITCH	PRESSURE CONTROLS	219B4562	DRYWELL	757' 4"	HARSH	M114/	E121/2B	M331/
PS-4404B	PRESSURE SWITCH	PRESSURE CONTROLS	219B4562	DRYWELL	757' 4"	HARSH	M114/	E121/2B	M331/
PS-4404C	PRESSURE SWITCH	PRESSURE CONTROLS	219B4562	DRYWELL	757' 4"	HARSH	M114/	E121/2B	M331/
PS-4405A	PRESSURE SWITCH	PRESSURE CONTROLS	219B4562	DRYWELL	757' 4"	HARSH	M114/	E121/2B	M331/
PS-4405B	PRESSURE SWITCH	PRESSURE CONTROLS	219B4562	DRYWELL	757' 4"	HARSH	M114/	E121/2B	M331/

SYSTEM: NUREG 0578 MODIFICATIONS

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
PS-4405C	PRESSURE SWITCH	PRESSURE CONTROLS	219B4562	DRYWELL	757' 4"	HARSH	M114/	E121/2B	M331/
PS-4406A	PRESSURE SWITCH	PRESSURE CONTROLS	219B4562	DRYWELL	757' 4"	HARSH	M114/	E121/2B	M331/
PS-4406B	PRESSURE SWITCH	PRESSURE CONTROLS	219B4562	DRYWELL	757' 4"	HARSH	M114/	E121/2B	M331/
PS-4406C	PRESSURE SWITCH	PRESSURE CONTROLS	219B4562	DRYWELL	757' 4"	HARSH	M114/	E121/2B	M331/
PS-4407A	PRESSURE SWITCH	PRESSURE CONTROLS	219B4562	DRYWELL	757' 4"	HARSH	M114/	E121/2B	M331/
PS-4407B	PRESSURE SWITCH	PRESSURE CONTROLS	219B4562	DRYWELL	757' 4"	HARSH	M114/	E121/2B	M331/
PS-4407C	PRESSURE SWITCH	PRESSURE CONTROLS	219B4562	DRYWELL	757' 4"	HARSH	M114/	E121/2B	M331/
PT-4398A	LEVEL/PRESSURE TRANSMITTER	ITT BARTON	764	RB-S	757' 6"	HARSH	M143/F7	E124/3	E319/E6
PT-4398B	LEVEL/PRESSURE TRANSMITTER	ITT BARTON	764	RB-N	786' 0"	HARSH	M143/D5	E124/3	E320/C4
PT-4399A	PRESSURE TRANSMITTER	ITT BARTON	763	RB-S	757' 6"	MILD	M143/F7	E124/3	E319/E6
PT-4399B	PRESSURE TRANSMITTER	ITT BARTON	763	RB-N	786' 0"	MILD	M143/D6	E124/3	E320/C4
PT-4599A	PRESSURE TRANSMITTER	ITT BARTON	763	RB-N/1C-56	786' 0"	MILD	M115/F8	E122/20	E320/D3
PT-4599B	PRESSURE TRANSMITTER	ITT BARTON	763	RB-N/1C-55	757' -6"	MILD	M115/F2	E122/20	M2/E6
RE-9184A	RADIATION ELEMENT	VICTOREEN	877-1	DRYWELL	757' 4"	HARSH	M148/B5	E63	E329/E5
RE-9184B	RADIATION ELEMENT	VICTOREEN	877-1	DRYWELL	757' 4"	HARSH	M148/B4	E63	E329/C4
RE-9185A	RADIATION ELEMENT	VICTOREEN	877-1	TORUS ROOM NORTH	716' 9"	HARSH	M148/C5	E63	E316/F6

SYSTEM: NUREG 0578 MODIFICATIONS

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
RE-9185B	RADIATION ELEMENT	VICTOREEN	877-1	TORUS ROOM SOUTH	716' 9"	HARSH	M148/C4	E63	E317/G2
RIM-9184A				CB CTL RM/1C-09	786' 0"	MILD	M148/C5	E63	E338/G4
RIM-9184B				CB CTL RM/1C-09	786' 0"	MILD	M148/C4	E63	E338/G4
RIM-9185A				CB CTL RM/1C-09	786' 0"	MILD	M148/C5	E63	E338/G4
RIM-9185B				CB CTL RM/1C-09	786' 0"	MILD	M148/C4	E63	E338/G4
RR-9184A	RADIATION RECORDER	WESTINGHOUSE	PAM	CB CTL RM/1C-09	786'	MILD	M148/C5	E63	E338/G4
RR-9184B	RADIATION RECORDER	WESTINGHOUSE	PAM	CB CTL RM/1C-09	786'	MILD	M148/C4	E63	E338/G4
SV-4300X	SOLENOID VALVE	ASCO	NP831665E	NE CRNR RM	735' 7"	HARSH	M143/D7	E122/12	E316/E2
SV-4302X	SOLENOID VALVE	ASCO	NP831665E	H&V CONTROL VALVE RM	812' 0"	HARSH	M143/D7	E122/12	E322/D4
SV-8772A	SOLENOID VALVE	TARGET ROCK	72V AND 81K	TORUS ROOM NORTH	716' 9"	HARSH	M187/E1	E112/19	E316/G4
SV-8772B	SOLENOID VALVE	TARGET ROCK	72V AND 81K	TORUS ROOM NORTH	716' 9"	HARSH	M187/E1	E112/19	E316/D8
SV-8773A	SOLENOID VALVE	ASCO	NP8321A5E	TORUS ROOM NORTH	716' 9"	HARSH	M187/C3	E113/64	E316/F6
SV-8773B	SOLENOID VALVE	ASCO	NP8321A5E	TORUS ROOM NORTH	716' 9"	HARSH	M187/C2	E113/64	E316/F6
ZS-8773A	POSITION SWITCH	NAMCO	EA170-41302	NW CRNR RM	716' 9"	HARSH	M187/C3	E113/64	E316/F6
ZS-8773B	POSITION SWITCH	NAMCO	EA170-41302	NW CRNR RM	716' 9"	HARSH	M187/C2	E113/64	E316/F6
1C-218A	HYDROGEN-OXYGEN MONITOR PANEL	COMSIP	K-IV	RB-S	757' 6"	MILD	M181/E7	E122/28	M2/D6

SYSTEM: NUREG 0578 MODIFICATIONS

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
1C-218B	HYDROGEN-OXYGEN MONITOR PANEL	COMSIP	K-IV	RB-N	757' 6"	MILD	M181/E1	E122/28	M2/F6

SYSTEM: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
HS-2400	HAND SWITCH	GE	SBM	CB CTL RM/1C-04	786' 0"	MILD	M124/H7	E121/29	E338/D5
HS-2401	HAND SWITCH	GE	SBM	CB CTL RM/1C-04	786' 0"	MILD	M124/H6	E121/30	E338/D5
HS-2458	HAND SWITCH	GE	CR2940	CB CTL RM/1C-04	786' 0"	MILD	M124/G7	E121/29	E338/D5
HS-2459	HAND SWITCH	GE	CR2940	CB CTL RM/1C-04	786' 0"	MILD	M124/G5	E121/30	E338/D5
HS-2481	HAND SWITCH	GE	CR2940	CB CTL RM/1C-04	786' 0"	MILD	M124/G5	E121/30	E338/D5
HS-2510	HAND SWITCH	GE	SBM	CB CTL RM/1C-04	786' 0"	MILD	M125/C4	E121/34	E338/D5
HS-2512	HAND SWITCH	GE	SMB	CB CTL RM/1C-04	786' 0"	MILD	M125/D5	E121/40	E338/D5
HS-2516	HAND SWITCH	GE	SBM	CB CTL RM/1C-04	786' 0"	MILD	M125/B5	E121/33	E338/D5
HS-2517	HAND SWITCH	GE	SBM	CB CTL RM/1C-04	786' 0"	MILD	M125/F4	E121/33	E338/D5
HS-2700	HAND SWITCH	GE	SBM	CB CTL RM/1C-04	786' 0"	MILD	M127/G8	E122/3	E338/D5
HS-2701	HAND SWITCH	GE	SBM	CB CTL RM/1C-04	786' 0"	MILD	M127/G7	E122/5	E338/D5
HS-2740	HAND SWITCH	GE	SBM	CB CTL RM/1C-04	786' 0"	MILD	M127/G3	E122/14	E338/D5
HS-3704	HAND SWITCH	GE	SBM	CB CTL RM/1C-04	786' 0"	MILD	M137/G7	E122/9	E338/D5
HS-3705	HAND SWITCH	GE	SBM	CB CTL RM/1C-04	786' 0"	MILD	M137/G7	E122/9	E338/D5
HS-3728	HAND SWITCH	GE	SBM	CB CTL RM/1C-04	786' 0"	MILD	M137/D7	E122/9	E338/D5
HS-3729	HAND SWITCH	GE	SBM	CB CTL RM/1C-04	786' 0"	MILD	M137/D6	E122/9	E338/D5

SYSTEM: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
HS-4371A	HAND SWITCH	GE	CR2940	CB CTL RM/1C-35	786' 0"	MILD	M143/E5	E122/24	E338/D6
HS-4371B	HAND SWITCH	GE	CR2940	CB CTL RM/1C-35	786' 0"	MILD	M143/F5	E122/24	E338/D6
HS-4371C	HAND SWITCH	GE	CR2940	CB CTL RM/1C-35	786' 0"	MILD	M143/F5	E122/24	E338/D6
HS-4378A	HAND SWITCH	GE	CR2940	CB CTL RM/1C-35	786' 0"	MILD	M143/E5	E122/24	E338/D6
HS-4378B	HAND SWITCH	GE	CR2940	CB CTL RM/1C-35	786' 0"	MILD	M143/E5	E122/24	E338/D6
HS-4412A	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M114/F4	E122/11	E338/D5
HS-4413A	HAND SWITCH	GE	SBM	CB CTL RM/1C-04	786' 0"	MILD	M114/F2	E122/11	E338/D5
HS-4415A	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M114/H8	E122/11	E338/D5
HS-4416A	HAND SWITCH	GE	SBM	CB CTL RM/1C-04	786' 0"	MILD	M114/H8	E122/11	E338/D5
HS-4418A	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M114/H8	E122/11	E338/D5
HS-4419A	HAND SWITCH	GE	SBM	CB CTL RM/1C-04	786' 0"	MILD	M114/H8	E122/11	E338/D5
HS-4420A	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M114/H8	E122/11	E338/D5
HS-4421A	HAND SWITCH	GE	SBM	CB CTL RM/1C-04	786' 0"	MILD	M114/H8	E122/11	E338/D5
HS-4423	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M114/B3	E122/2	E338/D5
HS-4424	HAND SWITCH	GE	SBM	CB CTL RM/1C-04	786' 0"	MILD	M114/B3	E122/5	E338/D5
HS-4639	HAND SWITCH	GE	SBM	CB CTL RM/1C-04	786' 0"	MILD	M116/F6	E122/10	E338/D5

SYSTEM: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
HS-4640	HAND SWITCH	GE	SBM	CB CTL RM/1C-04	786' 0"	MILD	M116/F7	E122/10	E338/D5
HS-4841	HAND SWITCH	GE	SBM	CB CTL RM/1C-06	786' 0"	MILD	M112/E3	E111/5	E338/E4
HS-5718A	HAND SWITCH	GE	SBM	CB CTL RM/1C-25A	786' 0"	MILD	M157/E8	E113/90	E338/D4
HS-5718B	HAND SWITCH	GE	SBM	CB CTL RM/1C-25B	786' 0"	MILD	M157/D8	E113/90	E338/D4
MO-2400	MOTOR OPERATED VALVE	LIMITORQUE	SMB-00, AC-CL	DRYWELL	777'	HARSH	M124/H7	E121/29	E330/E3
MO-2401	MOTOR OPERATED VALVE	LIMITORQUE	SMB-00,DC-CLA	STEAM TUNNEL	757' 6"	HARSH	M124/H6	E121/30	E328/E4
MO-2510	MOTOR OPERATED VALVE	LIMITORQUE	SMB-00, DC-CL	RCIC ROOM	716' 9"	MILD	M125/C4	E121/34	E317/C5
MO-2512	MOTOR OPERATED VALVE	LIMITORQUE	SMB-00,DC-CLA	STEAM TUNNEL	757' 6"	HARSH	M125/D5	E121/40	E328/E3
MO-2516	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	TORUS ROOM SOUTH	716' 9"	HARSH	M125/B5	E121/33	E317/E6
MO-2517	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, OC C	RCIC ROOM	716' 9"	HARSH	M125/F4	E121/33	E317/C5
MO-2700	MOTOR OPERATED VALVE	LIMITORQUE	SMB-00, AC-CL	DRYWELL	780'	HARSH	M127/F8	E122/3	E330/D5
MO-2701	MOTOR OPERATED VALVE	LIMITORQUE	SMB-00,DC-CLA	RWCU HEAT EXCH ROOM	786' 0"	HARSH	M127/F7	E122/5	E321/E6
MO-4423	MOTOR OPERATED VALVE	LIMITORQUE	SMB-00, AC-CL	DRYWELL	754'	HARSH	M114/B3	E122/2	E329/E2
MO-4424	MOTOR OPERATED VALVE	LIMITORQUE	SMB-00,DC-CLA	STEAM TUNNEL	757' 6"	HARSH	M114/B3	E122/5	E328/E4
MO-4627	MDTOR OPERATED VALVE	LIMITORQUE	SMB-2, DC-CLA	DRYWELL	757' 6"	HARSH	M116/C2	E120/3	E331/F4
MO-4628	MOTOR OPERATED VALVE	LIMITORQUE	SMB-2, DC-CLA	DRYWELL	734'	HARSH	M116/CB	E120/3	E331/05

SYSTEM: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
MO-4841A	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	TORUS ROOM NORTH	716' 9"	HARSH	M112/E3	E111/17	E316/E5
MO-4841B	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	TORUS ROOM NORTH	716' 9"	HARSH	M112/F3	E111/17	E316/E5
PS-4346	PRESSURE SWITCH	STATIC-O-RING	9N-AA45-(X9)-	RB-N	757' 6"	MILD	M143/D5	E122/13	E318/A5
PS-4637	PRESSURE SWITCH	BARKSDALE	B2T M12SS	RB-S/1C-122	757' -6"	MILD	M116/E6	E122/10	E319/E5
PS-4638A	PRESSURE SWITCH	BARKSDALE	PIH-M34055-V	SW CRNR RM/1C-58	716' 9"	MILD	M116/E6	E122/10	E317/D7
PS-4638B	PRESSURE SWITCH	BARKSDALE	PIH-M34055-V	SW CRNR RM/1C-58	716' 9"	MILD	M116/E6	E122/10	E317/D7
SV-3704	SOLENOID VALVE	ASCO	NP831665E	TORUS ROOM SOUTH	746' 3"	HARSH	M137/G7	E122/9	E317/F3
SV-3705	SOLENOID VALVE	ASCO	NP831665E	TORUS ROOM SOUTH	746' 3"	HARSH	M137/G7	E122/9	E317/F3
SV-3728	SOLENOID VALVE	ASCO	NP831665E	TORUS ROOM NORTH	716' 9"	HARSH	M137/D6	E122/9	E316/D7
SV-3729	SOLENOID VALVE	ASCO	NP831665E	TORUS ROOM NORTH	716' 9"	HARSH	M137/D6	E122/9	E316/D7
SV-4371A	SOLENOID VALVE	ASCO	AT831665	RB-S	757' 6"	MILD	M143/E5	E122/24	E324/B5
SV-4371B	SOLENOID VALVE	ASCO	NP831665E	DRYWELL	757' 6"	HARSH	M143/F5	E122/24	E329/B3
SV-4371C	SOLENOID VALVE	ASCO	AT831665	RB-S	759'	MILD	M143/F5	E122/24	E324/B5
SV-4378A	SOLENOID VALVE	ASCO	AT831665	RB-S	759'	MILD	M143/E5	E122/24	E324/B7
SV-4378B	SOLENOID VALVE	ASCO	AT831665	RB-S	759'	MILD	M143/E8	E122/24	E324/B7
SV-4412A	SOLENOID VALVE	ASCO	NP8320A183E	DRYWELL	757' 4"	HARSH	M114/F5	E121/11	E329/D3
SV-4412B	SOLENOID VALVE	ASCO	NP8323A36V	DRYWELL	757' 4"	HARSH	M114/F5	E122/11	E329/D3

SYSTEM: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
SV-4412C	SOLENOID VALVE	ASCO	NP8323A36V	DRYWELL	757' 4"	HARSH	M114/G5	E122/11	E329/D3
SV-4413A	SOLENOID VALVE	ASCO	NP8320A183E	STEAM TUNNEL	757' 6"	HARSH	M114/F2	E121/11	E328/D4
SV-4413B	SOLENOID VALVE	ASCO	NP8323A36V	STEAM TUNNEL	757' 6"	HARSH	M114/F2	E122/11	E328/D4
SV-4413C	SOLENOID VALVE	ASCO	NP8323A36V	STEAM TUNNEL	757' 6"	HARSH	M114/F2	E122/11	E328/D4
SV-4415A	SOLENOID VALVE	ASCO	NP8320A183E	DRYWELL	757' 4"	HARSH	M114/C7	E121/11	E329/C3
SV-4415B	SOLENOID VALVE	ASCO	NP8323A36V	DRYWELL	757' 4"	HARSH	M114/C7	E122/11	E329/C3
SV-4415C	SOLENOID VALVE	ASCO	NP8323A36V	DRYWELL	757' 4"	HARSH	M114/C7	E122/11	E329/C3
SV-4416A	SOLENOID VALVE	ASCO	NP8320A183E	STEAM TUNNEL	757' 6"	HARSH	M114/C8	E122/11	E328/D4
SV-4416B	SOLENOID VALVE	ASCO	NP8323A36V	STEAM TUNNEL	757' 6"	HARSH	M114/C8	E122/11	E328/D4
SV-4416C	SOLENOID VALVE	ASCO	NP8323A36V	STEAM TUNNEL	757' 6"	HARSH	M114/C8	E122/11	E328/D4
SV-4418A	SOLENOID VALVE	ASCO	NP8320A183E	DRYWELL	757' 4"	HARSH	M114/C3	E121/11	E329/F3
SV-4418B	SOLENOID VALVE	ASCO	NP8323A36V	DRYWELL	757' 4"	HARSH	M114/C3	E122/11	E329/F3
SV-4418C	SOLENOID VALVE	ASCO	NP8323A36V	DRYWELL	757' 4"	HARSH	M114/C3	E122/11	E329/F3
SV-4419A	SOLENOID VALVE	ASCO	NP8320A183E	STEAM TUNNEL	757' 6"	HARSH	M114/C2	E122/11	E328/E4
SV-4419B	SOLENOID VALVE	ASCO	NP8323A36V	STEAM TUNNEL	757' 6"	HARSH	M114/C2	E122/11	E328/E4
SV-4419C	SOLENOID VALVE	ASCO	NP8323A36V	STEAM TUNNEL	757' 6"	HARSH	M114/C2	E122/11	E328/E4

SYSTEM: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
SV-4420A	SOLENOID VALVE	ASCO	NP8320A183E	DRYWELL	757' 4"	HARSH	M114/E7	E122/11	E329/E3
SV-4420B	SOLENOID VALVE	ASCO	NP8323A36V	DRYWELL	757' 4"	HARSH	M114/E7	E122/11	E329/E3
SV-4420C	SOLENOID VALVE	ASCO	NP8323A36V	DRYWELL	757' 4"	HARSH	M114/E7	E122/11	E329/E3
SV-4421A	SOLENOID VALVE	ASCO	NP8320A183E	STEAM TUNNEL	757' 6"	HARSH	M114/E8	E122/11	E328/E4
SV-4421B	SOLENOID VALVE	ASCO	NP8323A36V	STEAM TUNNEL	757' 6"	HARSH	M114/E8	E122/11	E328/E4
SV-4421C	SOLENOID VALVE	ASCO	NP8323A36V	STEAM TUNNEL	757' 6"	HARSH	M114/E8	E122/11	E328/E4
SV-4639	SOLENOID VALVE	ASCO	206	DRYWELL	790' 0"	HARSH	M116/F6	E122/10	E330/B5
SV-5703A	SOLENOID VALVE	ASCO	206	TORUS ROOM SOUTH	746' 3"	HARSH	M157/G7	E113/94	E317/G7
SV-5703B	SOLENOID VALVE	ASCO	206	TORUS ROOM SOUTH	746' 3"	HARSH	M157/G7		E317/H7
SV-5704A	SOLENOID VALVE	ASCO	206	TORUS ROOM SOUTH	746' 3"	HARSH	M157/G6	E113/94	E317/E5
SV-5704B	SOLENOID VALVE	ASCO	206	TORUS ROOM SOUTH	716' 9"	HARSH	M157/G6	E113/94	E317/G7
SV-5718A	SOLENOID VALVE	ASCO	206	TORUS ROOM SOUTH	716' 9"	HARSH	M157/E8	E113/94	E317/E5
SV-5719A	SOLENOID VALVE	ASCO	206	TORUS ROOM NORTH	716' 9"	HARSH	M157/B7	E113/94	E317/E5
SV-5719B	SOLENOID VALVE	ASCO	206	TORUS ROOM SOUTH	746' 3"	HARSH	M157/A7	E113/94	E316/C7

SYSTEM: PRIMARY CONTAINMENT ISO&NSS SHUTOFF SYS

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
SV-4640	SOLENOID VALVE	ASCO 8	8302625	RWCU HEAT EXCH ROOM	786' 0"	HARSH	M116/F6	E122/10	E321/E5
SV-5718B	SOLENOID VALVE	ASCO	206	TORUS ROOM NORTH	746' 3"	HARSH	M157/D8	E113/94	E316/C7

SYSTEM: PUMPHOUSE DRAIN SUMP

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
HS-4936A	HAND SWITCH	GE	CR2940-BC301A	PUMPHOUSE	727'	MILD	M146/G5	E111/16A	E347/D4
HS-4936B	HAND SWITCH	GE	CR2940-BC301A	PUMPHOUSE	727'	MILD	M146/G4	E111/16A	E347/D4
LE-4936A		BORG-WARNER	E-4-51-1201	PUMPHOUSE	727'	MILD	M146/F5	E111/16A	E347/C4
LE-4936B		BORG-WARNER	E-4-51-1201	PUMPHOUSE	727'	MILD	M146/F4	E111/16A	E347/D4
LS-4936A		BORG-WARNER	E-4-51-1201	PUMPHOUSE	727'	MILD	M146/F5	E111/16A	E347/D4
LS-4936B		BORG-WARNER	E-4-51-1201	PUMPHOUSE	727'	MILD	M146/F4	E111/16A	E347/D4
1P-132A	PUMP MOTOR	CRANE COMPANY	GA-1K-ISO	PUMPHOUSE	727'	MILD	M146/F5	E111/16A	E347/D4
1P-132B	PUMP MOTOR	CRANE COMPANY	GA-1K-ISO	PUMPHOUSE	727'	MILD	M146/F4	E111/16A	E347/D4

SYSTEM: REACTOR PROTECTION SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
LIS-4592A	DIFF,PRESS. IND. SWIT	BARTON	288	RB-N/1C-56	786' 0"	MILD	M115/E6	E121/37	E320/H8
LIS-4592B	DIFF,PRESS. IND. SWIT	BARTON	288	RB-N/1C-56	786' 0"	MILD	M115/E6	E121/24	E320/H8
LIS-4592C	DIFF,PRESS. IND. SWIT	BARTON	288	RB-N/1C-55A	757' -6"	MILD	M115/E3	E121/37	M2/E6
LIS-4592D	DIFF,PRESS. IND. SWIT	BARTON	288	RB-N/1C-55A	757' -6"	MILD	M115/E3	E121/24	M2/E6
PS-1005A	PRESSURE SWITCH	BARKSDALE	B2T M12SS	TURBINE BLDG NORTH	734'	MILD	M103/E5	E66	M405-1/*
PS-1005B	PRESSURE SWITCH	BARKSDALE	B2T M12SS	TURBINE BLDG NORTH	734'	MILD	M103/E5	E66	M405-1/*
PS-1005C	PRESSURE SWITCH	BARKSDALE	B2T M12SS	TURBINE BLDG NORTH	734'	MILD	M103/E6	E66	M405-1/*
PS-1005D	PRESSURE SWITCH	BARKSDALE	B2T M12SS	TURBINE BLDG NORTH	734'	MILD	M103/E6	E66	M405-1/*
PS-1026A	PRESSURE SWITCH	BARKSDALE	TC-9022-3	TURBINE BLDG NORTH	780' 0"	MILD	M106/E7	E44	E308/D6
PS-1026B	PRESSURE SWITCH	BARKSDALE	TC-9022-3	TURBINE BLDG NORTH	780' 0"	MILD	M106/E6	E44	E308/D6
PS-1026C	PRESSURE SWITCH	BARKSDALE	TC-9022-3	TURBINE BLDG NORTH	780' 0"	MILD	M106/E7	E44	E308/C6
PS-1026D	PRESSURE SWITCH	BARKSDALE	TC-9022-3	TURBINE BLDG NORTH	780' 0"	MILD	M106/E6	E44	E308/C6
PS-1096A	PRESSURE SWITCH	BARKSDALE	DIT-M18SS	TURBINE BLDG NORTH	780'	MILD	M103/NS	E122/9	E311/D4
PS-1096B	PRESSURE SWITCH	BARKSDALE	DIT-M18SS	TURBINE BLDG SOUTH	780'	MILD	M103/NS	E122/9	E312/C3
PS-1096C	PRESSURE SWITCH	BARKSDALE	DIT-M18SS	TURBINE BLDG NORTH	780'	MILD	M103/NS	E122/9	E311/D4
PS-1096D	PRESSURE SWITCH	BARKSDALE	DIT-M18SS	TURBINE BLDG SOUTH	780'	MILD	M103/NS	E122/9	E312/C3
PS-4315A	PRESSURE SWITCH	STATIC-O-RING	12N-AA4	RB-S/1C-122	757' -6"	MILD	M143/D6	E66	E319/F6
PS-4315B	PRESSURE SWITCH	STATIC-O-RING	12N-AA4	RB-S/1C-126B	757' -6"	MILD	M143/E6	E66	E319/D5

SYSTEM: REACTOR PROTECTION SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
PS-4315C	PRESSURE SWITCH	STATIC-O-RING	12N-AA4	RB-S/1C-126B	757' -6"	MILD	M143/E6	E66	E319/E4
PS-4315D	PRESSURE SWITCH	STATIC-O-RING	12N-AA4	RB-N/1C-121	757' -6"	MILD	M143/F6	E66	E318/G10
ZS-1076A	POSITION SWITCH	NAMCO	D-2400X-R1	TURBINE BLDG NORTH	757' -6	MILD	M103/E6	E66	E308/D6
ZS-1076B	POSITION SWITCH	NAMCO	D-2400X-R1	TURBINE BLDG NORTH	757' -6"	MILD	M103/E6	E66	E308/D6
ZS-1076C	POSITION SWITCH	NAMCO	D-2400X-R1	TURBINE BLDG NORTH	757' -6"	MILD	M103/E7	E66	E308/C6
ZS-1076D	POSITION SWITCH	NAMCO	D-2400X-R1	TURBINE BLDG NORTH	757' -6"	MILD	M103/E7	E66	E308/C6
ZS-4412	POSITION SWITCH	NAMCO	EA 740	DRYWELL	761' 2"	MILD	M114/E3	E122/11	M341/D3
ZS-4413	POSITION SWITCH	NAMCO	EA 740	STEAM TUNNEL	757' 6"	HARSH	M114/E2	E122/11	M268/G2
ZS-4415	POSITION SWITCH	NAMCO	EA 740	DRYWELL	761' 2"	HARSH	M114/D7	E122/11	M341/C3
ZS-4416	POSITION SWITCH	NAMCO	EA 740	STEAM TUNNEL	757' 6"	HARSH	M114/D8	E122/11	M263/G2
ZS-4418	POSITION SWITCH	NAMCO	EA 740	DRYWELL	761' 2"	HARSH	M114/D3	E122/11	M341/F3
ZS-4419	POSITION SWITCH	NAMCO	EA 740	STEAM TUNNEL	757' 6"	HARSH	M114/D2	E122/11	M248/D3
ZS-4420	POSITION SWITCH	NAMCO	EA 740	DRYWELL	761' 2"	HARSH	M114/E7	E122/11	M341/E3
ZS-4421	POSITION SWITCH	NAMCO	EA 740	STEAM TUNNEL	757' 6"	HARSH	M114/E8	E122/11	M248/C2

SYSTEM: RESIDUAL HEAT REMOVAL SERVICE WATER SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
HS-1942	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M113/F8	E121/46	E338/D6
HS-1943A	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M113/G8	E121/45	E338/D6
HS-1943B	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M113/G8	E121/45	E338/D6
HS-1959	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M146/B5	E121/42	E338/D6
HS-2059	HAND SWITCH	GE,	SBM	CB CTL RM/1C-03	786' 0"	MILD	M146/B8	E121/42	E338/D6
HS-4924A	HAND SWITCH	GE	SBM	ESS SWITCHGEAR ROOM	786' 0"	MILD	M146/B8	E121/42	E335/E6
HS-4924B	HAND SWITCH	GE	SBM	ESS SWITCHGEAR ROOM	786' 0"	MILD	M146/B5	E121/42	E335/E4
HS-4924C	HAND SWITCH	GE	SBM	ESS SWITCHGEAR ROOM	786' 0"	MILD	M146/B7	E121/42	E335/E6
HS-4924D	HAND SWITCH	GE	SBM	ESS SWITCHGEAR ROOM	786' 0"	MILD	M146/B5	E121/42	E335/E4
HS-4925A	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M146/B8	E121/42	E338/D6
HS-4925B	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M146/B5	E121/42	E338/D6
HS-4925C	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M146/B7	E121/42	E338/D6
HS-4925D	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M146/B5	E121/42	E338/D6
MO-1942	MOTOR OPERATED VALVE	LIMITORQUE	SMB-0,AC-CLAS	SE CRNR RM	736' 6"	HARSH	M113/F8	E121/46	M266/E3
MO-1943A	MOTOR OPERATED VALVE	LIMITORQUE	SMB-00, AC-CL	SE CRNR RM	736' 6"	HARSH	M113/G8	E121/45	E317/E3
MO-1943B	MOTOR OPERATED VALVE	LIMITORQUE	SMB-00, AC-CL	TORUS ROOM SOUTH	746' 3"	HARSH	M113/G8	E121/45	E317/F7

SYSTEM: RESIDUAL HEAT REMOVAL SERVICE WATER SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
MO-1947	MOTOR OPERATED VALVE	LIMITORQUE	SMB-4, AC-CLA	NW CRNR RM	732' 0"	HARSH	M113/D7	E121/55	E316/E8
MO-2046	MOTOR OPERATED VALVE	LIMITORQUE	SMB-4, AC-CLA	HPCI ROOM	716' 9"	HARSH	M113/D5	E121/55	E317/D2
MO-2740	MOTOR OPERATED VALVE	LIMITORQUE	SMB-00, AC-CL	RB-S	757' -6"	MILD	M127/G4	E122/14	E319/F3
SV-1942	SOLENOID VALVE	TARGET ROCK	72V AND 81K	SE CRNR RM	731' 4"	HARSH	M113/F8	E121/46	M266/E3
ZM-1947	POSITION MONITOR	GE	543151AAAZZ	CB CTL RM/1C-18	786' 0"	MILD	M113/D7	E121/58A	E338/C5
ZM-2046	POSITION MONITOR	GE	543151AAAZZ	CB CTL RM/1C-19	786' 0"	MILD	M113/D5	E121/58	E338/D6
ZT-1947	POSITION TRANSMITER	LIMITORQUE	NONE	NW CRNR RM	747' 6"	HARSH	M113/C7	E121158A	M401-5
ZT-2046	POSITION TRANSMITER	LIMITORQUE	NONE	HPCI ROOM	731' 9"	HARSH	M113	E121158	M265/D2
1P-22A	PUMP MOTOR	LAYNE & BOWLER	D30841-A	PUMPHOUSE	761'	MILD	M146/A8	E121/42	M15/G7
1P-22B	PUMP MOTOR	LAYNE & BOWLER	D30841-A	PUMPHOUSE	761'	MILD	M146/A8	E121/42	M15/G7
1P-22C	PUMP MOTOR	LAYNE & BOWLER	D30841-A	PUMPHOUSE	761'	MILD	M146/A7	E121/42	M15/G7
1P-22D	PUMP MOTOR	LAYNE & BOWLER	D30841-A	PUMPHOUSE	761'	MILD	M146/A5	E121/42	M15/G7

SYSTEM: RESIDUAL HEAT REMOVAL SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
E/S-1947	POWER SUPPLY	GE	570062FAAC1	CB CTL RM/1C-18	786' 0"	MILD	M119/D4	E121/58	E338/C5
HS-1900	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M119/G8	E122/2	E338/D5
HS-1901	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M119/H7	E122/6	E338/D5
HS-1902	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M119/G7	E121/48	E338/D5
HS-1903A	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M119/G6	E121/60	E338/D5
HS-1903B	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M119/G6	E121/56	E338/D5
HS-1903C	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M119/G6	E121/56	E338/D5
HS-1904	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M119/F6	E121/53	E338/D5
HS-1905A	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M119/F6	E121/52	E338/D5
HS-1905B	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M119/F6	E121/52	E338/D5
HS-1908	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M119/E8	E122/2	E338/D5
HS-1909	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M119/E8	E122/4	E338/D5
HS-1912	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M119/C7	E121/44	E338/D5
HS-1912A	HAND SWITCH	C-H	1025T16224	RB-N	757' 6"	MILD	NS	E121/44	E316/E2
HS-1913	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M119/C7	E121/43	E338/D5
HS-1913A	HAND SWITCH	C-H	1025T16224	RB-WEST/MCC-1B44	757' -6"	MILD	M119/C7	E121/43A	M2/E7

SYSTEM: RESIDUAL HEAT REMOVAL SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
HS-1915	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M119/B6	E121/41	E338/D5
HS-1920	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M119/C8	E121/44	E338/D5
HS-1920A	HAND SWITCH	C-H	1025T16224	RB-N	757' 6"	MILD	NS	E121/44	E316/F7
HS-1921	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M119/C7	E121/43	E338/D5
HS-1921A	HAND SWITCH	C-H	1025T16224	RB-W/MCC 1B-44	716' 9"	MILD	M119/C7	E121/43A	M2/E7
HS-1923	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M119/B8	E121/41	E338/D5
HS-1932	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M119/F5	E121/49	E338/D5
HS-1932A	HAND SWITCH	C-H	1025T16224	RB-N	757' 6"	MILD	M119/F5	E121/49	M266/G7
HS-1933	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M119/F5	E121/59	E338/D5
HS-1934	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M119/F5	E121/59	E338/D5
HS-1935	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M119/C5	E121/54	E338/D5
HS-1936	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M119/E6	E122/7	E338/D5
HS-1937	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M119/E6	E122/15	E338/D5
HS-1939	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M119/D4	E121/43	E338/D5
HS-1940	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M119/E4	E121/51	E338/D5
HS-1941	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M119/E3	E121/43	E338/D5

SYSTEM: RESIDUAL HEAT REMOVAL SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
HS-1949A	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M119/D4	E121/47	E338/D5
HS-1949B	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M119/C4	E121/47	E338/D5
HS-1963	HAND SWITCH	GE	SBM	CB CTL RM/1C-04	786' 0"	MILD	M119/D2	E121/58	E338/D5
HS-1967	HAND SWITCH	GE	SBM	CB CTL RM/1C-04	786' 0"	MILD	M119/E2	E121/50	E338/D5
HS-1970	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M119/F3	E121/50	E338/D5
HS-1972	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M119/D3	E122/13	E338/D5
HS-1973	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M119/D2	E122/13	E338/D5
HS-1989	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M119/D7	E121/45	E338/D5
HS-2000	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M120/G2	E121/48	E338/D5
HS-2001A	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M120/G3	E121/60	E338/D5
HS-2001B	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M120/G3	E121/56	E338/D5
HS-2001C	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M120/G3	E121/56	E338/D5
HS-2003A	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M120/F4	E121/52	E338/D5
HS-2003B	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M120/F4	E121/56	E338/D5
HS-2004	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M120/F4	E121/53	E338/D5
HS-2005	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M120/G4	E121/49	E338/D5

SYSTEM: RESIDUAL HEAT REMOVAL SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
HS-2005A	HAND SWITCH	C-H	1025T16224	RB-S/MCC 1B-34	786'	MILD	M120/F5	E121/49	E321/C4
HS-2006	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M120/F4	E121/59	E338/D5
HS-2007	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M120/F4	E121/59	E338/D5
HS-2009	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M120/C4	E121/54	E338/D5
HS-2010	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M120/D5	E121/45	E338/D5
HS-2010A	HAND SWITCH	C-H	1025T16224	RB-S/MCC 1B-34	786'	MILD	M120/F5	E121/45A	E321/C4
HS-2011	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M120/C3	E121/44	E338/D5
HS-2011A	HAND SWITCH	C-H	1025T16224	RB-S/MCC 1B-34	786'	MILD	NS	E121/44	E321/C4
HS-2012	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M120/C3	E121/43	E338/D5
HS-2012A	HAND SWITCH	C-H	1025T16224	RB-S/MCC 1B-34	786'	MILD	M120/C3	E121/43A	E321/C4
HS-2014	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M120/B3	E121/41	E338/D5
HS-2015	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M120/C2	E121/43	E338/D5
HS-2015A	HAND SWITCH	C-H	1025T16224	RB-S/MCC 1B-34	786'	MILD	M120/C2	E121/43A	E321/C4
HS-2016	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M120/C2	E121/44	E338/D5
HS-2016A	HAND SWITCH	C-H	1025T16224	RB-S/MCC 1B-34	786'	MILD	NS	E121/44	E321/C4
HS-2018	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M120/B2	E121/41	E338/D5
HS-2029	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M120/D5	E121/43	E338/D5
HS-2030	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M120/E5	E121/51	E338/D5

SYSTEM: RESIDUAL HEAT REMOVAL SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
HS-2031	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M120/E6	E121/43	E338/D5
HS-2035	HAND SWITCH	GE	CR2940	CB CTL RM/1C-04	786' 0"	MILD	M120/E7	E121/56	E338/D5
HS-2036	HAND SWITCH	GE	SBM	CB CTL RM/1C-04	786' 0"	MILD	M120/E8	E121/50	E338/D5
HS-2038	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M120/F7	E121/50	E338/D5
HS-2044A	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M120/D6	E121/47	E338/D5
HS-2044B	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M120/D6	E121/47	E338/D5
HS-2051	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M120/D7	E122/13	E338/D5
HS-2052	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M120/D7	E122/13	E338/D5
HS-2058	HAND SWITCH	GE	SBM	CB CTL RM/1C-03	786' 0"	MILD	M120/E1	E121/45	E338/D5
HS-2069	HAND SWITCH	GE	CR2940	CB CTL RM/1C-03	786' 0"	MILD	M120/D3	E121/45	E338/D5
KY-1935	RELAY			CB CTL RM/1C-33	786' 0"	MILD	M119/C5	E121/54	E338/C6
KY-1940		GE		CB CTL RM/1C-44	786' 0"	MILD	M119/E4	E121/51	E338/C6
KY-2009	RELAY			CB CTL RM/1C-43	786' 0"	MILD	M120/C4	E121/54	E338/D6
KY-2080	RELAY			CB CTL RM/1C-43	786' 0"	MILD	M120/E6	E121/54	E338/D6
MO-1900	MOTOR OPERATED VALVE	LIMITORQUE	SMB-00, AC-CL	DRYWELL	811' -6"	HARSH	M119/G8	E122/2	E5
MO-1901	MOTOR OPERATED VALVE	LIMITORQUE	SMB-0, DC-CLA	RB-N	786' 0"	MILD	M119/H7	E122/6	M249/D6

SYSTEM: RESIDUAL HEAT REMOVAL SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
MO-1902	MOTOR OPERATED VALVE	LIMITORQUE	SMB-2, AC-CLA	RHR VALVE ROOM	773' 6"	HARSH	M119/G7	E121/48	M248/C6
MO-1903	MOTOR OPERATED VALVE WITH MOTO	LIMITORQUE	SMB-2,AC-CLAS	TORUS ROOM NORTH	746' 3"	HARSH	M119/G6	E121/60	M266/H8
MO-1904	MOTOR OPERATED VALVE	ELECTRODYNE	TN-24-400	RHR VALVE ROOM	757' 6"	HARSH	M119/E6	E121/53	M268/G7
MO-1905	MOTOR OPERATED VALVE	LIMITORQUE	SMB-5, AC-CLA	RHR VALVE ROOM	757' 6"	HARSH	M119/F6	E121/52	M268/G7
MO-1908	MOTOR OPERATED VALVE WITH MOTO	LIMITORQUE	SMB-2,AC-CLAS	DRYWELL	757' 6"	HARSH	M119/E8	E122/56	M331/D6
MO-1909	MOTOR OPERATED VALVE WITH MOTO	LIMITORQUE	SMB-2,DC-CLAS	RHR VALVE ROOM	757' 6"	HARSH	M119/E8	E122/4	M248/D7
MO-1912	MOTOR OPERATED VALVE	LIMITORQUE	SMB-00, AC-CL	NW CRNR RM	716' 9"	HARSH	M119/C7	E121/44	F7
MO-1913	MOTOR OPERATED VALVE	LIMITORQUE	SMB-00, AC-CL	NW CRNR RM	716' 9"	HARSH	M119/C7	E121/43	E316/F7
MO-1920	MOTOR OPERATED VALVE	LIMITORQUE	SMB-00, AC-CL	NW CRNR RM	716' 9"	HARSH	M119/C8	E121/44	M245/F7
MO-1921	MOTOR OPERATED VALVE	LIMITORQUE	SMB-00, AC-CL	NW CRNR RM	732' 0"	HARSH	M119/C7	E121/43	M245/F7
MO-1932	MOTOR OPERATED VALVE	LIMITORQUE	SMB-0,AC-CLAS	TORUS ROOM SOUTH	716' 9"	HARSH	M119/F5	E121/49	M266
MO-1933	MOTOR OPERATED VALVE	LIMITORQUE	SMB-00, AC-CL	TORUS ROOM SOUTH	716' 9"	HARSH	M119/F5	E121/59	M266/G7
MO-1934	MOTOR OPERATED VALVE	LIMITORQUE	SMB-2, AC-CLA	TORUS ROOM SOUTH	746' 3"	HARSH	M119/F5	E121/59	M266/G7
MO-1935	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	TORUS ROOM NORTH	746' 3"	HARSH	M119/C5	E121/54	M256/D3
MO-1936	MOTOR OPERATED VALVE	LIMITORQUE	SMB-00, AC-CL	TORUS ROOM NORTH	746' 3"	HARSH	M119/D6	E122/7	M246/8C
MO-1937	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, DC C	TORUS ROOM NORTH	746' 3"	HARSH	M119/D6	E122/15	M246/8C

SYSTEM: RESIDUAL HEAT REMOVAL SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
MO-1939	MOTOR OPERATED VALVE	LIMITORQUE	SMB-O,AC-CLAS	NW CRNR RM	732' 0"	HARSH	M119/D4	E121/43	M253/C7
MO-1940	MOTOR OPERATED VALVE	LIMITORQUE	SMB-4, AC-CLA	NW CRNR RM	732' 0"	HARSH	M119/E4	E121/51	M256/C2
MO-1941	MOTOR OPERATED VALVE	LIMITORQUE	SMB-O,AC-CLAS	NW CRNR RM	732' 0"	HARSH	M119/E3	E121/43	M253/C7
MO-1949A	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	NW CRNR RM	747' 6"	HARSH	M119/C4	E121/47	E316/E8
MO-1949B	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	NW CRNR RM	747'	HARSH	M119/D4	E121/47	E316/E8
MO-1967	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	NW CRNR RM	732' 0"	HARSH	M119/E2	E121/50	M246/E7
MO-1970	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	TORUS ROOM NORTH	746' 3"	HARSH	M119/F3	E121/50	M246/E7
MO-1989	MOTOR OPERATED VALVE	LIMITORQUE	SMB-O,AC-CLAS	TORUS ROOM NORTH	716' 9"	HARSH	M119/D7	E121/45	M245/E7
MO-2000	MOTOR OPERATED VALVE	LIMITORQUE	SMB-2, AC-CLA	RB-S	786' 0"	HARSH	M120/G2	E121/48	M269/F6
MO-2001	MOTOR OPERATED VALVE	LIMITORQUE	SMB-2, AC-CLA	TORUS ROOM NORTH	716' 9"	HARSH	M120/G4	E113/89	M257/D7
MO-2003	MOTOR OPERATED VALVE	LIMITORQUE	SMB-5, AC-CLA	RHR VALVE ROOM	757' 6"	HARSH	M120/G4	E121/52	M248/D7
MO-2004	MOTOR OPERATED VALVE	ELECTRODYNE	TN-24-400	RHR VALVE ROOM	757' 6"	HARSH	M120/F4	E121/53	M248/E7
MO-2005	MOTOR OPERATED VALVE	LIMITORQUE	SMB-O,AC-CLAS	TORUS ROOM NORTH	716' 9"	HARSH	M120/G4	E121/49	M256/D3
MO-2006	MOTOR OPERATED VALVE	LIMITORQUE	SMB-00, AC-CL	TORUS ROOM NORTH	716' 9"	HARSH	M120/F4	E121/59	M246/D7
MO-2007	MOTOR OPERATED VALVE	LIMITORQUE	SMB-2, AC-CLA	TORUS ROOM NORTH	746' 3"	HARSH	M120/F5	E121/59	M256/D3
MO-2009	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	TORUS ROOM SOUTH	716' 9"	HARSH	M120/C4	E121/54	M277/D5

SYSTEM: RESIDUAL HEAT REMOVAL SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&IO/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
MO-2010	MOTOR OPERATED VALVE	LIMITORQUE	SMB-1, AC-CLA	TORUS ROOM NORTH	746' 3"	HARSH	M120/D5	E121/45	E316/C8
MO-2011	MOTOR OPERATED VALVE	LIMITORQUE	SMB-00, AC-CL	SE CRNR RM	716' 9"	HARSH	M120/C3	E121/44	M265/F2
MO-2012	MOTOR OPERATED VALVE	LIMITORQUE	SMB-00, AC-CL	SE CRNR RM	716' 9"	HARSH	M120/C3	E121/43	E317/E2
MO-2015	MOTOR OPERATED VALVE	LIMITORQUE	SMB-00, AC-CL	SE CRNR RM	716' 9"	HARSH	M120/C2	E121/43	E317/E2
MO-2016	MOTOR OPERATED VALVE	LIMITORQUE	SMB-00, AC-CL	SE CRNR RM	716' 9"	HARSH	M120/C2	E121/44	M317/E2
MO-2029	MOTOR OPERATED VALVE	LIMITORQUE	SMB-0,AC-CLAS	SE CRNR RM	716' 9"	HARSH	M120/D5	E121/43	M277/C2
MO-2030	MOTOR OPERATED VALVE	LIMITORQUE	SMB-4, AC-CLA	SE CRNR RM	731' 4"	HARSH	M120/E5	E121/51	M277/C2
MO-2031	MOTOR OPERATED VALVE	LIMITORQUE	SMB-0,AC-CLAS	SE CRNR RM	731' 4"	HARSH	M120/E7	E121/43	M277/C2
MO-2036	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	SE CRNR RM	731' 4"	HARSH	M120/E8	E121/50	M277/C3
MO-2038	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	TORUS ROOM SOUTH	716' 9"	HARSH	M120/F7	E121/50	M277/D5
MO-2044A	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	SE CRNR RM	747' 0"	HARSH	M120/C6	E121/47	E317/D3
MO-2044B	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000, AC-C	SE CRNR RM	747' 0"	HARSH	M120/C6	E121/47	E317/D3
MO-2069	MOTOR OPERATED VALVE	LIMITORQUE	SMB-0,AC-CLAS	TORUS ROOM SOUTH	716' 9"	HARSH	M120/D3	E121/45	M265/F3
PDIS-1971A	PRESSURE SWITCH	BARTON	289	SE CRNR RM	716' 9"	HARSH	M120/F7	E121/54	E317/E3
PDIS-1971B	PRESSURE SWITCH	BARTON	289	NW CRNR RM	716' 9"	HARSH	M120/F7	E121/54	M405-1/E
PDIS-4625A	DIFF.PRESS. IND. SWIT	BARTON	288	NE CRNR RM/1C-57	735' 7"	HARSH	M116/A3	E121/56	E316/E2

SYSTEM: RESIDUAL HEAT REMOVAL SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
PDIS-4625B	DIFF,PRESS. IND. SWIT	BARTON	288	NE CRNR RM/1C-57	735' 7"	HARSH	M116/A3	E121/56	E316/E2
PDIS-4625C	DIFF,PRESS. IND. SWIT	BARTON	288	NE CRNR RM/1C-57	735' 7"	HARSH	M116/A3	E121/56	E316/E2
PDIS-4625D	DIFF,PRESS. IND. SWIT	BARTON	288	NE CRNR RM/1C-57	735' 7"	HARSH	M116/A2	E121/56	E316/E2
PDIS-4626A	DIFF,PRESS. IND. SWIT	BARTON	288	SW CRNR RM/1C-58	716' 9"	MILD	M116/A7	E121/56A	E317/D7
PDIS-4626B	DIFF,PRESS. IND. SWIT	BARTON	288	SW CRNR RM/1C-58	716' 9"	MILD	M116/A7	E121/56A	E317/D7
PDIS-4626C	DIFF,PRESS. IND. SWIT	BARTON	288	SW CRNR RM/1C-58	716' 9"	MILD	M116/A7	E121/56A	E317/D7
PDIS-4626D	DIFF,PRESS. IND. SWIT	BARTON	288	SW CRNR RM/1C-58	716' 9"	MILD	M116/A8	E121/56A	E317/D7
PDIS-4641	DIFF,PRESS. IND. SWIT	BARTON	288	RB-S/1C-122	757' -6"	MILD	M116/H3	E121/56	E319/E5
PDIS-4642	DIFF,PRESS. IND. SWIT	BARTON	288	RB-N/1C-121	757' -6	MILD	M116/G3	E121/56A	E318/F4
PDIS-4643	DIFF,PRESS. IND. SWIT	BARTON	288	RB-S/1C-122	757' -6"	MILD	M116/G3	E121/56	E319/E5
PDIS-4644	DIFF,PRESS. IND. SWIT	BARTON	288	RB-N/1C-121	757' -6"	MILD	M116/G3	E121/56	E318/F4
PDT-1947	PRESSURE DIFF.TRANSMI	GE	DIFF PRESSURE	NW CRNR RM/1C-129B	716' 9"	HARSH	M119/C4	E121/58	M1/E7
PDT-2046	PRESSURE DIFF.TRANSMI	GE	DIFF PRESSURE	SE CRNR RM/1C-129A	716' 9"	HARSH	M120/C5	E121/57	M1/E7
SV-1963	SOLENOID VALVE	ASCO	8320A6	NW CRNR RM	732' 0"	HARSH	M119/D3	E121/58	M246/E8
SV-1964	SOLENOID VALVE	ASCO	NP8320A173E	TORUS ROOM SOUTH	716' 9"	HARSH	M119/D2	E121/58	M277/C5
SV-1966	SOLENOID VALVE	ASCO	8320A6	NW CRNR RM	732' 0"	HARSH	M119/E3	E121/58	M246/E7

SYSTEM: RESIDUAL HEAT REMOVAL SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
SV-1972	SOLENOID VALVE	TARGET ROCK	72V AND 81K	NW CRNR RM	716' 9"	HARSH	M119/D3	E122/13	E316/E7
SV-1973	SOLENOID VALVE	TARGET ROCK	72V AND 81K	NW CRNR RM	716' 9"	HARSH	M119/D2	E122/13	E316/E7
SV-2033	SOLENOID VALVE	ASCO	8320A6	SE CRNR RM	736' 6"	HARSH	M120/D7	E121/58	E317/D3
SV-2034	SOLENOID VALVE	ASCO	NP8320A173E	TORUS ROOM SOUTH	746' 3"	HARSH	M120/D7	E121/58	M405/C6
SV-2037	SOLENOID VALVE	ASCO	8320A6	SE CRNR RM	731' 4"	HARSH	M120/E7	E121/58	E317/E3
SV-2051	SOLENOID VALVE	TARGET ROCK	72V AND 81K	SE CRNR RM	716' 9"	HARSH	M120/D7	E121/13	E317/E3
SV-2052	SOLENOID VALVE	TARGET ROCK	72V AND 81K	SE CRNR RM	716' 9"	HARSH	M120/D7	E122/13	E317/E3
1P-229A	PUMP MOTOR	GE	5K6336XC213A	SE CRNR RM	716' 9"	HARSH	M120/B3	E121/41	M1/C5
1P-229B	PUMP MOTOR	GE	5K6336XC213A	NW CRNR RM	716' 9"	HARSH	M119/B7	E121/41	M1/F7
1P-229C	PUMP MOTOR	GE	5K6336XC213A	SE CRNR RM	716' 9"	HARSH	M120/B2	E121/41	M1/C5
1P-229D	PUMP MOTOR	GE	5K6336XC213A	NW CRNR RM	716' 9"	HARSH	M119/B8	E121/41	M1/F7

SYSTEM: RIVER WATER SUPPLY

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
HS 2910 B	HAND SWITCH	GE	CR2940	INTAKE STR/1C-154B	754'	MILD	M129/F2	E111/21	E348/E6
HSS-2911A	HAND SWITCH	GE	SBM	CB CTL RM/1C-06	786' 0"	MILD	M129/D7	E111/11	E338/E4
HSS-2911B	HAND SWITCH	GE	SBM	CB CTL RM/1C-06	786' 0"	MILD	M129/D4	E111/11	E338/E4
HS-2902A	HAND SWITCH	GE	SBM	INTAKE STR	754'	MILD	M129/C7	E111/10	E348/C5
HS-2902B	HAND SWITCH	GE	SBM	INTAKE STR	754'	MILD	M129/C7	E111/10	E348/C5
HS-2903A	HAND SWITCH	GE	SBM	INTAKE STR	754'	MILD	M129/C3	E111/10	E348/B5
HS-2903B	HAND SWITCH	GE	SBM	INTAKE STR	754'	MILD	M129/C3	E111/10	E348/B5
HS-2906A	HAND SWITCH	GE	CR2940-UB203	INTAKE STR	767'	MILD	M129/D8	E111/9	E348/G6
HS-2906B	HAND SWITCH	GE	CR2940-UB203	INTAKE STR	767'	MILD	M129/D2	E111/9	E348/E6
HS-2907A	HAND SWITCH	GE	SBM	CB CTL RM/1C-06	786' 0"	MILD	M129/D7	E111/11	E338/E4
HS-2907B	HAND SWITCH	GE	SBM	CB CTL RM/1C-06	786' 0"	MILD	M129/D4	E111/11	E338/E4
HS-2907C	HAND SWITCH	GE	SBM	CB CTL RM/1C-06	786' 0"	MILD	M129/D6	E111/11	E338/E4
HS-2907D	HAND SWITCH	GE	SBM	CB CTL RM/1C-06	786' 0"	MILD	M129/D3	E111/11	E338/E4
HS-2908A	HAND SWITCH	GE	SBM	INTAKE STR	767'	MILD	M129/D7	E111/11	E338/E4
HS-2908B	HAND SWITCH	GE	SBM	INTAKE STR	767'	MILD	M129/D4	E111/11	E348
HS-2908C	HAND SWITCH	GE	SBM	INTAKE STR	767'	MILD	M129/D6	E111/11	E348
HS-2908D	HAND SWITCH	GE	SBM	INTAKE STR	767'	MILD	M129/D3	E111/11	E348
HS-2910A	HAND SWITCH	GE	CR2940	INTAKE STR/1C-154A	754'	MILD	M129/F8	E111/21	E348/G6
HS-4909A	HAND SWITCH	GE	SBM	CB CTL RM/1C-06	786' 0"	MILD	M146/H6	E111/13	E338/E4
HS-4909B	HAND SWITCH	GE	SBM	PUMPHOUSE	727'	MILD	M146/H6	E111/13	E347/C5

SYSTEM: RIVER WATER SUPPLY

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
HS-4910A	HAND SWITCH	GE	CR2940	CB CTL RM/1C-06	786' 0"	MILD	M146/H8	E111/13	E338/E4
HS-4910B	HAND SWITCH	GE	CR2940	CB CTL RM/1C-06	786' 0"	MILD	M146/H8	E111/13	E338/E4
HS-4914	HAND SWITCH	GE	CR2940-UA202B	CB CTL RM/1C-06	786' 0"	MILD	M146/F6	E111/13	E338/E4
HS-4915	HAND SWITCH	GE	CR2940-UA202B	CB CTL RM/1C-06	786' 0"	MILD	M146/F7	E111/13	E338/E4
KY-2902A	RELAY	PARAGON	CRIM	INTAKE STR	767'	MILD	M129/C8	E111/10	E348/C7
KY-2902B	RELAY	PARAGON	CRIM	INTAKE STR	767'	MILD	M129/B8	E111/10	E348/C7
KY-2902C	RELAY	AGASTAT	2400	INTAKE STR	767'	MILD	M129/B8	E111/9	E348/C7
KY-2903A	RELAY	PARAGON	CRIM	INTAKE STR	767'	MILD	M129/C2	E111/10	E348/B7
KY-2903B	RELAY	PARAGON	CRIM	INTAKE STR	767'	MILD	M129/B2	E111/10	E348/B7
KY-2903C	RELAY	AGASTAT	2400	INTAKE STR	767'	MILD	M129/B2	E111/9	E348/B7
KY-2908A	RELAY	AGASTAT	7012-PFLL	CB CTL RM/1C-06	786' 0"	MILD	M129/D7	E111/11	E338/E4
KY-2908B	RELAY	AGASTAT	7012-PFLL	CB CTL RM/1C-06	786' 0"	MILD	M129/D4	E111/11	E338/E4
KY-2908C	RELAY	AGASTAT	7012-PFLL	CB CTL RM/1C-06	786' 0"	MILD	M129/D6	E111/11	E338/E4
KY-2908D	RELAY	AGASTAT	7012-PFLL	CB CTL RM/1C-06	786' 0"	MILD	M129/D3	E111/11	E338/E4
MO-2902	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000-2	INTAKE STR	754'	MILD	M129/C7	E111/15	E348/F5
MO-2903	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000-2	INTAKE STR	754'	MILD	M129/C3	E111/15	E348/E5
MO-2910A	MOTOR OPERATOR	ZURN INDUSTRIES	MAR-8	INTAKE STR	754'	MILD	M129/F8	E111/21	E348/G6
MO-2910B	MOTOR OPERATOR	ZURN INDUSTRIES	MAR-8	INTAKE STR	754'	MILD	M129/F2	E111/21	E348/E6

SYSTEM: RIVER WATER SUPPLY

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
PDIS-2902	PRESSURE SWITCH	BARTON	289	INTAKE STR/1C-227A	767'	MILD	M129/B8	E111/10	E348/F6
PDIS-2903	PRESSURE SWITCH	BARTON	289	INTAKE STR/1C-227B	767'	MILD	M129/B3	E111/10	E348/F6
PDS-2910A	PRESSURE DIFFERENTIAL SWITCH	ZURN INDUSTRIES	150	INTAKE STR	754'	MILD	M129/F7	E111/21	E348/G6
PDS-2910B	PRESSURE DIFFERENTIAL SWITCH	ZURN INDUSTRIES	150	INTAKE STR	754'	MILD	M129/F3	E111/21	E348/E6
PS-2902	PRESSURE SWITCH	BARKSDALE	D1T-A80	INTAKE STR	754'	MILD	M129/C7	E111/10	E348/F5
PS-2903	PRESSURE SWITCH	BARKSDALE	D1T-A80	INTAKE STR	754'	MILD	M129/C3	E111/10	E348/E5
SV-4909	SOLENOID VALVE	ASCO	8320A6	PUMPHOUSE	727'	MILD	M146/H6	E111/13	E347/D5
SV-4910A	SOLENOID VALVE	ASCO	8320A6	PUMPHOUSE	727'	MILD	M146/H7	E111/13	E347/D5
SV-4910B	SOLENOID VALVE	ASCO	8320A6	PUMPHOUSE	727'	MILD	M146/H8	E111/13	E347/C5
SV-4914	SOLENOID VALVE	ASCO	8320A6	PUMPHOUSE	727'	MILD	M146/F6	E111/13	E347/C6
SV-4915	SOLENOID VALVE	ASCO	8320A6	PUMPHOUSE	727'	MILD	M146/F7	E111/13	E347/C7
ZS-2902	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000-2	INTAKE STR	754'	MILD	M129/C7	E111/15	E348/F5
ZS-2903	MOTOR OPERATED VALVE	LIMITORQUE	SMB-000-2	INTAKE STR	754'	MILD	M129/C3	E111/15	E348/E5
1F-36A		RELIANCE	P1461403	INTAKE STR	754'	MILD	M129/B6	E111/10	E348/C5
1F-36B		RELIANCE	P1461403	INTAKE STR	754'	MILD	M129/B4	E111/10	E348/B5
1P-112A		GOULD PUMPS, INC.	3196MT	INTAKE STR	754'	MILD	M129/D8	E111/9	E348/F6
1P-112B		GOULD PUMPS, INC.	3196MT	INTAKE STR	754'	MILD	M129/D3	E111/9	E348/E6
1P-117A	PUMP MOTOR	LAYNE & BOWLER PU	M-10	INTAKE STR	767'	MILD	M129/D7	E111/11	E348/C6
1P-117B	PUMP MOTOR	LAYNE & BOWLER PU	M-10	INTAKE STR	767'	MILD	M129/D4	E111/11	E348/B6
1P-117C	PUMP MOTOR	LAYNE & BOWLER PU	M-10	INTAKE STR	767'	MILD	M129/D6	E111/11	E348/C6
1P-117D	PUMP MOTOR	LAYNE & BOWLER PU	M-10	INTAKE STR	767'	MILD	M129/D3	E111/11	E348/B6

SYSTEM: RIVER WATER SUPPLY

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
1S-85A		GE	5K42F6	INTAKE STR	754'	MILD	M129/E8	E111/21	E348/C5
1S-85B		GE	5K42F6	INTAKE STR	754'	MILD	M129/E2	E111/21	E348/B5

SYSTEM: SAFETY DISPLAY INSTRUMENTATION

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
APRM A1C37		GE		CB CTL RM	786' 0"	MILD	NS	E62	E338/D4
APRM B1C37		GE		CB CTL RM	786' 0"	MILD	NS	E62	E338/D4
APRM C1C37		GE		CB CTL RM	786' 0"	MILD	NS	E62	E338/D4
APRM D1C37		GE		CB CTL RM	786' 0"	MILD	NS	E62	E338/D4
APRM E1C37		GE		CB CTL RM	786' 0"	MILD	NS	E62	E338/D4
APRM F1C37		GE		CB CTL RM	786' 0"	MILD	NS	E62	E338/D4
AR-4381A	RADIATION RECORDER	HONEYWELL	37303-6020-02	CB CTL RM/1C-29	786' 0"	MILD	M143/D2	E122/28	E338/D4
AR-4381B	RADIATION RECORDER	HONEYWELL	37303-6020-02	CB CTL RM/1C-29	786' 0"	MILD	M143/D1	E122/28	E338/E4
AR-4382A	RADIATION RECORDER	HONEYWELL	37303-6020-02	CB CTL RM/1C-29	786' 0"	MILD	M143/D1	E122/28	E338/E4
AR-4382B	RADIATION RECORDER	HONEYWELL	37303-6020-02	CB CTL RM/1C-29	786' 0"	MILD	M143/D1	E122/28	E338/E4
E/I-3724		GE	550211EAA-C1P	CB CTL RM/1C-19	786' 0"	MILD	M137/B4	E125/5	E338/D5
E/S-2106	POWER SUPPLY	GE	570062FAAC1	CB CTL RM/1C-19	786' 0"	MILD	M121/E4	E121/9	E338/D5
E/S-2126	POWER SUPPLY	GE	570062FAAC1	CB CTL RM/1C-18	786' 0"	MILD	M121/E4	E121/10	E338/C5
E/S-2207	POWER SUPPLY	GE	570	CB CTL RM/1C-18	786' 0"	MILD	M122/F2	E121/25	E338/C5
E/S-2306	POWER SUPPLY	GE	570062FAAC1	CB CTL RM/1C-18	786' 0"	MILD	M123/D4	E121/25	E338/C5
E/S-2403	POWER SUPPLY	GE	570062FAAC1	CB CTL RM/1C-19	786' 0"	MILD	M124/G3	E121/38	E338/D5

SYSTEM: SAFETY DISPLAY INSTRUMENTATION

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
E/S-2509	POWER SUPPLY	GE	570	CB CTL RM/1C-19	786' 0"	MILD	M125/C2	E121/38	E338/D5
E/S-2747	POWER SUPPLY	GE	570	CB CTL RM/1C-19	786' 0"	MILD	M127/F5	E120/14	E338/D5
E/S-3707	POWER SUPPLY	GE	570062FAAC1	CB CTL RM/1C-19	786' 0"	MILD	M137/H6	E125/5	E338/D5
E/S-3708	POWER SUPPLY	GE	570062FAAC1	CB CTL RM/1C-19	786' 0"	MILD	M137/E6	E125/5	E338/D5
E/S-4343	POWER SUPPLY	GE	570-06	E SWGR RM/1C-142	757' -6"	MILD	M143/G3	E122/21	E335/D6
E/S-4365A	POWER SUPPLY	GE	570-06	E SWGR RM/1C-142	757' -6"	MILD	M143/F6	E122/21	E335/D6
E/S-4365B	POWER SUPPLY	GE	570-06	CB CTL RM/1C-06	786' 0"	MILD	M143/D5	E122/21	E338/D4
E/S-4408	POWER SUPPLY	GE	570062FAAC1	CB CTL RM/1C-18	786' 0"	MILD	M114/D3	E109/9	E338/C5
E/S-4409	POWER SUPPLY	GE	570062FAAC1	CB CTL RM/1C-18	786' 0"	MILD	M114/B7	E109/9	E338/C5
E/S-4410	POWER SUPPLY	GE	570062FAAC1	CB CTL RM/1C-18	786' 0"	MILD	M114/B3	E109/9	E338/C5
E/S-4411	POWER SUPPLY	GE	570062FAAC1	CB CTL RM/1C-18	786' 0"	MILD	M114/D7	E109/9	E338/C5
E/S-4541	POWER SUPPLY	GE	570062FAAC1	CB CTL RM/1C-19	786' 0"	MILD	M115/G6	E124/2	E338/D5
E/S-4559	POWER SUPPLY	GE	570062FAAC1	CB CTL RM/1C-18	786' 0"	MILD	M115/E7	E109/10	E338/C5
E/S-4560	POWER SUPPLY	GE	570062FAAC1	CB CTL RM/1C-18	786' 0"	MILD	M115/E3	E109/10	E338/C5
E/S-4561	POWER SUPPLY	GE	570062FAAC1	CB CTL RM/1C-18	786' 0"	MILD	M115/E7	E109/10	E338/C5
E/S-4563	POWER SUPPLY	GE	570062FAAC1	CB CTL RM/1C-18	786' 0"	MILD	M115/E7	E109/10	E338/C5

SYSTEM: SAFETY DISPLAY INSTRUMENTATION

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
E/S-4564	POWER SUPPLY	GE	570062FAAC1	CB CTL RM/1C-18	786' 0"	MILD	M115/E2	E109/10	E338/C5
E/S-4565	POWER SUPPLY	GE	570062FAAC1	CB CTL RM/1C-18	786' 0"	MILD	M115/E6	E109/10	E338/C5
E/S-4623	POWER SUPPLY	GE	570062FAAC1	CB CTL RM/1C-18	786' 0"	MILD	M116/A3	E124/2	E338/C5
E/S-4624	POWER SUPPLY	GE	570062FAAC1	CB CTL RM/1C-18	786' 0"	MILD	M116/A7	E124/2	E338/C5
FC-4408	LEVEL CONTROL	GE	563022CAAC1	CB CTL RM/1C-18	786' 0"	MILD	M114/D2	E109/9	E338/C5
FC-4409	LEVEL CONTROL	GE	563022CAAC1	CB CTL RM	786' 0"	MILD	M114/B8	E109/9	E338/C5
FC-4410	LEVEL CONTROL	GE	563022CAAC1	CB CTL RM/1C-18	786' 0"	MILD	M114/B2	E109/9	E338/C5
FC-4411	LEVEL CONTROL	GE	563022CAAC1	CB CTL RM/1C-18	786' 0"	MILD	M114/D7	E109/9	E338/C5
FIC-2509	FLOW INDICATING CONTROL	GE	540	CB CTL RM/1C-04	786' 0"	MILD	M125/D4	E121/38	E338/D5
FIC-5828A	FLOW INDICATING CONTROL	GE	540	CB CTL RM/1C-24A	786' 0"	MILD	M158/E5	E113/112	E338/D4
FIC-5828B	FLOW INDICATING CONTROL	GE	540	CB CTL RM/1C-24B	786' 0"	MILD	M158/E5	E113/112	E338/D4
FI-2749		GE	180	CB CTL RM/1C-19	786' 0"	MILD	M127/G6	E120/14	E338/D5
FI-4408		GE	180	CB CTL RM/1C-05	786' 0"	MILD	M114/D2	E109/9	E338/D5
FI-4409		GE	180	CB CTL RM/1C-05	786' 0"	MILD	M114/B8	E109/9	E338/D5
FI-4410		GE	180	CB CTL RM/1C-05	786' 0"	MILD	M114/B2	E109/9	E338/D5
FI-4411		GE	180	CB CTL RM/1C-05	786' 0"	MILD	M114/D7	E109/9	E338/D5

SYSTEM: SAFETY DISPLAY INSTRUMENTATION

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
FQ-3707	FLOW INTEGRATING INDICATOR	GE	561290AAA-CIP	CB CTL RM/1C-19	786' 0"	MILD	M137/H6	E125/5	E338/D5
FQ-3708	FLOW INTEGRATING INDICATOR	GE	561290AAA-CIP	CB CTL RM/1C-19	786' 0"	MILD	M137/E6	E125/5	E338/D5
FR-3707	PRESSURE RECORDER	GE	531	CB CTL RM/1C-04	786' 0"	MILD	M137/H6	E125/5	E338/D5
FS-5826A	FLOW SWITCH	GE	560	CB CTL RM/1C-24A	786' 0"	MILD	M158/E5	E113/112	E338/D4
FS-5826B	FLOW SWITCH	GE	560	CB CTL RM/1C-24B	786' 0"	MILD	M158/E5	E113/112	E338/D4
FT-3707	FLOW TRANSMITTER	GE	555111BCAA-3A	TORUS ROOM SOUTH	716' 9"	HARSH	M137/H6	E125/5	E317/F3
FT-3708	FLOW TRANSMITTER	GE	555111BCAA-3A	TORUS ROOM NORTH	716' 9"	HARSH	M137/E6	E125/5	E316/D7
FT-4408	DIFFERENTIAL PRESSURE	BARTON	368	RB-S/1C-126B	757' -6"	MILD	M114/E3	E109/9	E319/E4
FT-4409	DIFFERENTIAL PRESSURE	BARTON	368	RB-S/1C-126B	757' -6"	MILD	M114/C7	E109/9	E319/E4
FT-4410	DIFFERENTIAL PRESSURE	BARTON	368	RB-N/1C-126A	757' -6"	MILD	M114/C3	E109/9	E318/C3
FT-4411	DIFFERENTIAL PRESSURE	BARTON	368	RB-N/1C-126A	757' -6"	MILD	M114/E7	E109/9	E318/D3
FY-2509		GE	565	CB CTL RM/1C-04	786' 0"	MILD	M125/D4	E121/38	E338/D5
FY-3707	FLOW RELAY	GE	565100AAAC1	CB CTL RM/1C-19	786' 0"	MILD	M137/H6	E125/5	E338/D5
FY-3708	FLOW RELAY	GE	565100AAAC1	CB CTL RM/1C-19	786' 0"	MILD	M137/E6	E125/5	E338/D5
FY-4408	FLOW RELAY	GE	564120AAAC1	CB CTL RM/1C-18	786' 0"	MILD	M114/D2	E109/9	E338/C5
FY-4409	FLOW RELAY	GE	564120AAAC1	CB CTL RM/1C-18	786' 0"	MILD	M114/B7	E109/9	E338/C5

SYSTEM: SAFETY DISPLAY INSTRUMENTATION

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
FY-4410	FLOW RELAY	GE	564120AAAC1	CB CTL RM/1C-18	786' 0"	MILD	M114/B3	E109/9	E338/C5
FY-4411	FLOW RELAY	GE	564120AAAC1	CB CTL RM/1C-18	786' 0"	MILD	M114/D7	E109/9	E338/C5
IRM-4572A		GE	194X672G8	CB CTL RM/1C-36	786' 0"	MILD	M115/D4	E61	E338/D5
IRM-4572B		GE	194X672G8	CB CTL RM/1C-36	786' 0"	MILD	M115/D4	E61	E338/D5
IRM-4572C		GE	194X672G8	CB CTL RM/1C-36	786' 0"	MILD	M115/D4	E61	E338/D5
IRM-4572D		GE	194X672G8	CB CTL RM/1C-36	786' 0"	MILD	M115/D4	E61	E338/D5
IRM-4572E		GE	194X672G8	CB CTL RM/1C-36	786' 0"	MILD	M115/D4	E61	E338/D5
IRM-4572F		GE	194X672G8	CB CTL RM/1C-36	786' 0"	MILD	M115/D4	E61	E338/D5
KS-3706A		BLISS	HP52A6	CB CTL RM/1C-21	786' 0"	MILD	M137/F7	E125/2	E338/C4
KS-3706B		BLISS	HP52A6	CB CTL RM/1C-21	786' 0"	MILD	M137/F7	E125/2	E338/C4
KS-3747A		BLISS	HP52A6	CB CTL RM/1C-21	786' 0"	MILD	M137/B8	E125/2	E338/C4
KS-3747B		BLISS	HP52A6	CB CTL RM/1C-21	786' 0"	MILD	M137/B8	E125/2	E338/C4
LC-4559	LEVEL CONTROL	GE	563022CAAC1	CB CTL RM/1C-18	786' 0"	MILD	M115/E7	E109/10	E338/C5
LC-4560	LEVEL CONTROL	GE	563022CAAC1	CB CTL RM/1C-18	786' 0"	MILD	M115/E2	E109/10	E338/C5
LC-4561	LEVEL CONTROL	GE	563022CAAC1	CB CTL RM/1C-18	786' 0"	MILD	M115/E7	E109/10	E338/C5
LE-3701	LEVEL SWITCH	DELAVAL GEMS SENS	XM-33353-1	DRYWELL	742' -9"	HARSH	M137/F8	E125/2	E331/D4

SYSTEM: SAFETY DISPLAY INSTRUMENTATION

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
LE-3721	LEVEL SWITCH	DELAVAL GEMS SENS	XM-33353-1	DRYWELL	742' -9"	HARSH	M137/B7	E125/2	E331/E5
LITS-4539	LEVEL INDICATING SWITCH	YARWAY	4418C	RB-N/1C-56	786' 0"	MILD	M115/F7	E843	E320/D4
LITS-4540	LEVEL INDICATING SWITCH	YARWAY	4418C	RB-N/1C-55	757' -6"	MILD	M115/F3	E842	E318/E6
LITS-4565	LEVEL INDICATING SWITCH	YARWAY	4418C	RB-S/1C-122	757' -6"	MILD	M115/E7	E121/56	E319/A7
LITS-4566	LEVEL INDICATING SWITCH	YARWAY	4418C	RB-N/1C-121	757' -6"	MILD	M115/E3	E121/56	E318/F4
LI-4539	LEVEL INDICATOR	YARWAY	4455	CB CTL RM/1C-05	786' 0"	MILD	M115/F7	E109/10	E338/D5
LI-4540	LEVEL INDICATOR	YARWAY	4455	CB CTL RM/1C-05	786' 0"	MILD	M115/F2	E109/10	E338/D5
LI-4541		GE	180	CB CTL RM/1C-04	786' 0"	MILD	M115/F6	E124/2	E338/D5
LI-4559		GE	180	CB CTL RM/1C-05	786' 0"	MILD	M115/E7	E109/10	E338/D5
LI-4560		GE	180	CB CTL RM/1C-05	786' 0"	MILD	M115/E2	E109/10	E338/D5
LI-4561		GE	180	CB CTL RM/1C-05	786' 0"	MILD	M115/E7	E109/10	E338/D5
LI-4565	LEVEL INDICATOR	YARWAY	4455	CB CTL RM/1C-03	786' 0"	MILD	M115/E7	E121/57	E338/D5
LPRM-4571A		GE		CB CTL RM/1C-36	786' 0"	MILD	M115/D4	E62	E338/D5
LPRM-4571B		GE		CB CTL RM/1C-36	786' 0"	MILD	M115/D4	E62	E338/D5
LPRM-4571C		GE		CB CTL RM/1C-36	786' 0"	MILD	M115/D4	E62	E338/D5
LPRM-4571D		GE		CB CTL RM/1C-36	786' 0"	MILD	M115/D4	E62	E338/D5

SYSTEM: SAFETY DISPLAY INSTRUMENTATION

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
LPRM-4571E		GE		CB CTL RM/1C-36	786' 0"	MILD	M115/D4	E62	E338/D5
LPRM-4571F		GE		CB CTL RM/1C-36	786' 0"	MILD	M115/D4	E62	E338/D5
LPRM-4571G		GE		CB CTL RM/1C-36	786' 0"	MILD	M115/D4	E62	E338/D5
LPRM-4571H		GE		CB CTL RM/1C-36	786' 0"	MILD	M115/D4	E62	E338/D5
LPRM-4571I		GE		CB CTL RM/1C-36	786' 0"	MILD	M115/D4	E62	E338/D5
LPRM-4571J		GE		CB CTL RM/1C-36	786' 0"	MILD	M115/D4	E62	E338/D5
LPRM-4571K		GE		CB CTL RM/1C-36	786' 0"	MILD	M115/D4	E62	E338/D5
LPRM-4571L		GE		CB CTL RM/1C-36	786' 0"	MILD	M115/D4	E62	E338/D5
LPRM-4571M		GE		CB CTL RM/1C-36	786' 0"	MILD	M115/D4	E62	E338/D5
LPRM-4571N		GE		CB CTL RM/1C-36	786' 0"	MILD	M115/D4	E62	E338/D5
LPRM-4571O		GE		CB CTL RM/1C-36	786' 0"	MILD	M115/D4	E62	E338/D5
LPRM-4571P		GE		CB CTL RM/1C-36	786' 0"	MILD	M115/D4	E62	E338/D5
LPRM-4571Q		GE		CB CTL RM/1C-36	786' 0"	MILD	M115/D4	E62	E338/D5
LPRM-4571R		GE		CB CTL RM/1C-36	786' 0"	MILD	M115/D4	E62	E338/D5
LPRM-4571S		GE		CB CTL RM/1C-36	786' 0"	MILD	M115/D4	E62	E338/D5
LPRM-4571T		GE		CB CTL RM/1C-36	786' 0"	MILD	M115/D4	E62	E338/D5

SYSTEM: SAFETY DISPLAY INSTRUMENTATION

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
LPRM-4571U		GE		CB CTL RM/1C-36	786' 0"	MILD	M115/D4	E62	E338/D5
LPRM-4571V		GE		CB CTL RM/1C-36	786' 0"	MILD	M115/D4	E62	E338/D5
LRS-4559	PRESSURE RECORDER	GE	531	CB CTL RM/1C-05	786' 0"	MILD	M115/E1	E109/10	E338/D5
LRS-4560	PRESSURE RECORDER	GE	531	CB CTL RM/1C-05	786' 0"	MILD	M115/E1	E109/10	E338/D5
LR-4566	LEVEL RECORDER	GE	530	CB CTL RM/1C-03	786' 0"	MILD	M115/E3	E121/56	E338/D5
LSS-3701	LEVEL SELECTOR SWITCH	GE	CR120A28802	RAD BLDG/1C-84	786' 0"	MILD	M137/F8	E125/2	E359/G5
LSS-3721	LEVEL SELECTOR SWITCH	GE	CR120A28802	RAD BLDG/1C-84	786' 0"	MILD	M137/B7	E125/2	E359/G5
LS-3701	LEVEL SWITCH	DELAVAL GEMS SENS	XM-33353-1	RB-N	757' -6"	HARSH	M137/F8	E125/2	E318/E5
LS-3721	LEVEL SWITCH	DELAVAL GEMS SENS	XM-33353-1	RB-N	757' -6"	HARSH	M137/B7	E125/2	E318/E5
LT-4541	LEVEL TRANSMITTER	GE	555111BDAA-3P	RB-N/1C-56	786' 0"	MILD	M115/F6	E124/2	E320/D4
LT-4559	LEVEL TRANSMITTER	GE	555111BB AA3P	RB-N/1C-56	786' 0"	MILD	M115/E7	E109/10	E320/D4
LT-4560	LEVEL TRANSMITTER	GE	555111BB AA3P	RB-N/1C-55	757' -6"	MILD	M115/E3	E109/10	E318/E6
LT-4561	LEVEL TRANSMITTER	GE	555111BB AA3P	RB-N/1C-56	786' 0"	MILD	M115/E7	E109/10	E320/D4
PDI-4623		GE	180	CB CTL RM/1C-04	786' 0"	MILD	M116/A3	E124/2	E338/D5
PDI-4624		GE	180	CB CTL RM/1C-04	786' 0"	MILD	M116/A7	E124/2	E338/D5
PDT-4623	DIFFERENTIAL PRESSURE	BARTON	368	NE CRNR RM/1C-57	716' 9"	HARSH	M116/A3	E124/2	E316/E2

SYSTEM: SAFETY DISPLAY INSTRUMENTATION

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
PDT-4624	DIFFERENTIAL PRESSURE	BARTON	368	SW CRNR RM/1C-58	735'	MILD	M116/A7	E124/2	E317/D7
PI-1018		GE	180	CB CTL RM/1C-07	786' 0"	MILD	M130/G6	E43	E338/E4
PI-1019		GE	180	CB CTL RM/1C-07	786' 0"	MILD	M103/G7	E43	E338/E4
PI-2106		GE	180	CB CTL RM/1C-03	786' 0"	MILD	M121/E4	E121/9	E338/D5
PI-2126		GE	180	CB CTL RM/1C-03	786' 0"	MILD	M121/E4	E121/10	E338/D5
PI-2207		GE	180	CB CTL RM/1C-03	786' 0"	MILD	M122/F2	E121/26	E338/D5
PI-2306		GE	180	CB CTL RM/1C-03	786' 0"	MILD	M123/DE	E121/25	E338/D5
PI-2403		GE	180	CB CTL RM/1C-04	786' 0"	MILD	M124/G3	E121/30	E338/D5
PI-4563		GE	180	CB CTL RM/1C-05	786' 0"	MILD	M115/E7	E109/10	E338/D5
PI-4564		GE	180	CB CTL RM/1C-05	786' 0"	MILD	M115/E2	E109/10	E338/D5
PI-4565		GE	180	CB CTL RM/1C-05	786' 0"	MILD	M115/E6	E109/10	E338/D5
PR-4384A	RADIATION RECORDER	HONEYWELL	37303-6020-02	CB CTL RM/1C-29	786' 0"	MILD	M143/D2	E122/21	E338/E4
PR-4385A	RADIATION RECORDER	HONEYWELL	37303-6020-02	CB CTL RM/1C-29	786' 0"	MILD	M143/D2	E122/21	E338/E4
PR-4542	PRESSURE RECORDER	GE	531	CB CTL RM/1C-05	786' 0"	MILD	M115/G2	E109/9	E338/D5
PT-1018	PRESSURE TRANSMITTER	SCHAEVITZ	501X5A	TB-N/1C-210	757' -6"	MILD	M103/G6	E43	E308/C6
PT-1019	PRESSURE TRANSMITTER	SCHAEVITZ	501X5A	TB-N/1C-210	757' -6"	MILD	M103/G6	E43	E308/C6

SYSTEM: SAFETY DISPLAY INSTRUMENTATION

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
PT-2106	PRESSURE TRANSMITTER	GE	551032EKZZ2	SE CRNR RM/1C-123	716' 9"	HARSH	M121/E3	E121/9	E317/D3
PT-2126	PRESSURE TRANSMITTER	GE	551032EKZZ2	NW CRNR RM/1C-124	716' 9"	HARSH	M121/E4	E121/10	E316/E7
PT-2207	PRESSURE TRANSMITTER	GE	551032GK222	HPCI ROOM/1C-120	716' 9"	HARSH	M122/F2	E121/25	E317/B4
PT-2306	PRESSURE TRANSMITTER	GE	551032GK222	HPCI ROOM/1C-120	716' 9"	HARSH	M123/D4	E121/25	E317/B4
PT-4343	PRESSURE TRANSMITTER	GE	556	RECOMBINER H&V ROOM	757' -6"	MILD	M143/G3	E122/21	E315/B8
PT-4365A	PRESSURE TRANSMITTER	GE	556	RB-S	757' -6"	MILD	M143/F6	E122/21	E319/E5
PT-4365B	PRESSURE TRANSMITTER	GE	556	RB-N	786' 0"	MILD	M143/D5	E122/21	E320/C4
PT-4542	DIFFERENTIAL PRESSURE	BARTON	368	RB-N/1C-55	757' -6"	MILD	M115/F2	E109/9	E318/E6
PT-4563	PRESSURE TRANSMITTER	GE	551032-GM772	RB-N/1C-56	786' 0"	MILD	M115/E7	E109/10	E320/D4
PT-4564	PRESSURE TRANSMITTER	GE	551032-GM772	RB-N/1C-55	757' 6"	MILD	M115/E2	E109/10	E318/E6
PT-4565	PRESSURE TRANSMITTER	GE	551032-GM772	RB-N/1C-56	786' 0"	MILD	M115/E6	E109/10	E320/D4
RC-4448A	RADIATIDN CONTROL	GE	238X660G3	CB CTL RM/1C-36	786' 0"	MILD	M114/E1	E64	E338/D5
RC-4448B	RADIATION CONTROL	GE	238X660G3	CB CTL RM/1C-36	786' 0"	MILD	M114/D8	E64	E338/D5
RC-4448C	RADIATION CONTROL	GE	238X660G3	CB CTL RM/1C-36	786' 0"	MILD	M114/C1	E64	E338/D5
RC-4448D	RADIATION CONTROL	GE	238X660G3	CB CTL RM/1C-36	786' 0"	MILD	M114/E8	E64	E338/D5
RE-4131A	RADIATION ELEMENT	GE	194X927G11	RB-N	833' -6"	MILD	M141/H2	E64	E324/E3

SYSTEM: SAFETY DISPLAY INSTRUMENTATION

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
RE-4131B	RADIATION ELEMENT	GE	194X927G11	RB-N	833' -6"	MILD	M141/H2	E64	E324/E3
RE-4448A	RADIATION ELEMENT	GE	237X731G001	STEAM TUNNEL	757' 6"	HARSH	M114/E2	E64	E328/E4
RE-4448B	RADIATION ELEMENT	GE	237X731G001	STEAM TUNNEL	757' 6"	HARSH	M114/D8	E64	E328/E4
RE-4448C	RADIATION ELEMENT	GE	237X731G001	STEAM TUNNEL	757' 6"	HARSH	M114/D8	E64	E328/E4
RE-4448D	RADIATION ELEMENT	GE	237X731G001	STEAM TUNNEL	757' 6"	HARSH	M114/E8	E64	E328/E4
RE-4571L	RADIATION ELEMENT	GE		RV	800' 0"	MILD	M115/E5	E62	E369
RE-4571M	RADIATION ELEMENT	GE		RV	800' 0"	MILD	M115/E5	E62	E369
RE-4571N	RADIATION ELEMENT	GE		RV	800' 0"	MILD	M115/E5	E62	E369
RE-4571O	RADIATION ELEMENT	GE		RV	800' 0"	MILD	M115/E5	E62	E369
RE-4571P	RADIATION ELEMENT	GE		RV	800' 0"	MILD	M115/E5	E62	E369
RE-4571Q	RADIATION ELEMENT	GE		RV	800' 0"	MILD	M115/E5	E62	E369
RE-4571R	RADIATION ELEMENT	GE		RV	800' 0"	MILD	M115/E5	E62	E369
RE-4571S	RADIATION ELEMENT	GE		RV	800' 0"	MILD	M115/E5	E62	E369
RE-4571T	RADIATION ELEMENT	GE		RV	800' 0"	MILD	M115/E5	E62	E369
RE-4571U	RADIATION ELEMENT	GE		RV	800' 0"	MILD	M115/E5	E62	E369
RE-4571V	RADIATION ELEMENT	GE		RV	800' 0"	MILD	M115/E5	E62	E369

SYSTEM: SAFETY DISPLAY INSTRUMENTATION

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
RE-4572A	RADIATION ELEMENT	GE	112C3144G008	RV	800' 0"	MILD	M115/E5	E61	E369
RE-4572B	RADIATION ELEMENT	GE	112C3144G008	RV	800' 0"	MILD	M115/E5	E62	E369
RE-4572C	RADIATION ELEMENT	GE	112C3144G008	RV	800' 0"	MILD	M115/E5	E61	E369
RE-4572D	RADIATION ELEMENT	GE	112C3144G008	RV	800' 0"	MILD	M115/E5	E61	E369
RE-4572E	RADIATION ELEMENT	GE	112C3144G008	RV	800' 0"	MILD	M115/E5	E61	E369
RE-4572F	RADIATION ELEMENT	GE	112C3144G008	RV	800' 0"	MILD	M115/E5	E61	E369
RE-4573A	RADIATION ELEMENT	GE	112C3144G007	RV	800' 0"	MILD	M115/D5	E61	E369
RE-4573B	RADIATION ELEMENT	GE	112C3144G007	RV	800' 0"	MILD	M115/D5	E61	E369
RE-4573C	RADIATION ELEMENT	GE	112C3144G007	RV	800' 0"	MILD	M115/D5	E61	E369
RE-4573D	RADIATION ELEMENT	GE	112C3144G007	RV	800' 0"	MILD	M115/D5	E61	E369
RE-8101A	AIR MONITOR	NMC	RAK-22IF	RB-S/1C-219A	757' -6"	MILD	M181/G6	E122/28	E319/E6
RE-8101B	AIR MONITOR	NMC	RAK-22IF	RB-N/1C-219B	757' -6"	MILD	M181/G3	E122/28	E318/G6
RE-8102A	AIR MONITOR	NMC	RAK-22IF	RB-S/1C-219A	757' -6"	MILD	M181/G6	E122/28	E319/E6
RE-8102B	AIR MONITOR	NMC	RAK-22IF	RB-N/1C-219B	757' -6"	MILD	M181/G3	E122/28	E318/G6
RE-8103A	AIR MONITOR	NMC	RAK-22IF	RB-S/1C-219A	757' -6"	MILD	M181/G3	E122/28	E319/E6
RE-8103B	AIR MONITOR	NMC	RAK-22IF	RB-N/1C-219B	757' -6"	MILD	M181/G3	E122/28	E318/G6

SYSTEM: SAFETY DISPLAY INSTRUMENTATION

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
RIS-4131A	RADIATION INDICATING SWITCH	GE	129B2802	CB CTL RM/1C-10	786' 0"	MILD	M141/H2	E64	E338/C4
RIS-4131B	RADIATION INDICATING SWITCH	GE	129B2802	CB CTL RM/1C-10	786' 0"	MILD	M141/H2	E64	E338/C4
RIT-8101A	AIR MONITOR	NMC	RAK-22IF	RB-S/1C-219A	757' -6"	MILD	M181/G6	E122/28	E319/E6
RIT-8101B	AIR MONITOR	NMC	RAK-22IF	RB-N/1C-219B	757' -6"	MILD	M181/G3	E122/28	E318/G6
RIT-8102A	AIR MONITOR	NMC	RAK-22IF	RB-S/1C-219A	757' -6"	MILD	M181/G6	E122/28	E319/E6
RIT-8102B	AIR MONITOR	NMC	RAK-22IF	RB-N/1C-219B	757' -6"	MILD	M181/G3	E122/28	E318/G6
RIT-8103A	AIR MONITOR	NMC	RAK-22IF	RB-S/1C-219A	757' -6"	MILD	M181/G6	E122/28	E319/E6
RIT-8103B	AIR MONITOR	NMC	RAK-22IF	RB-N/1C-219B	757' -6"	MILD	M181/G3	E122/28	E318/G6
RR-4131	RADIATION RECORDER	GE	521	CB CTL RM/1C-02	786' 0"	MILD	M141/H2	E64	E338/C4
RR-4379A	RADIATION RECORDER	HONEYWELL	37303-6020-02	CB CTL RM/1C-29	786' 0"	MILD	M143/E2	E122/28	E338/E4
RR-4379B	RADIATION RECORDER	HONEYWELL	37303-6020-02	CB CTL RM/1C-29	786' 0"	MILD	M143/E1	E122/28	E338/D4
RR-4448A	RADIATION RECORDER	GE	521	CB CTL RM/1C-02	786' 0"	MILD	M114/E1	E64	E338/C4
RR-4448B	RADIATION RECORDER	GE	521	CB CTL RM/1C-02	786' 0"	MILD	M114/E2	E64	E338/C4
RR-7606A	RADIATION RECORDER	HONEYWELL	37303-6020-02	RB-N/1C-183	757' -6"	MILD	M176/A3	E113/11	E318/G2
RR-7606B	RADIATION RECORDER	HONEYWELL	37303-6020-02	RB-N	757' -6"	MILD	M176/A3	E113/11	E318/G3
SRM-4573A		GE	194X400G17	CB CTL RM/1C-36	786' 0"	MILD	M115/D4	E61	E338/D5

SYSTEM: SAFETY DISPLAY INSTRUMENTATION

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
SRM-4573B		GE	194X400G17	CB CTL RM/1C-36	786' 0"	MILD	M115/D4	E61	E338/D5
SRM-4573C		GE	194X400G17	CB CTL RM/1C-36	786' 0"	MILD	M115/D4	E61	E338/D5
SRM-4573D		GE	194X400G17	CB CTL RM/1C-36	786' 0"	MILD	M115/D4	E61	E338/D5
TDS-4451	TEMPERATURE DIFFERENTIAL SWITC	RI 8	86UTFF	CB CTL RM/1C-21	786'	MILD	M114/G1	E124/6	E338/C4
TE-3724	TEMPERATURE ELEMENT	LATER L	LATER	DRYWELL	742' 9"	HARSH	M137/B4	E125/5	E331/E5
TE-4328A	TEMPERATURE ELEMENT	LEEDS & NORTHRUP	8197-10-S	TORUS ROOM NORTH	746' 3"	HARSH	M143/C5	E122/18	E316/F5
TE-4328B	TEMPERATURE ELEMENT	LEEDS & NORTHRUP	8197-10-S	TORUS ROOM NORTH	746' 3"	HARSH	M143/C5	E122/18	E316/B2
TE-4328C	TEMPERATURE ELEMENT	LEEDS & NORTHRUP	8197-10-S	TORUS ROOM SOUTH	746' 3"	HARSH	M143/C5	E122/18	E317/G5
TE-4328D	TEMPERATURE ELEMENT	LEEDS & NORTHRUP	8197-10-S	TORUS ROOM SOUTH	746' 3"	HARSH	M143/C5	E122/18	E317/H8
TE-4328E	TEMPERATURE ELEMENT	LEEDS & NORTHRUP	8197-10-S	DRYWELL	742' -9"	HARSH	M143/D6	E122/20	E331/C3
TE-4328F	TEMPERATURE ELEMENT	LEEDS & NORTHRUP	8197-10-S	DRYWELL	742' -9"	HARSH	M143/D6	E122/20	E331/F6
TE-4328G	TEMPERATURE ELEMENT	LEEDS & NORTHRUP	8197-10-S	DRYWELL	757' -4"	HARSH	M143/D6	E122/20	E329/B4
TE-4328H	TEMPERATURE ELEMENT	LEEDS & NORTHRUP	8197-10-S	DRYWELL	757' -4"	HARSH	M143/D6	E122/20	E329/G4
TE-4328J	TEMPERATURE ELEMENT	LEEDS & NORTHRUP	8197-10-S	DRYWELL	757' -4"	HARSH	M143/E6	E122/20	E330/E2
TE-4328K	TEMPERATURE ELEMENT	LEEDS & NORTHRUP	8197-10-S	DRYWELL	761' -2"	HARSH	M143/E6	E122/20	E330/E6
TE-4328L	TEMPERATURE ELEMENT	LEEDS & NORTHRUP	8197-10-S	DRYWELL	805' -5"	HARSH	M143/E6	E122/20	E330/F4

SYSTEM: SAFETY DISPLAY INSTRUMENTATION

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
TE-4328M	TEMPERATURE ELEMENT	LEEDS & NORTHRUP	8197-10-S	DRYWELL	805' -5"	HARSH	M143/D6	E122/20	E331/D4
TE-4386A	TEMPERATURE ELEMENT	LEEDS & NORTHRUP	8920-404-00-3	TORUS ROOM NORTH	716' 9"	HARSH	M143/C5	E122/18	E316/F5
TE-4386B	TEMPERATURE ELEMENT	LEEDS & NORTHRUP	8920-404-00-3	TORUS ROOM NORTH	716' 9"	HARSH	M143/C5	E122/18	E316/B2
TE-4386C	TEMPERATURE ELEMENT	LEEDS & NORTHRUP	8920-404-00-3	TORUS ROOM SOUTH	716' 9"	HARSH	M143/C5	E122/18	E317/G5
TE-4386D	TEMPERATURE ELEMENT	LEEDS & NORTHRUP	8920-404-00-3	TORUS ROOM SOUTH	716' 9"	HARSH	M143/C5	E122/18	E317/H8
TE-4386E	TEMPERATURE ELEMENT	LEEDS & NORTHRUP	8920-404-00-3	DRYWELL	805' 5"	HARSH	M143/D6	E122/20	E331/C3
TE-4386F	TEMPERATURE ELEMENT	LEEDS & NORTHRUP	8920-404-00-3	DRYWELL	805' 5"	HARSH	M143/D6	E122/20	E331/F6
TE-4386G	TEMPERATURE ELEMENT	LEEDS & NORTHRUP	8920-404-00-3	DRYWELL	805' 5"	HARSH	M143/D6	E122/20	E329/B4
TE-4386H	TEMPERATURE ELEMENT	LEEDS & NORTHRUP	8920-404-00-3	DRYWELL	805' 5"	HARSH	M143/D6	E122/20	E329/G4
TE-4386J	TEMPERATURE ELEMENT	LEEDS & NORTHRUP	8920-404-00-3	DRYWELL	805' 5"	HARSH	M143/E6	E122/20	E330/D2
TE-4386K,	TEMPERATURE ELEMENT	LEEDS & NORTHRUP	8920-404-00-3	DRYWELL	805' 5"	HARSH	M143/E6	E122/20	E330/D6
TE-4386L	TEMPERATURE ELEMENT	LEEDS & NORTHRUP	8920-404-00-3	DRYWELL	805' 5"	HARSH	M143/E6	E122/20	E330/F5
TE-4386M	TEMPERATURE ELEMENT	LEEDS & NORTHRUP	8920-404-00-3	DRYWELL	805' 5"	HARSH	M143/D6	E122/20	E331/D4
TE-4400	TEMPERATURE ELEMENT	NECI 1	110-5009-0034	DRYWELL	761' 2"	HARSH	M114/E4	E121/2	E330/C4
TE-4401	TEMPERATURE ELEMENT	NECI 1	110-5009-0034	DRYWELL	761' 2"	HARSH	M114/E4	E121/2	E330/C3
TE-4402	TEMPERATURE ELEMENT	NECI 1	110-5009-0034	DRYWELL	773' -9"	HARSH	M114/E6	E121/2	E330/C4

SYSTEM: SAFETY DISPLAY INSTRUMENTATION

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
TE-4403	TEMPERATURE ELEMENT	NECI 1	110-5009-0034	DRYWELL	773' -9"	HARSH	M114/E6	E121/2	E330/C4
TE-4404	TEMPERATURE ELEMENT	NECI 1	110-5009-0034	DRYWELL	773' -9"	HARSH	M114/D5	E121/2	E330/F4
TE-4405	TEMPERATURE ELEMENT	NECI 1	110-5009-0034	DRYWELL	773' -9"	HARSH	M114/D4	E121/2	E330/F4
TE-4406	TEMPERATURE ELEMENT	NECI 1	110-5009-0034	DRYWELL	773' -9"	HARSH	M114/E6	E121/2	E330/F3
TE-4407	TEMPERATURE ELEMENT	NECI 1	110-5009-0034	DRYWELL	773' -9"	HARSH	M114/E6	E121/2	E330/E3
TIS-3724	TEMPERATURE INDICATING SWITCH	GE	195	CB CTL RM/1C-04	786' 0"	MILD	M137/B4	E125/5	E338/D5
TI-4328	TEMPERATURE INDICATOR	LEEDS & NORTHRUP	900	E SWGR RM/1C-142	757' -6"	MILD	M143/F6	E122/20	E335/D6
TR-4383A	RADIATION RECORDER	HONEYWELL	37303-6020-02	CB CTL RM/1C-29	786' 0"	MILD	M143/D2	E122/20	E338/E4
TR-4383B	RADIATION RECORDER	HONEYWELL	37303-6020-02	CB CTL RM/1C-29	786' 0"	MILD	M143/D1	E122/20	E338/E4
TR-4383C	RADIATION RECORDER	HONEYWELL	37303-6020-02	CB CTL RM/1C-29	786' 0"	MILD	M143/E1	E122/20	E338/E4
TR-4386A	RADIATION RECORDER	HONEYWELL	37303-6020-02	CB CTL RM/1C-29	786' 0"	MILD	M143/D2	E122/20	E338/E4
TR-4386B	RADIATION RECORDER	HONEYWELL	37303-6020-02	CB CTL RM/1C-29	786' 0"	MILD	M143/D1	E122/20	E338/E4
TR-4400	TEMPERATURE RECORDER	GE H	HG	CB CTL RM/1C-21	786'	MILD	M114/D4	E121/2	E338/D5
TS-2265		TRANSMATION	610A	CB CTL RM/1C-21	786' 0"	MILD	M122/A2	E124/7	E338/C4
TS-2453		TRANSMATION	610A	CB CTL RM/1C-04	786' 0"	MILD	M124/C7	E124/7	E338/D5
TS-4447		TRANSMATION	610A	CB CTL RM/1C-21	786' 0"	MILD	M114/G2	E124/7	E338/C4

SYSTEM: SAFETY DISPLAY INSTRUMENTATION

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
TT-4386A	TEMPERATURE TRANSMITTER	HONEYWELL	39521-4010-91	E SWGR RM/1C-142	757' -6"	MILD	M143/C5	E122/18	E335/D6
TT-4386B	TEMPERATURE TRANSMITTER	HONEYWELL	39521-4010-91	E SWGR RM/1C-142	757' -6"	MILD	M143/C5	E122/18	E335/D6
TT-4386C	TEMPERATURE TRANSMITTER	HONEYWELL	39521-4010-91	E SWGR RM/1C-142	757' -6"	MILD	M143/C5	E122/18	E335/D6
TT-4386D	TEMPERATURE TRANSMITTER	HONEYWELL	39521-4010-91	E SWGR RM/1C-142	757' -6"	MILD	M143/C5	E122/18	E335/D6
TT-4386E	TEMPERATURE TRANSMITTER	HONEYWELL	39521-4010-91	E SWGR RM/1C-142	757' -6"	MILD	M143/F5	E122/20	E335/D6
TT-4386F	TEMPERATURE TRANSMITTER	HONEYWELL	39521-4010-91	E SWGR RM/1C-142	757' -6"	MILD	M143/F5	E122/20	E335/D6
TT-4386G	TEMPERATURE TRANSMITTER	HONEYWELL	39521-4010-91	E SWGR RM/1C-142	757' -6"	MILD	M143/F5	E122/20	E335/D6
TT-4386H	TEMPERATURE TRANSMITTER	HONEYWELL	39521-4010-91	E SWGR RM/1C-142	757' -6"	MILD	M143/F5	E122/20	E335/D6
TT-4386I	TEMPERATURE TRANSMITTER	HONEYWELL	39521-4010-91	ESS SWITCHGEAR ROOM	757' 6-"	MILD	M143/F5	E122/20	E335/D6
TT-4386J	TEMPERATURE TRANSMITTER	HONEYWELL	39521-4010-91	E SWGR RM/1C-142	757' -6"	MILD	M143/F5	E122/20	E335/D6
TT-4386K	TEMPERATURE TRANSMITTER	HONEYWELL	39521-4010-91	E SWGR RM/1C-142	757' -6"	MILD	M143/F5	E122/20	E335/D6
TT-4386L	TEMPERATURE TRANSMITTER	HONEYWELL	39521-4010-91	E SWGR RM/1C-142	757' -6"	MILD	M143/F5	E122/20	E335/D6
TT-4386M	TEMPERATURE TRANSMITTER	HONEYWELL	39521-4010-91	E SWGR RM/1C-142	757' -6"	MILD	M143/F5	E122/20	E335/D6
ZS-1906A	POSITION SWITCH	NAMCO	EA 740	DRYWELL	757' 4"	HARSH	M119/F7	E121/58A	E329/C5
ZS-1906B	POSITION SWITCH	NAMCO	SL-2C-11	DRYWELL	757' -4"	HARSH	M119/E7	E121/58A	E329/C5
ZS-1972	SOLENOID VALVE INTEGR	TARGET ROCK	72V001 (ZS)	NW CRNR RM	716' 9"	HARSH	M119/D3	E122/13	E316/E8

SYSTEM: SAFETY DISPLAY INSTRUMENTATION

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
ZS-1973	SOLENOID VALVE INTEGR	TARGET ROCK	72V001 (ZS)	NW CRNR RM	716' 9"	HARSH	M119/D2	E122/13	E316/E8
ZS-2002A	POSITION SWITCH	NAMCO	SL-2C-11	DRYWELL	757' -4"	HARSH	M120/F3	E121/58	E329/F5
ZS-2002B	POSITION SWITCH	NAMCO	EA 740	DRYWELL	757' 4"	HARSH	M120/E3	E121/58	E329/F5
ZS-2051	SOLENOID VALVE INTEGR	TARGET ROCK	72V001 (ZS)	SE CRNR RM	716' 9"	HARSH	M120/D7	E122/13	E317/D3
ZS-2052	SOLENOID VALVE INTEGR	TARGET ROCK	72V001 (ZS)	SE CRNR RM	716' 9"	HARSH	M120/D8	E122/13	E317/D3
ZS-2211	POSITION SWITCH	NAMCO	SAI-31	HPCI ROOM	716' 9"	HARSH	M122/D2	E121/26	E317/C3
ZS-2212	POSITION SWITCH	NAMCO	SAI-31	HPCI ROOM	716' 9"	HARSH	M122/D2	E121/26	E317/C3
ZS-2234	POSITION SWITCH	NAMCO	SAI-131	HPCI ROOM	716' 9"	HARSH	M122/C5	E121/26	E317/A3
ZS-2235	POSITION SWITCH	NAMCO	SAI-131	HPCI ROOM	716' 9"	HARSH	M122/C6	E121/26	E317/A3
ZS-2435	POSITION SWITCH	NAMCO	SAI-131	RCIC ROOM	716' 9"	HARSH	M124/B5	E121/39	M405/B6
ZS-2436	POSITION SWITCH	NAMCO	SAI-131	RCIC ROOM	716' 9"	HARSH	M124/B5	E121/39	M405/B6
ZS-3704	POSITION SWITCH	MICRO SWITCH	OTF2-2RN-RH	TORUS ROOM SOUTH	716' 9"	HARSH	M137/H7	E122/9	E317/F4
ZS-3705	POSITION SWITCH	MICRO SWITCH	DTF2-2RN-RH	TORUS ROOM SOUTH	716' 9"	HARSH	M137/H7	E122/9	E317/F4
ZS-3728	POSITION SWITCH	MICRO SWITCH	DTF2-2RN-RH	TORUS ROOM NORTH	716' 9"	HARSH	M137/D7	E122/9	E316/D6
ZS-3729	POSITION SWITCH	MICRO SWITCH	DTF2-2RN-RH	TORUS ROOM NORTH	716' 9"	HARSH	M137/D7	E122/9	E316/D6
ZS-4300	POSITION SWITCH	MICRO SWITCH	OPD-AR	NE CRNR RM	735' 7"	MILD	M143/C7	E122/12	E316/E2

SYSTEM: SAFETY DISPLAY INSTRUMENTATION

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
ZS-4301	POSITION SWITCH	MICRO SWITCH	OPD-AR	NE CRNR RM	735' 7"	HARSH	M143/C8	E122/13	E316/E2
ZS-4302	POSITION SWITCH	MICRO SWITCH	OPD-AR	RB-N	812' 0"	MILD	M143/D7	E122/12	E322/D3
ZS-4303	POSITION SWITCH	MICRO SWITCH	OPD-AR	H&V CONTROL VALVE RM	812' 0"	HARSH	M143/D7	E122/13	E322/D3
ZS-4304	POSITION SWITCH	MICRO SWITCH	OPD-AR	NE CRNR RM	735' 7"	HARSH	M143/D7	E122/23	E316/E3
ZS-4305	POSITION SWITCH	MICRO SWITCH	OPD-AR	NE CRNR RM	735' 7"	HARSH	M143/B7	E122/23	E316/E2
ZS-4306	POSITION SWITCH	MICRO SWITCH	OPD-AR	RHR VALVE ROOM	757' 6"	HARSH	M143/B7	E122/13	E318/E6
ZS-4307	POSITION SWITCH	MICRO SWITCH	OPD-AR	RHR VALVE ROOM	757' 6"	HARSH	M143/E3	E122/12	E318/E6
ZS-4308	POSITION SWITCH	MICRO SWITCH	OPD-AR	RHR VALVE ROOM	757' 6"	HARSH	M143/E3	E122/12	E318/C6
ZS-4309	POSITION SWITCH	NAMCO	SAI-31	NE CRNR RM	735' 7"	HARSH	M143/C7	E122/12	E316/E2
ZS-4310	POSITION SWITCH	NAMCO	SAI-31	H&V CONTROL VALVE RM	812' 0"	HARSH	M143/D7	E122/12	E322/D4
ZS-4311	POSITION SWITCH	MICRO SWITCH	DTF2-2RN-RH	RHR VALVE ROOM	757' 6"	HARSH	M143/F3	E122/13	E319/G7
ZS-4312	POSITION SWITCH	MICRO SWITCH	DTF2-2RN-RH	RHR VALVE ROOM	757' 6"	HARSH	M143/F3	E122/12	E318/D7
ZS-4313	POSITION SWITCH	MICRO SWITCH	DTF2-2RN-RH	RHR VALVE ROOM	757' 6"	HARSH	M143/F3	E122/12	E319/G7
ZS-4639	POSITION SWITCH	NAMCO	SAI-31	DRYWELL	757' 4"	HARSH	M116/F6	E122/10	E330/B5
ZS-4640	POSITION SWITCH	NAMCO	SAI-131	RWCU HEAT EXCH ROOM	786' 0"	HARSH	M116/F7	E122/10	E321/E5
ZS-5703A	POSITION SWITCH	MICRO SWITCH	DTF2-2RN-RH	TORUS ROOM SOUTH	716' 9"	HARSH	M157/H7	E113/94	E317/E5

SYSTEM: SAFETY DISPLAY INSTRUMENTATION

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
ZS-5703B	POSITION SWITCH	MICRO SWITCH	DTF2-2RN-RH	TORUS ROOM SOUTH	716' 9"	HARSH	M157/G7	E113/94	E317/H7
ZS-5704A	POSITION SWITCH	MICRO SWITCH	DTF2-2RN-RH	TORUS ROOM SOUTH	716' 9"	HARSH	M157/G6	E113/94	E317/E5
ZS-5704B	POSITION SWITCH	MICRO SWITCH	DTF2-2RN-RH	TORUS ROOM SOUTH	716' 9"	HARSH	M157/G6	E113/94	E317/G7
ZS-5718A	POSITION SWITCH	MICRO SWITCH	DTF2-2RN-RH	TORUS ROOM SOUTH	716' 9"	HARSH	M157/C8	E113/94	E317/E5
ZS-5718B	POSITION SWITCH	MICRO SWITCH	DTF2-2RN-RH	TORUS ROOM NORTH	716' 9"	HARSH	M157/A8	E113/94	E316/C7
ZS-5719A	POSITION SWITCH	MICRO SWITCH	DTF2-2RN-RH	TORUS ROOM SOUTH	716' 9"	HARSH	M157/B7	E113/94	E317/E5
ZS-5719B	POSITION SWITCH	MICRO SWITCH	DTF2-2RN-RH	TORUS ROOM NORTH	716' 9"	HARSH	M157/A7	E113/94	E316/C7
ZS-5817A	POSITION SWITCH	MICRO SWITCH	OPD-AR	H&V ROOM	796' 0"	MILD	M158/E2	E113/11	E320/G3
ZS-5817B	POSITION SWITCH	MICRO SWITCH	OPD-AR	H&V ROOM	796' 0"	MILD	M158/D2	E113/11	E320/G3
ZS-5825A	POSITION SWITCH	MICRO SWITCH	OPD-AR	SGT ROOM	786' 0"	HARSH	M158/F6	E113/11	E315/G5
ZS-5825B	POSITION SWITCH	MICRO SWITCH	OPD-AR	SGT ROOM	786' 0"	HARSH	M158/D6	E113/11	E315/F5
ZS-7602A	POSITION SWITCH	MICRO SWITCH	OPD-AR	SGT ROOM	786' 0"	HARSH	M176/A4	E113/64	E315/G3
ZS-7602B	POSITION SWITCH	MICRO SWITCH	OPD-AR	SGT ROOM	786' 0"	HARSH	M176/A4	E113/64	E315/G3
ZS-7604U	POSITION SWITCH	MICRO SWITCH	OPD-AR	H&V ROOM	796' 0"	MILD	M176/B4	E113/54	E320/G3
ZS-7604V	POSITION SWITCH	MICRO SWITCH	OPD-AR	H&V ROOM	796' 0"	MILD	M176/B3	E113/57	E320/G3
ZS-7610A	POSITION SWITCH	MICRO SWITCH L	LATER	RB-N	812'	MILD	M176/E3	E113/64	E322/F2

SYSTEM: SAFETY DISPLAY INSTRUMENTATION

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
ZS-7610B	POSITION SWITCH	MICRO SWITCH L	LATER	RB-N	812'	MILD	M176/E3	E113/64	E322/F2
ZS-7612A	POSITION SWITCH	MICRO SWITCH L	LATER	RB-N	812'	MILO	M176/F3	E113/64	E322/F2
ZS-7612B	POSITION SWITCH	MICRO SWITCH L	LATER	RB-N	812'	MILD	M176/F3	E113/64	E322/F2
ZS-7630A	POSITION SWITCH	MICRO SWITCH	BZE6-2RN	RB-S	757' -6"	MILD	M176/H7	E113/64	E319/G8
ZS-7630B	POSITION SWITCH	MICRO SWITCH	BZE6-2RN	RB-S	757' -6"	MILD	M176/G7	E113/64	E319/G8
ZS-7631A	POSITION SWITCH	MICRO SWITCH	BZE6-2RN	RB-S	812' 0"	MILD	M176/H6	E113/64	E323/E3
ZS-7631B	POSITION SWITCH	MICRO SWITCH	BZE6-2RN	RB-S	812' 0"	MILD	M176/G7	E113/64	E323/E3
ZS-7632A	POSITION SWITCH	MICRO SWITCH	BZE6-2RN	RB-S	812' 0"	MILD	M176/H4	E113/64	E323/F3
ZS-7632B	POSITION SWITCH	MICRO SWITCH	BZE6-2RN	RB-S	812' 0"	MILD	M176/G4	E113/64	E323/F3
ZS-7633A	POSITION SWITCH	MICRO SWITCH	BZE6-2RN	RB-S	812' 0"	MILD	M176/H4	E113/64	E323/G3
ZS-7633B	POSITION SWITCH	MICRO SWITCH	BZE6-2RN	RB-S	812' 0"	MILD	M176/G5	E113/64	E323/G3
ZS-7634A	POSITION SWITCH	MICRO SWITCH	BZE6-2RN	RB-S	757' -6"	MILD	M176/H4	E113/64	E319/D8
ZS-7634B	POSITION SWITCH	MICRO SWITCH	BZE6-2RN	RB-S	757' -6"	MILD	M176/G4	E113/64	E319/D8
ZS-7636A	POSITION SWITCH	MICRO SWITCH	BZE6-2RN	RB-S	757' -6"	MILD	M176/C6	E113/64	E319/D8
ZS-7636B	POSITION SWITCH	MICRO SWITCH	BZE6-2RN	RB-S	757' -6"	MILD	M176/D6	E113/64	E319/D8
ZS-7641A	POSITION SWITCH	MICRO SWITCH	OPD-AR	RAD BLDG	786' 0"	MILD	M176/H8	E113/64	E359/G8
ZS-7641B	POSITION SWITCH	MICRO SWITCH	OPD-AR	RAD BLDG	786' 0"	MILD	M176/G8	E113/64	E359/F8

SYSTEM: SAFETY DISPLAY INSTRUMENTATION

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
1C77A		GE		CB CTL RM	786' 0"	MILD	NS	E62	E338/D4
1C77B		GE		CB CTL RM	786' 0"	MILD	NS	E62	E338/D4
1C77C		GE		CB CTL RM	786' 0"	MILD	NS	E62	E338/D4
1C77D		GE		CB CTL RM	786' 0"	MILD	NS	E62	E338/D4
1C77E		GE		CB CTL RM	786' 0"	MILD	NS	E62	E338/D4
1C77F		GE		CB CTL RM	786' 0"	MILD	NS	E62	E338/D4

SYSTEM: STANDBY AC POWER SUPPLY

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
HS-3225A	HAND SWITCH	ONAN	DJA-MS/1T	DG ROOM	757' -6"	MILD	M132/E8	E80	M2/B3
HS-3225B	HAND SWITCH	ONAN	DJA-MS/1T	DG ROOM	757' -6"	MILD	M132/H8	E80	M2/B3
HS-3233A	HAND SWITCH	GE	CR2940 U301	DG ROOM	757' -6"	MILD	M132/G6	E80	M2/B3
HS-3233B	HAND SWITCH	GE	CR2940 U301	DG ROOM	757' -6"	MILD	M132/D6	E80	M2/B3
LS-3208A	LEVEL SWITCH	COLT INDUSTRIES	80	DG ROOM	757' -6"	MILD	M132/F4	E106/5	E310/B3
LS-3208B	LEVEL SWITCH	COLT INDUSTRIES	80	DG ROOM	757' -6"	MILD	M132/F4	E106/5	E310/B3
LS-3210A	LEVEL SWITCH	COLT INDUSTRIES	80	DG ROOM	757' -6"	MILD	M132/C4	E106/5	E310/B4
LS-3210B	LEVEL SWITCH	COLT INDUSTRIES	80	DG ROOM	757' -6"	MILD	M132/C4	E106/5	E310/B4
PS-3241A	PRESSURE SWITCH	COLT INDUSTRIES	2584-B1	DG ROOM	757' -6"	MILD	M132/NS	E80	M2/B3
PS-3241B	PRESSURE SWITCH	COLT INDUSTRIES	2584-B1	DG ROOM	757' -6"	MILD	M132/NS	E80	M2/B3
PS-3242A	PRESSURE SWITCH	COLT INDUSTRIES	2584-B1	DG ROOM/1C-91	757' -6"	MILD	M132/G1	E80	E310/C3
PS-3242B	PRESSURE SWITCH	COLT INDUSTRIES	2584-B1	DG ROOM/1C-92	757' -6"	MILD	M132/A7	E80	E310/C2
SS-3236A	SPEED SWITCH	WESTINGHOUSE		DG ROOM	757' -6"	MILD	M132/H1	E80	M2/B3
SS-3236B	SPEED SWITCH	WESTINGHOUSE		DG ROOM	757' -6"	MILD	M132/A8	E80	M2/B3
SS-3237A	SPEED SWITCH	WESTINGHOUSE		DG ROOM	757' -6"	MILD	M132/C1	E80	M2/B3
SS-3237B	SPEED SWITCH	WESTINGHOUSE		DG ROOM	757' -6"	MILD	M132/A5	E80	M2/B3

SYSTEM: STANDBY AC POWER SUPPLY

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
TS-3226	TEMPERATURE SWITCH	FENWAL	27020	DG ROOM	757' -6"	MILD	M132/G3	E106/5	E310/C4
TS-3227	TEMPERATURE SWITCH	FENWAL	27020	DG ROOM	757' -6"	MILD	M132/D3	E106/5	E310/C4
1A3		GE	HFA-511	ESS SWITCHGEAR ROOM	757' -6"	MILD	N/A	E5	M2/F5
1A4		GE	HFA-511	ESS SWITCHGEAR ROOM	757' -6"	MILD	N/A	E5	M2/F6
1B20	SWITCHGEAR	ITE IMPERIAL	47855-B1	INTAKE STR	767'	MILD	N/A	E24	M17/E7
1B21	SWITCHGEAR	ALLIS-CHALMERS	VALUELINE	INTAKE STR	767' 0"	MILD	N/A	E105/30	M17/E7
1B3	SWITCHGEAR	ITE IMPERIAL	47844-A	ESS SWITCHGEAR ROOM	757' -6"	MILD	N/A	E24	M2/F5
1B32	SWITCHGEAR	ALLIS-CHALMERS	VALUELINE	ESS SWITCHGEAR ROOM	757' -6"	MILD	N/A	E105/12	M2/G5
1B34	SWITCHGEAR	ALLIS-CHALMERS	MARK 1	RB-S	757' -6"	MILD	N/A	E105/14	E321/B4
1B34A	SWITCHGEAR	ALLIS-CHALMERS	VALUELINE	RB-S	786' 0"	MILD	N/A	E105/15A	M3/C6
1B36	SWITCHGEAR	ALLIS-CHALMERS	VALUELINE	PUMPHOUSE	761'	MILD	N/A	E105/34	E347/G6
1B37	SWITCHGEAR	ALLIS-CHALMERS	VALUELINE	RB-S	757' -6"	MILD	N/A	E105/38	E321/B5
1B4	SWITCHGEAR	ITE IMPERIAL	47844-B	ESS SWITCHGEAR ROOM	757' -6"	MILD	N/A	E24	M2/F6
1B42	SWITCHGEAR	ALLIS-CHALMERS	VALUELINE	ESS SWITCHGEAR ROOM	757' -6"	MILD	N/A	E105/16	M2/G5
1B44	SWITCHGEAR	ALLIS-CHALMERS	MARK 1	RB-N	757' -6"	MILD	N/A	E105/18	M2/E7
1B44A	SWITCHGEAR	ALLIS-CHALMERS	VALUELINE	RB-N	757' -6"	MILD	N/A	E105/19A	M2/E7

SYSTEM: STANDBY AC POWER SUPPLY

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
1B46	SWITCHGEAR	ALLIS-CHALMERS	MARK 1	PUMPHOUSE	761'	MILD	N/A	E105/35	E347/F7
1B9	SWITCHGEAR	ITE IMPERIAL	47855-A3	INTAKE STR	767'	MILD	N/A	E24	M17/E7
1B91	SWITCHGEAR	ALLIS-CHALMERS	VALUELINE	INTAKE STR	767'	MILD	N/A	E105/31	M17/E7
1G-21	GENERATOR	COLT INDUSTRIES	50-44-24	DG ROOM	757' -6"	MILD	M132/M2	E27	M2/C3
1G-31	GENERATOR	COLT INDUSTRIES	50-44-24	OG ROOM	757' -6"	MILD	M132/M2	E27	M2/C3
1P-44A	PUMP MOTOR	CRANE CO.	GA-1K-150	OUTSIDE TB	757' -6"	MILD	M132/A2	E106/5	E354/D3
1P-44B	PUMP MOTOR	CRANE CO.	GA-1K-150	DG ROOM	757' -6"	MILD	M132/A3	E106/5	E354/D4
1X20		ITE	47855	INTAKE STR	767'	MILD	N/A	E24	M17/E7
1X31		ITE IMPERIAL	46787	ESS SWITCHGEAR ROOM	757' -6"	MILD	N/A	E24	M2/G5
1X41		ITE IMPERIAL	46787	ESS SWITCHGEAR ROOM	757' -6"	MILD	N/A	E24	M405-2/*
1X91		ITE	47855	INTAKE STR	767'	MILD	N/A	E24	M2/G5
1Y-30	RPS DISTRIBUTION PANEL	GE C	CR105P002	E SWGR RM	757' -6"	MILD	N/A	E29	E335/D2

SYSTEM: STANDBY DIESEL GEN. ROOM VENT SYS

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
SV-7001B	SOLENOID VALVE	JOHNSON CONTROLS	V-24	DG ROOM	757' 6"	MILD	M170/E5	E113/52	E310/F6

SYSTEM: STANDBY DIESEL GEN. ROOM VENT. SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
HS-7000A	HAND SWITCH	GE	CR2940 US203E	CB CTL RM/1C-23A	786' 0"	MILD	M170/G6	E113/52	E338/E4
HS-7000B	HAND SWITCH	GE	CR2940 US203E	CB CTL RM/1C-23B	786' 0"	MILD	M170/E7	E113/52	E338/E4
HS-7003A	HAND SWITCH	GE	CR2940-US203E	DG ROOM/1C-151	757' -6"	MILD	M170/H6	E113/52	E310/G6
HS-7003B	HAND SWITCH	GE	CR2940-US203E	DG ROOM/1C-152	757' -6"	MILD	M170/E5	E113/52	E310/F6
SV-7000A	SOLENOID VALVE	JOHNSON CONTROLS	V-24	DG ROOM/1C-151	757' -6"	MILD	M170/G7	E113/52	E310/G6
SV-7000B	SOLENOID VALVE	JOHNSON CONTROLS	V-24	DG ROOM/1C-152	757' -6"	MILD	M170/E7	E113/52	E310/F6
SV-7001A	SOLENOID VALVE	JOHNSON CONTROLS	V-24	DG ROOM	757' 6"	MILD	M170/G7	E113/52	E310/G6
SV-7002A	SOLENOID VALVE	JOHNSON CONTROLS	V-24	DG ROOM/1C-151	757' -6"	MILD	M170/G7	E113/52	E310/G6
SV-7002B	SOLENOID VALVE	JOHNSON CONTROLS	V-24	DG ROOM/1C-152	757' -6"	MILD	M170/E5	E113/52	E310/F6
1V-SF-20	FAN MOTOR	JOY	SF-31060, SER	DG ROOM	757' -6"	MILD	M170/G7	E113/52	M625/C3
1V-SF-21	FAN MOTOR	JOY	SF-3160-1, SE	DG ROOM	757' -6"	MILD	M170/E8	E113/52	M625/C3

SYSTEM: STANDBY GAS TREATMENT SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
CU-5835A1	CONTROL UNIT	FENWAL	35003-0	SGT ROOM	786' 0"	HARSH	M158/F4	E113/97	M647/G6
CU-5835A2	CONTROL UNIT	FENWAL	35003-0	SGT ROOM	786' 0"	HARSH	M158/F4	E113/97	M647/G6
CU-5835B1	CONTROL UNIT	FENWAL	35003-0	SGT ROOM	786' 0"	HARSH	M158/B4	E113/97	M647/F6
CU-5835B2	CONTROL UNIT	FENWAL	35003-0	SGT ROOM	786' 0"	HARSH	M158/B4	E113/97	M647/F6
CU-5837A1	CONTROL UNIT	FENWAL	35003-0	SGT ROOM	786' 0"	HARSH	M158/F4	E113/97	M674/G6
CU-5837A2	CONTROL UNIT	FENWAL	35003-0	SGT ROOM	786' 0"	HARSH	M158/F4	E113/97	M647/G6
CU-5837B1	CONTROL UNIT	FENWAL	35003-0	SGT ROOM	786' 0"	HARSH	M158/B4	E113/97	M647/F6
CU-5837B2	CONTROL UNIT	FENWAL	35003-0	SGT ROOM	786' 0"	HARSH	M158/B4	E113/97	M647/F6
DPS-5803A	DIFFERENTIAL PRESSURE SWITCH	DWYER	1600	SGT ROOM	786' 0"	MILD	M158/G6	E113/13	E315/G6
DPS-5803B	DIFFERENTIAL PRESSURE SWITCH	OWYER	1600	SGT ROOM	786' 0"	MILD	M158/C6	E113/13	E315/F6
DPS-7637A	DIFFERENTIAL PRESSURE SWITCH	WESTINGHOUSE	1637-25	RB-N	812' 0"	MILD	M176/C2	E113/64	E322/F2
DPS-7637B	DIFFERENTIAL PRESSURE SWITCH	WESTINGHOUSE	1637-25	RB-N	812'	MILD	M176/C2	E113/64	E322/F2
DPT-7600A	FLOW TRANSMITTER	GE	554	OFFGAS STACK	740'	MILD	M176/G2	E113/14	E370/E3
DPT-7600B	FLOW TRANSMITTER	GE	554	OFFGAS STACK	740'	MILD	M176/G2	E113/14	E370/E3
DTIC-5805A	FLOW INDICATING CONTROL	GE	540	CB CTL RM/1C-24A	786' 0"	MILD	M158/G4	E113/113	E338/D4
DTIC-5805B	FLOW INDICATING CONTROL	GE	540	CB CTL RM/1C-24B	786' 0"	MILD	M158/G4	E113/113	E338/D4

SYSTEM: STANDBY GAS TREATMENT SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
DTT-5805A	DIFFERENTIAL TEMP TRANSMITTER	GE	678	SGT ROOM/1C-158	786' 0"	MILD	M158/G4	E113/113	E315/G6
DTT-5805B	DIFFERENTIAL TEMP TRANSMITTER	GE	567	SGT ROOM/1C-159	786' 0"	MILD	M158/C4	E113/113	E315/F6
EC-5805A		HALMAR	ZF34825CDI	SGT ROOM/1C-170	786' 0"	MILD	M158/H5	E113/13	E315/G6
EC-5805B		HALMAR	ZF34825CEI	SGT ROOM/1C-171	786' 0"	MILD	M158/C5	E113/13	E315/F6
E/PC-5816A		JOHNSON CONTROLS	N-6810	SGT ROOM/1C-158	786' 0"	MILD	M158/F2	E113/112	E315/G6
E/PC-5816B		JOHNSON CONTROLS	N-6810	SGT ROOM/1C-159	786' 0"	MILD	M158/C2	E113/112	E315/F6
E/PC-7600A		JOHNSON CONTROLS	N-6810	OFFGAS STACK	740'	MILD	M176/C4	E113/57	E370/E3
E/PC-7600B		JOHNSON CONTROLS	N-6810	OFFGAS STACK	740'	MILD	M176/C4	E113/57	E370/F3
FS-7600A	FLOW SWITCH	GE	560	OFFGAS STACK	740'	MILD	M176/G2	E113/15	E370/E3
FS-7600B	FLOW SWITCH	GE	560	OFFGAS STACK	740'	MILD	M176/G1	E113/15	E370/F3
FT-5829A	FLOW TRANSMITTER	GE	554	SGT ROOM	786' 0"	MILD	M158/E7	E113/112	E315/G6
FT-5829B	FLOW TRANSMITTER	GE	554	SGT ROOM	786' 0"	MILD	M158/D7	E113/112	E315/G7
HS-5801A	HAND SWITCH	GE	CR2940-UB202A	CB CTL RM/1C-24A	786' 0"	MILD	M158/H7	E113/11	E338/D4
HS-5801B	HAND SWITCH	GE	CR2940-UB202A	CB CTL RM/1C-24B	786' 0"	MILD	M158/C7	E113/11	E338/D4
HS-5805A	HAND SWITCH	GE	CR2940-UB202A	CB CTL RM/1C-24A	786' 0"	MILD	M158/H5	E113/15	E338/D4
HS-5805B	HAND SWITCH	GE	CR2940-UB202A	CB CTL RM/1C-24B	786' 0"	MILD	M158/D5	E113/15	E338/D4
HS-5814A	HAND SWITCH	GE	SB1	CB CTL RM/1C-24A	786' 0"	MILD	M158/G3	E113/11	E338/D4

SYSTEM: STANDBY GAS TREATMENT SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
HS-5814B	HAND SWITCH	GE	SB1	CB CTL RM/1C-24B	786' 0"	MILD	M158/C3	E113/11	E338/D4
HS-5815A	HAND SWITCH	GE	CR2940-UB202A	CB CTL RM/1C-24A	786' 0"	MILD	M158/G3	E113/11	E338/D4
HS-5815B	HAND SWITCH	GE	CR2940-UB202A	CB CTL RM/1C-24B	786' 0"	MILD	M158/C3	E113/11	E338/D4
HS-5816A	HAND SWITCH	GE	CR2940-UB203E	CB CTL RM/1C-24A	786' 0"	MILD	M158/G2	E113/11	E338/D4
HS-5816B	HAND SWITCH	GE	CR2940-UB203E	CB CTL RM/1C-24B	786' 0"	MILD	M158/C2	E113/11	E338/D4
HS-5817A	HAND SWITCH	GE	CR2940-UB202A	CB CTL RM/1C-24A	786' 0"	MILD	M158/F3	E113/11	E338/D4
HS-5817B	HAND SWITCH	GE	CR2940-UB202A	CB CTL RM/1C-24B	786' 0"	MILD	M158/D2	E113/11	E338/D4
HS-5825A	HAND SWITCH	GE	CR2940-UB202A	CB CTL RM/1C-24A	786' 0"	MILD	M158/F6	E113/11	E338/D4
HS-5825B	HAND SWITCH	GE	CR2940-UB202A	CB CTL RM/1C-24B	786' 0"	MILD	M158/D6	E113/11	E338/D4
HS-5839A	HAND SWITCH	GE	CR2940-UB203E	CB CTL RM/1C-158	786' 0"	MILD	M158/G2	E113/11	E315/G6
HS-5839B	HAND SWITCH	GE	CR2940-UB203E	CB CTL RM/1C-159	786' 0"	MILD	M158/C2	E113/11	E315/F6
HS-7600A	HAND SWITCH	GE	SBM	CB CTL RM/1C-24A	786' 0"	MILD	M176/F2	E113/15	E338/D4
HS-7600B	HAND SWITCH	GE	SBM	CB CTL RM/1C-24B	786' 0"	MILD	M176/F1	E113/15	E338/D4
HS-7601A	HAND SWITCH	GE	CR2940-UB203E	OFFGAS STACK/1C-164A	740'	MILD	M176/F2	E113/15	E370/E4
HS-7601B	HAND SWITCH	GE	CR2940-UB203E	OFFGAS STACK/1C-164B	740'	MILD	M176/F1	E113/15	E370/F3
LR-5830A	LEVEL RECORDER	WESTINGHOUSE	WL	CB CTL RM/1C-24A	786' 0"	MILD	M158/H3	E113/18	E338/D4

SYSTEM: STANDBY GAS TREATMENT SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
LR-5830B	LEVEL RECORDER	WESTINGHOUSE	WL	CB CTL RM/1C-24B	786' 0"	MILD	M158/D3	E113/18	E338/D4
PB-5831A		GE	CR2940U201	CB CTL RM/1C-24A	786' 0"	MILD	M158/H3	E113/98	E338/D4
PB-5831B		GE	CR2940U201	CB CTL RM/1C-24B	786' 0"	MILD	M158/D3	E113/98	E338/D4
PB-5837A		GE	CR2040U201	CB CTL RM/1C-24A	786' 0"	MILD	M158/F4	E113/98	E338/D4
PB-5837B		GE	CR2940U201	CB CTL RM/1C-24B	786' 0"	MILD	M158/B4	E113/98	E338/D4
PB-5838A		GE	CR2940U201	CB CTL RM/1C-24A	786' 0"	MILD	M158/F4	E113/98	E338/D4
PB-5838B		GE	CR2940U201	CB CTL RM/1C-24B	786' 0"	MILD	M158/B4	E113/98	E338/D4
P/ER-7600A		GE	6-271	OFFGAS STACK	740'	MILD	M176/F2	E113/15	E370/F3
P/ER-7600B		GE	6-271	OFFGAS STACK	740'	MILD	M176/F1	E113/15	E370/F3
RE-7606A	RADIATION ELEMENT	NMC	GA-2T0	A CRD RR	771' 10"	HARSH	M176/A3	E113/11	E318/G2
RE-7606B	RADIATION ELEMENT	NMC	GA-2T0	A CRD RR	771' 10"	HARSH	M176/A3	E113/11	E318/G2
RIM-7606A	RADIATION INDICATOR	NMC	GA-2TMO	RB-N/1C-183	757' -6"	MILD	M176/A3	E113/11	E318/G2
RIM-7606B	RADIATION INDICATOR	NMC	GA-2TMO	RB-N/1C-184	757' -6"	MILD	M176/A3	E113/11	E318/G3
SQ-5829A		GE	565	SGT ROOM/1C-158	786' 0"	MILD	M158/E6	E113/112	E315/G6
SQ-5829B		GE	565	SGT ROOM/1C-159	786' 0"	MILD	M158/E6	E113/112	E315/F6
SV-5801A	SOLENOID VALVE	ASCO	AT831665	SGT ROOM	786' 0"	HARSH	M158/G7	E113/11	E315/G6

SYSTEM: STANDBY GAS TREATMENT SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
SV-5801B	SOLENOID VALVE	ASCO	AT831665	SGT ROOM	786' 0"	HARSH	M158/C7	E113/11	E315/F6
SV-5815A	SOLENOID VALVE	ASCO	AT831665	SGT ROOM	786' 0"	HARSH	M158/G3	E113/11	E315/G4
SV-5815B	SOLENOID VALVE	ASCO	AT831665	SGT ROOM	786' 0"	HARSH	M158/C3	E113/11	E315/F4
SV-5817A	SOLENOID VALVE	ASCO	AT831665	H&V ROOM	796' 0"	MILD	M158/F2	E113/11	E320/G3
SV-5817B	SOLENOID VALVE	ASCO	AT831665	H&V ROOM	796' 0"	MILD	M158/D1	E113/11	E320/G3
SV-5825A	SOLENOID VALVE	ASCO	AT831665	SGT ROOM	786' 0"	HARSH	M158/E6	E113/11	E315/G6
SV-5825B	SOLENOID VALVE	ASCO	AT831665	SGT ROOM	786' 0"	HARSH	M158/D6	E113/11	E315/F6
SV-5837A	SOLENOID VALVE	ASCO	AT831665	H&V ROOM	796' 0"	MILD	M158/F4	E113/98	E320/G4
SV-5837B	SOLENOID VALVE	ASCO	AT831665	H&V ROOM	796' 0"	MILD	M158/B4	E113/98	E320/G4
SV-7600A	SOLENOID VALVE	ASCO	FT8321A5	OFFGAS STACK	740'	MILD	M176/F1	E113/54	E370/F3
SV-7600B	SOLENOID VALVE	ASCO	FT8321A5	OFFGAS STACK	740'	MILD	M176/F2	E113/54	E370/F3
SV-7602A	SOLENOID VALVE	ASCO	AT831665	SGT ROOM	786' 0"	HARSH	M176/A4	E113/54	E315/G3
SV-7602B	SOLENOID VALVE	ASCO	AT831665	SGT ROOM	786' 0"	HARSH	M176/A4	E113/54	E315/G3
SV-7605A	SOLENOID VALVE	ASCO	NP831665E	HPCI ROOM	731' 9"	HARSH	M176/A5	E113/64	E317/B4
SV-7605B	SOLENOID VALVE	ASCO	NP831665E	HPCI ROOM	731' 9"	HARSH	M176/A5	E113/64	E317/B4
SV-7607A	SOLENOID VALVE	ASCO	FT8321A5	RB-N	796'	MILD	M176/C4	E113/57	E320/G2
SV-7607B	SOLENOID VALVE	ASCO	FT8321A5	RB-N	796'	MILD	M176/C4	E113/57	E320/G2

SYSTEM: STANDBY GAS TREATMENT SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
SV-7610A	SOLENOID VALVE	ASCO	FT8321A5	RB-N	812' 0"	MILD	M176/D2	E113/64	E322/F2
SV-7610B	SOLENOID VALVE	ASCO	FT8321A5	RB-N	812' 0"	MILD	M176/C2	E113/64	E322/F2
SV-7612A	SOLENOID VALVE	ASCO	FT8321A5	RB-N	812' 0"	MILD	M176/E4	E113/64	E322/F2
SV-7612B	SOLENOID VALVE	ASCO	FT8321A5	RB-N	812' 0"	MILO	M176/E4	E113/64	E322/G2
SV-7630A	SOLENOID VALVE	ASCO	FT8321A5	RB-N	757' 6"	MILD	M176/H8	E113/64	E319/G8
SV-7630B	SOLENOID VALVE	ASCO	FT8321A5	RB-N	757' 6"	MILD	M176/G8	E113/64	E319/G8
SV-7631A	SOLENOID VALVE	ASCO	FT8321A5	RB-S	812' 0"	MILD	M176/H7	E113/64	E323/E3
SV-7631B	SOLENOID VALVE	ASCO	FT8321A5	RB-S	812' 0"	MILD	M176/G7	E113/64	E323/E3
SV-7632A	SOLENOID VALVE	ASCO	FT8321A5	RB-S	812' 0"	MILD	M176/H6	E113/64	E323/F4
SV-7632B	SOLENOID VALVE	ASCO	FT8321A5	RB-S	812' 0"	MILD	M176/G7	E113/64	E323/F4
SV-7633A	SOLENOID VALVE	ASCO	FT8321A5	RB-S	812' 0"	MILD	M176/H4	E113/64	E323/G4
SV-7633B	SOLENOID VALVE	ASCO	FT8321A5	RB-S	812' 0"	MILD	M176/G5	E113/64	E323/G3
SV-7634A	SOLENOID VALVE	ASCO	FT8321A5	RB-S	757' 6"	MILD	M176/H3	E113/64	E319/D8
SV-7634B	SOLENOID VALVE	ASCO	FT8321A5	RB-S	812' 0"	MILD	M176/G4	E113/64	E319/D8
SV-7636A	SOLENOID VALVE	ASCO	8317A29	RB-S	757' 6"	MILD	M176/H2	E113/64	E319/D8
SV-7636B	SOLENOID VALVE	ASCO	8317A29	RB-S	757' 6"	MILD	M176/G3	E113/64	E319/D8

SYSTEM: STANDBY GAS TREATMENT SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
SV-7637A	SOLENOID VALVE	ASCO	FT8321A5	RB-S	812' 0"	MILD	M176/D3	E113/65	E322/F2
SV-7637B	SOLENOID VALVE	ASCO	FT8321A5	RB-S	812' 0"	MILD	M176/C3	E113/65	E322/F2
SV-7639A	SOLENOID VALVE	ASCO	NP8321A5E	RADWASTE TANK ROOM	786' 0"	MILD	M176/C6	E113/65	E317/B7
SV-7639B	SOLENOID VALVE	ASCO	NP8321A5E	RADWASTE TANK ROOM	786' 0"	MILD	M176/C6	E113/65	E317/B7
SV-7641A	SOLENOID VALVE	ASCO	FT8321A5	RAD BLDG	7'6	MILD	M176/F4	E113/65	E359/F8
SV-7641B	SOLENOID VALVE	ASCO	FT8321A5	RAD BLDG	7'6	MILD	M176/F4	E113/65	E359/F8
TE-5805A	TEMPERATURE ELEMENT	GULTON INDUSTRIES	TCA-0646	SGT ROOM	786' 0"	HARSH	M158/G5	E113/13	M647/G6
TE-5805B	TEMPERATURE ELEMENT	GULTON INDUSTRIES	TCA-0646	SGT ROOM	786' 0"	HARSH	M158/C5	E113/13	M647/F6
TE-5805U	TEMPERATURE ELEMENT	GULTON INDUSTRIES	TCA-0646	SGT ROOM	786' 0"	HARSH	M158/G5	E113/113	E315/G5
TE-5805V	TEMPERATURE ELEMENT	GULTON INDUSTRIES	TCA-0646	SGT ROOM	786' 0"	HARSH	M158/G4	E113/114	E315/G4
TE-5805W	TEMPERATURE ELEMENT	GULTON INDUSTRIES	TCA-0646	SGT ROOM	786' 0"	HARSH	M158/C5	E113/113	E315/F5
TE-5805X	TEMPERATURE ELEMENT	GULTON INDUSTRIES	TCA-0646	SGT ROOM	786' 0"	HARSH	M158/C4	E113/114	E315/F4
TI-5805A		GE	180	CB CTL RM/1C-24A	786' 0"	MILD	M158/G5	E113/113	E338/D4
TI-5805B		GE	180	CB CTL RM/1C-24B	786' 0"	MILD	M158/C5	E113/15	E338/D4
TI-5822A		METER WESTON	2031	SGT ROOM/1C-158	786' 0"	MILD	M158/G4	E113/113	E315/G6
TI-5822B		METER WESTON	2031	SGT ROOM/1C-159	786' 0"	MILD	M158/C4	E113/113	E315/F6

SYSTEM: STANOBY GAS TREATMENT SYSTEM

PLANT-ID	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	ELEV	ENVI-RON-MENT	P&ID/LOC	ELECT SCHEME DWG/SH	LAYOUT/ LOC
TI-5838A		GE	180	CB CTL RM/1C-24A	786' 0"	MILD	M158/G4	E113/113	E338/D4
TI-5838B		GE	180	CB CTL RM/1C-24B	786' 0"	MILD	M158/C4	E113/113	E338/D4
TS-5805A	FLOW SWITCH	GE	560	CB CTL RM	786' 0"	MILD	M158/H4	E113/113	E338/D4
TS-5805B	FLOW SWITCH	GE	560	CB CTL RM	786' 0"	MILD	M158/D4	E113/113	E338/D4
TS-5808A	TEMPERATURE SWITCH	PENN	A-19ABB-6	SGT ROOM	786' 0"	HARSH	M158/G5	E113/13	E315/G5
TS-5808B	TEMPERATURE SWITCH	PENN	A-19ABB-6	SGT ROOM	786' 0"	HARSH	M158/C5	E113/13	E315/F4
TS-5836A	TEMPERATURE SWITCH	INDUSTRIAL ENG. EQUIPMENT	CT32-23	SGT ROOM	786' 0"	HARSH	M158/G5	E113/13	M647/G6
TS-5836B	TEMPERATURE SWITCH	INDUSTRIAL ENG. EQUIPMENT	CT32-23	SGT ROOM	786' 0"	HARSH	M158/C5	E113/13	M647/F6
TT-5805A	TEMPERATURE TRANSMITTER	GE	550	SGT ROOM/1C-158	786' 0"	MILD	M158/G6	E113/13	E315/G6
TT-5805B	TEMPERATURE TRANSMITTER	GE	550	SGT ROOM/1C-159	786' 0"	MILD	M158/C6	E113/13	E315/F6
TT-5838A	TEMPERATURE TRANSMITTER	GE	550	SGT ROOM/1C-158	786' 0"	MILD	M158/G4	E113/113	E315/G6
TT-5838B	TEMPERATURE TRANSMITTER	GE	550	SGT ROOM/1C-159	786' 0"	MILD	M158/C4	E113/113	E315/F6
1V-EF-15A	FAN MOTOR	LOUIS-ALLIS COMPA	C064B	SGT ROOM	786' 0"	HARSH	M158/G2	E113/11	E315/G4
1V-EF-15B	FAN MOTOR	LOUIS-ALLIS COMPA	C064B	SGT ROOM	786' 0"	HARSH	M152/C2	E113/11	E315/F4
1V-EF-18A		JOHNSON CONTROLS	N-6810	OFFGAS STACK	740'	MILD	M176/G2	E133/15	E370/F3
1V-EF-18B		JOHNSON CONTROLS	N-6810	OFFGAS STACK	740'	MILD	M176/G2	E113/15	E370/F3

GENERAL NOTES

GENERAL NOTES

1. This component is associated with safety display instrumentation. Finalization of safety display instrumentation is being pursued as expeditiously as possible. Iowa Electric has developed a schedule for resolution of safety display instrumentation concerns based on implementation of the revised emergency procedures at the time of the fall 1982 refueling outage. This will allow the final list of safety display instruments which must be environmentally qualified to be completed by January 1, 1983. A component evaluation sheet demonstrating environmental qualification or identifying an action item for each component on the final list will be completed by March 1, 1983. Resolution of all action items identified will be complete by the spring 1984 refueling outage based on the availability of qualified components.

2. This component is part of the HPCI system. In the initial response, the purpose and functioning of the HPCI system were analyzed and it was concluded that radiation qualification is not required. For additional discussion, see Section III of this report.

3. The component will be replaced by the analog transmitter/trip system. Iowa Electric is currently working to specify an analog transmitter/trip system (ATTS) for the DAEC. Included in this system will be a number of instruments which will replace existing instruments that are included in the equipment qualification program. The present schedule calls for installation of this system during the spring 1984 refueling outage.

4. This component is in an area which is harsh for radiation only. The required radiation dose specified is the maximum dose which could be received over the required operating time. In qualifying the component for this integrated radiation dose, the qualification requirements for operating time are also met.

5. Not used.

6. See attached Figures 1 and 2 for required drywell temperature and pressure conditions as a function of time. In addition, equipment located in the drywell is also required to be qualified to a peak temperature of 324 F.

7. This equipment is in a location in which the pressure, temperature, and humidity conditions do not significantly change post-accident and is therefore classified as mild for these parameters. Post-accident environmental qualification for pressure, temperature, and humidity is not required.

8. This component performs its intended function immediately following an accident and, therefore, needs only to be qualified for one hour (includes margin).

9. This component has been tested at temperatures higher than the setpoint of the associated instrumentation. The component will perform its function prior to exceeding the qualification test value. Therefore, qualification testing to higher values will not enhance the ability of the component to perform its function at its setpoint value.

10. This equipment is only required to operate during or following a high energy line break outside primary containment, therefore, post-LOCA radiation qualification is not required. The required radiation value indicated is the maximum 40 year normal integrated dose for this equipment. The effects of the normal dose will be addressed as part of the aging evaluation program.

11. An investigation was conducted to confirm that subcomponents in Limitorque valve operators at DAEC are of similar nature and durability to the subcomponents in valve operators tested by Limitorque Corporation. This investigation identified three subcomponents within valve operators of potential environmental qualification concern: torque switch, geared limit switch motor, and motor brake. The torque switches and geared limit switch assemblies within valve operators tested by Limitorque were made of melamine or fibrite. Communications with Limitorque Corporation indicate that some valve operators (those whose specification was for outside containment service) may contain torque switches or geared limit switch assemblies made of a hard plastic (Durez - a phenolic material). This material should be suitable for use at outside containment locations. Limitorque has indicated that only the Dings model motor brake is environmentally qualified by test. Further research is required to ensure that all valve operators with brakes contain the qualified mode (see Action Item 19).

12. Qualification analysis in this case is engineering judgement based on a knowledge of the equipment's subcomponents, function, principle of operation, and input from the manufacturer. More detailed documentation is being pursued for incorporation into a formal analytical report.

13. The post-LOCA radiation dose for this equipment is less than 1×10^5 rads, the required radiation value indicated is the maximum 40 year normal integrated dose for this equipment. The effects of the normal dose will be addressed as part of the aging evaluation program.

DRYWELL TEMPERATURE RESPONSE

(From DAEC FSAR Figure 14.6-7)

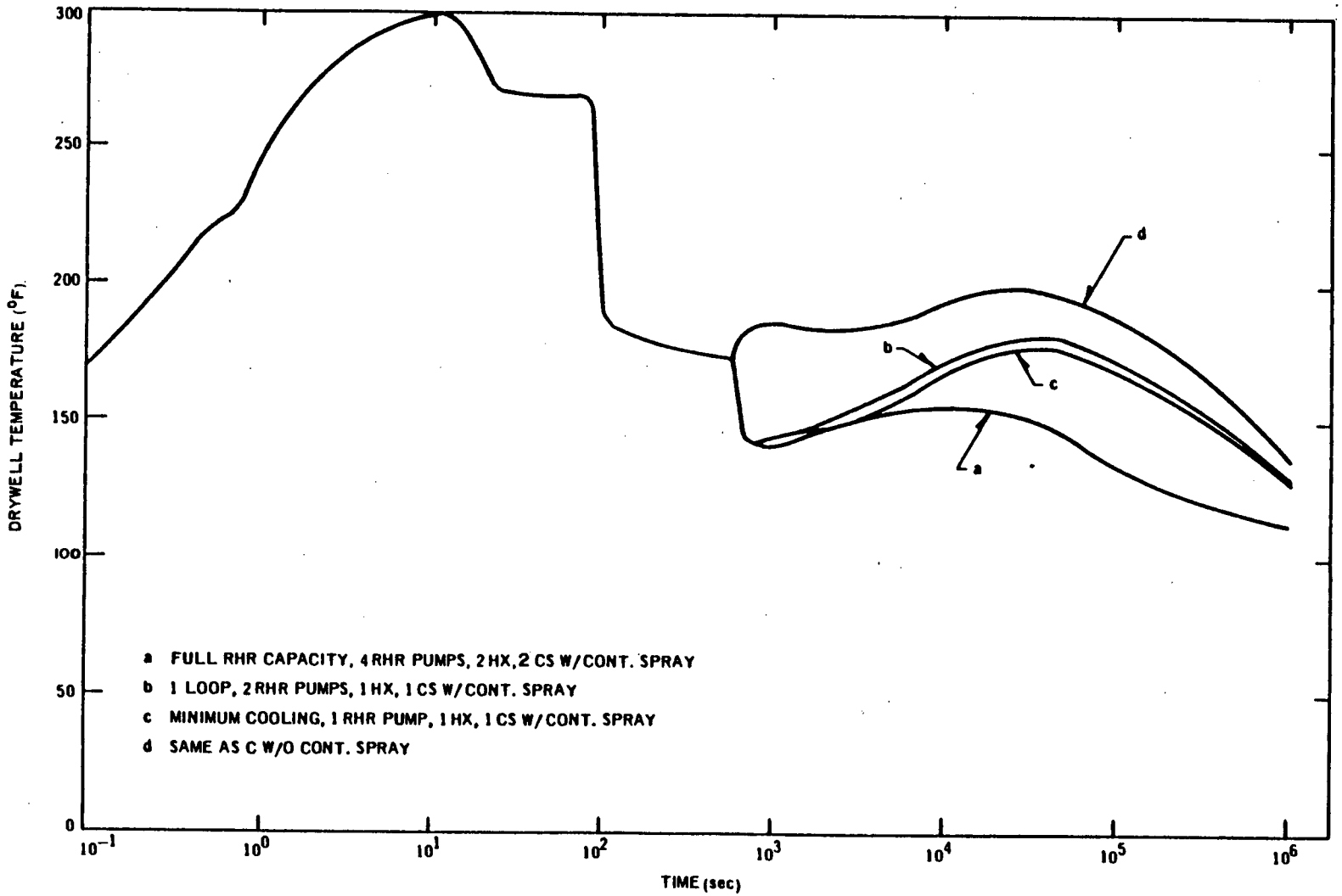

Figure . 1

CONTAINMENT PRESSURE RESPONSE

(From DAEC FSAR Figure 14.6-6)

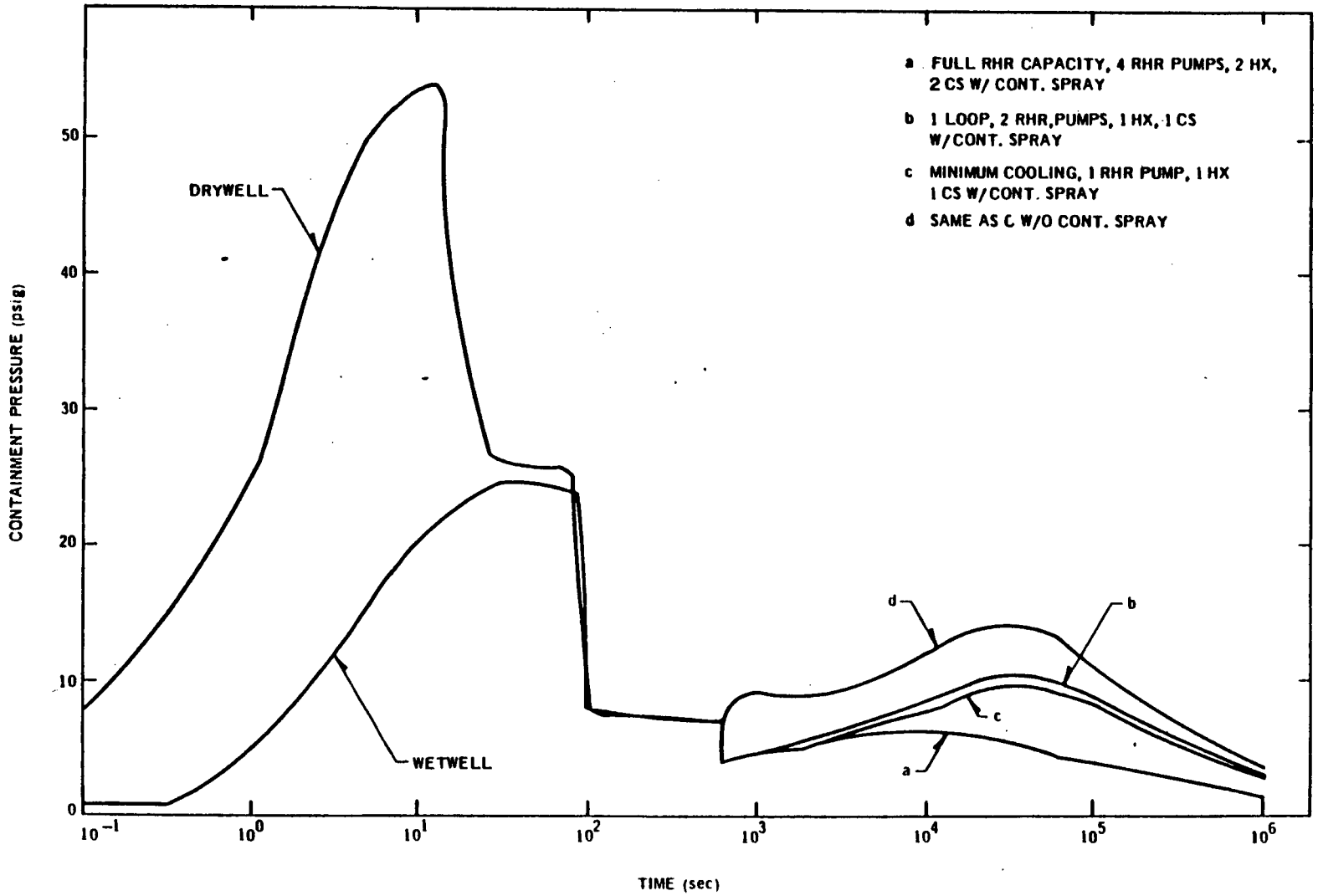

Figure -2

EQUIPMENT QUALIFICATION SUMMARY SHEET CROSS-INDEX

EQUIPMENT QUALIFICATION SUMMARY INDEX

PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
	A001-08-001			
APRM A1C37	G080-99-001	GE		MILD
APRM B1C37	G080-99-002	GE		MILD
APRM C1C37	G080-99-003	GE		MILD
APRM D1C37	G080-99-004	GE		MILD
APRM E1C37	G080-99-005	GE		MILD
APRM F1C37	G080-99-006	GE		MILD
AR-4381A	H260-01-006	HONEYWELL	37303-6020-0222-000-610-00	MILD
AR-4381B	H260-01-001	HONEYWELL	37303-6020-0222-000-610-00	MILD
AR-4382A	H260-01-007	HONEYWELL	37303-6020-0222-000-610-00	MILD
AR-4382B	H260-01-008	HONEYWELL	37303-6020-0222-000-610-00	MILD
CS-6132A	D026-01-001	DAZIC	CI2120	MILD
CS-6132B	D026-01-002	DAZIC	CI2120	MILD
CS-6132C	D026-01-003	DAZIC	CI2120	MILD
CU-5835A1	F081-02-001	FENWAL	35003-0	HARSH
CU-5835A2	F081-02-002	FENWAL	35003-0	HARSH
CU-5835B1	F081-02-003	FENWAL	35003-0	HARSH
CU-5835B2	F081-02-004	FENWAL	35003-0	HARSH
CU-5837A1	F081-02-005	FENWAL	35003-0	HARSH
CU-5837A2	F081-02-006	FENWAL	35003-0	HARSH
CU-5837B1	F081-02-007	FENWAL	35003-0	HARSH
CU-5837B2	F081-02-008	FENWAL	35003-0	HARSH
CU-7327A	F081-02-009	FENWAL	35003-0	MILD
CU-7327B	F081-02-010	FENWAL	35003-0	MILD
CU-7329A	F081-02-011	FENWAL	35003-0	MILD
CU-7329B	F081-02-012	FENWAL	35003-0	MILD
DPS-5803A	D295-01-001	DWYER	1600	MILD
DPS-5803B	D295-01-002	DWYER	1600	MILD
DPS-7304A	D295-02-001	DWYER	1636-25	MILD
DPS-7304B	D295-02-002	DWYER	1636-25	MILD
DPS-7637A	W120-04-001	WESTINGHOUSE	1637-25	MILD
DPS-7637B	W120-04-002	WESTINGHOUSE	1637-25	MILD
DPT-7600A	G080-61-001	GE	554	MILD
DPT-7600B	G080-61-002	GE	554	MILD
DTIC-5805A	G080-54-001	GE	540	MILD
DTIC-5805B	G080-54-002	GE	540	MILD
DTT-5805A	G080-81-001	GE	678	MILD
DTT-5805B	G080-75-001	GE	567	MILD
EC-5805A	H052-01-001	HALMAR	ZF34825CDI	MILD
EC-5805B	H052-02-001	HALMAR	ZF34825CEI	MILD
EC-7304A	P023-01-001	PACIFIC CHROMALOX	3C5CR-025-3480	MILD
EC-7304B	P023-01-002	PACIFIC CHROMALOX	3C5CR-025-3480	MILD
E/I-3724	G080-58-001	GE	550211EAA-C1PPN	MILD
E/PC-5816A	J073-01-001	JOHNSON CONTROLS	N-6810	MILD
E/PC-5816B	J073-01-002	JOHNSON CONTROLS	N-6810	MILD
E/PC-7320A	J073-01-003	JOHNSON CONTROLS	N-6810	MILD
E/PC-7320B	J073-01-004	JOHNSON CONTROLS	N-6810	MILD
E/PC-7600A	J073-01-005	JOHNSON CONTROLS	N-6810	MILD
E/PC-7600B	J073-01-006	JOHNSON CONTROLS	N-6810	MILD

EQUIPMENT QUALIFICATION SUMMARY INDEX

PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
E/S-1947	G080-79-001	GE	570062FAAC1	MILD
E/S-2106	G080-79-002	GE	570062FAAC1	MILD
E/S-2126	G080-79-003	GE	570062FAAC1	MILD
E/S-2207	G080-76-001	GE	570	MILD
E/S-2257	G080-78-001	GE	570062BAA1	MILD
E/S-2306	G080-79-004	GE	570062FAAC1	MILD
E/S-2309	G080-53-001	GE	54C	MILD
E/S-2403	G080-79-005	GE	570062FAAC1	MILD
E/S-2509	G080-76-002	GE	570	MILD
E/S-2725	G080-34-001	GE	145C3016-P001	MILD
E/S-2747	G080-76-003	GE	570	MILD
E/S-2748	G080-34-002	GE	145C3016-P001	MILD
E/S-3707	G080-79-020	GE	570062FAAC1	MILD
E/S-3708	G080-79-006	GE	570062FAAC1	MILD
E/S-4343	G080-77-001	GE	570-06	MILD
E/S-4365A	G080-77-002	GE	570-06	MILD
E/S-4365B	G080-77-003	GE	570-06	MILD
E/S-4408	G080-79-007	GE	570062FAAC1	MILD
E/S-4409	G080-79-008	GE	570062FAAC1	MILD
E/S-4410	G080-79-009	GE	570062FAAC1	MILD
E/S-4411	G080-79-010	GE	570062FAAC1	MILD
E/S-4541	G080-79-011	GE	570062FAAC1	MILD
E/S-4559	G080-79-012	GE	570062FAAC1	MILD
E/S-4560	G080-79-013	GE	570062FAAC1	MILD
E/S-4561	G080-79-014	GE	570062FAAC1	MILD
E/S-4563	G080-79-015	GE	570062FAAC1	MILD
E/S-4564	G080-79-016	GE	570062FAAC1	MILD
E/S-4565	G080-79-017	GE	570062FAAC1	MILD
E/S-4599A	A001-01-001			MILD
E/S-4599B	A001-01-002			MILD
E/S-4623	G080-79-018	GE	570062FAAC1	MILD
E/S-4624	G080-79-019	GE	570062FAAC1	MILD
FC-4408	G080-71-001	GE	563022CAAC1	MILD
FC-4409	G080-71-002	GE	563022CAAC1	MILD
FC-4410	G080-71-003	GE	563022CAAC1	MILD
FC-4411	G080-71-004	GE	563022CAAC1	MILD
FIC-2309	G080-41-001	GE	45001	MILD
FIC-2509	G080-54-003	GE	540	MILD
FIC-5828A	G080-54-004	GE	540	MILD
FIC-5828B	G080-54-005	GE	540	MILD
FIC-7320A	G080-55-001	GE	540-01	MILD
FIC-7320B	G080-55-002	GE	540-01	MILD
FIS-2111	B081-03-001	BARTON	289	HARSH
FIS-2131	B081-03-002	BARTON	289	HARSH
FI-2749	G080-35-001	GE	180	MILD
FI-4408	G080-35-002	GE	180	MILD
FI-4409	G080-35-003	GE	180	MILD
FI-4410	G080-35-004	GE	180	MILD
FI-4411	G080-35-005	GE	180	MILD

EQUIPMENT QUALIFICATION SUMMARY INDEX

PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
FM-8408A	S223-01-001	S.K. INSTRUMENT	20-9651-8550	HARSH
FM-8408B	S223-01-002	S.K. INSTRUMENT	20-9651-8550	HARSH
FM-8408C	S223-01-003	S.K. INSTRUMENT	20-9651-8550	HARSH
FM-8408D	S223-01-004	S.K. INSTRUMENT	20-9651-8550	HARSH
FQ-3707	G080-70-001	GE	561290AAA-CIPYE	MILD
FQ-3708	G080-70-002	GE	561290AAA-CIPYE	MILD
FR-3707	G080-52-001	GE	531	MILD
FS-2310	B081-03-003	BARTON	289	MILD
FS-2749A	G080-69-001	GE	560	MILD
FS-2749B	G080-69-002	GE	560	MILD
FS-5826A	G080-69-003	GE	560	MILD
FS-5826B	G080-69-004	GE	560	MILD
FS-6924A	C753-01-001	CUSTOM COMPONENT SWITCHES	642D	MILD
FS-6924B	C753-01-002	CUSTOM COMPONENT SWITCHES	642D	MILD
FS-6925A	C753-01-003	CUSTOM COMPONENT SWITCHES	642D	MILD
FS-6925B	C753-01-004	CUSTOM COMPONENT SWITCHES	642D	MILD
FS-7321A	G080-69-005	GE	560	MILD
FS-7321B	G080-69-006	GE	560	MILD
FS-7600A	G080-69-007	GE	560	MILD
FS-7600B	G080-69-008	GE	560	MILD
FT-2309	G080-63-001	G.E.	555-111BCAA3PDG	MILD
FT-2725	G080-63-002	G.E.	555-111BCAA3PDG	MILD
FT-3707	G080-66-001	GE	555111BCAA-3ABA	HARSH
FT-3708	G080-66-002	GE	555111BCAA-3ABA	HARSH
FT-4408	B081-04-001	BARTON	368	MILD
FT-4409	B081-04-002	BARTON	368	MILD
FT-4410	B081-04-003	BARTON	368	MILD
FT-4411	B081-04-004	BARTON	368	MILD
FT-5829A	G080-61-003	GE	554	MILD
FT-5829B	G080-61-004	GE	554	MILD
FT-7320A	G080-61-005	GE	554	MILD
FT-7320B	G080-61-006	GE	554	MILD
FY-2309	G080-73-001	GE	565	MILD
FY-2509	G080-73-002	GE	565	MILD
FY-2725	G080-73-003	GE	565	MILD
FY-2747	G080-73-004	GE	565	MILD
FY-2748	G080-73-010	GE	565	MILD
FY-2749	G080-73-009	GE	565	MILD
FY-3707	G080-74-001	GE	565100AAAC1	MILD
FY-3708	G080-74-002	GE	565100AAAC1	MILD
FY-4408	G080-72-001	GE	564120AAAC1	MILD
FY-4409	G080-72-002	GE	564120AAAC1	MILD
FY-4410	G080-72-003	GE	564120AAAC1	MILD
FY-4411	G080-72-004	GE	564120AAAC1	MILD
HS 2910 B	G080-06-069	GE	CR2940	MILD
HSS-2911A	G080-29-001	GE	SBM	MILD
HSS-2911B	G080-29-002	GE	SBM	MILD
HS-1804A	G080-06-001	GE	CR2940	MILD
HS-1804B	G080-06-002	GE	CR2940	MILD

EQUIPMENT QUALIFICATION SUMMARY INDEX

PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
HS-1900	G080-29-003	GE	SBM	MILD
HS-1901	G080-29-004	GE	SBM	MILD
HS-1902	G080-29-005	GE	SBM	MILD
HS-1903A	G080-06-003	GE	CR2940	MILD
HS-1903B	G080-06-004	GE	CR2940	MILD
HS-1903C	G080-06-005	GE	CR2940	MILD
HS-1904	G080-29-006	GE	SBM	MILD
HS-1905A	G080-29-007	GE	SBM	MILD
HS-1905B	G080-29-008	GE	SBM	MILD
HS-1908	G080-29-009	GE	SBM	MILD
HS-1909	G080-29-010	GE	SBM	MILD
HS-1912	G080-06-006	GE	CR2940	MILD
HS-1912A	C770-01-009	C-H	1025T16224	MILD
HS-1913	G080-06-008	GE	CR2940	MILD
HS-1913A	C770-01-001	C-H	1025T16224	MILD
HS-1915	G080-29-011	GE	SBM	MILD
HS-1920	G080-29-012	GE	SBM	MILD
HS-1920A	C770-01-007	C-H	1025T16224	MILD
HS-1921	G080-29-013	GE	SBM	MILD
HS-1921A	C770-01-002	C-H	1025T16224	MILD
HS-1923	G080-29-014	GE	SBM	MILD
HS-1932	G080-06-010	GE	CR2940	MILD
HS-1932A	C770-01-008	C-H	1025T16224	MILD
HS-1933	G080-29-015	GE	SBM	MILD
HS-1934	G080-29-016	GE	SBM	MILD
HS-1935	G080-29-017	GE	SBM	MILD
HS-1936	G080-06-012	GE	CR2940	MILD
HS-1937	G080-29-018	GE	SBM	MILD
HS-1939	G080-06-013	GE	CR2940	MILD
HS-1940	G080-29-019	GE	SBM	MILD
HS-1941	G080-29-020	GE	SBM	MILD
HS-1942	G080-06-014	GE	CR2940	MILD
HS-1943A	G080-06-015	GE	CR2940	MILD
HS-1943B	G080-06-016	GE	CR2940	MILD
HS-1949A	G080-29-021	GE	SBM	MILD
HS-1949B	G080-29-022	GE	SBM	MILD
HS-1959	G080-29-023	GE	SBM	MILD
HS-1963	G080-29-024	GE	SBM	MILD
HS-1967	G080-29-025	GE	SBM	MILD
HS-1970	G080-29-026	GE	SBM	MILD
HS-1972	G080-29-027	GE	SBM	MILD
HS-1973	G080-29-028	GE	SBM	MILD
HS-1989	G080-06-017	GE	CR2940	MILD
HS-2000	G080-29-029	GE	SBM	MILD
HS-2001A	G080-06-018	GE	CR2940	MILD
HS-2001B	G080-06-019	GE	CR2940	MILD
HS-2001C	G080-06-020	GE	CR2940	MILD
HS-2003A	G080-29-030	GE	SBM	MILD
HS-2003B	G080-29-031	GE	SBM	MILD

EQUIPMENT QUALIFICATION SUMMARY INDEX

PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
HS-2004	G080-29-032	GE	SBM	MILD
HS-2005	G080-06-021	GE	CR2940	MILD
HS-2005A	C770-01-003	C-H	1025T16224	MILD
HS-2006	G080-29-033	GE	SBM	MILD
HS-2007	G080-29-034	GE	SBM	MILD
HS-2009	G080-29-035	GE	SBM	MILD
HS-2010	G080-29-036	GE	SBM	MILD
HS-2010A	C770-01-004	C-H	1025T16224	MILD
HS-2011	G080-06-022	GE	CR2940	MILD
HS-2011A	C770-01-010	C-H	1025T16224	MILD
HS-2012	G080-06-024	GE	CR2940	MILD
HS-2012A	C770-01-005	C-H	1025T16224	MILD
HS-2014	G080-29-037	GE	SBM	MILD
HS-2015	G080-06-025	GE	CR2940	MILD
HS-2015A	C770-01-006	C-H	1025T16224	MILD
HS-2016	G080-06-026	GE	CR2940	MILD
HS-2016A	C770-01-011	C-H	1025T16224	MILD
HS-2018	G080-29-038	GE	SBM	MILD
HS-2029	G080-29-039	GE	SBM	MILD
HS-2030	G080-29-040	GE	SBM	MILD
HS-2031	G080-06-028	GE	CR2940	MILD
HS-2035	G080-06-029	GE	CR2940	MILD
HS-2036	G080-29-041	GE	SBM	MILD
HS-2038	G080-29-042	GE	SBM	MILD
HS-2039A	G080-29-043	GE	SBM	MILD
HS-2039B	G080-29-044	GE	SBM	MILD
HS-2044A	G080-29-045	GE	SBM	MILD
HS-2044B	G080-29-046	GE	SBM	MILD
HS-2051	G080-06-030	GE	CR2940	MILD
HS-2052	G080-06-031	GE	CR2940	MILD
HS-2058	G080-29-047	GE	SBM	MILD
HS-2059	G080-29-048	GE	SBM	MILD
HS-2069	G080-06-032	GE	CR2940	MILD
HS-2077	G080-29-049	GE	SBM	MILD
HS-2078	G080-29-050	GE	SBM	MILD
HS-2080	G080-29-051	GE	SBM	MILD
HS-2081	G080-29-052	GE	SBM	MILD
HS-2100	G080-29-053	GE	SBM	MILD
HS-2103	G080-29-054	GE	SBM	MILD
HS-2104	G080-29-055	GE	SBM	MILD
HS-2112	G080-29-056	GE	SBM	MILD
HS-2115	G080-29-057	GE	SBM	MILD
HS-2117	G080-29-058	GE	SBM	MILD
HS-2120	G080-06-033	GE	CR2940	MILD
HS-2123	G080-29-059	GE	SBM	MILD
HS-2124	G080-29-060	GE	SBM	MILD
HS-2132	G080-29-061	GE	SBM	MILD
HS-2135	G080-29-062	GE	SBM	MILD
HS-2137	G080-29-063	GE	SBM	MILD

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PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
HS-2146	G080-06-034	GE	CR2940	MILD
HS-2147	G080-06-035	GE	CR2940	MILD
HS-2202	G080-06-036	GE	CR2940	MILD
HS-2206	G080-29-064	GE	SBM	MILD
HS-2211	G080-29-065	GE	SBM	MILD
HS-2212	G080-29-066	GE	SBM	MILD
HS-2219	G080-29-067	GE	SBM	MILD
HS-2221	G080-29-068	GE	SBM	MILD
HS-2222	G080-29-069	GE	SBM	MILD
HS-2234	G080-06-037	GE	CR2940	MILD
HS-2235	G080-06-038	GE	CR2940	MILD
HS-2238	G080-29-070	GE	SBM	MILD
HS-2239	G080-29-071	GE	SBM	MILD
HS-2247	G080-06-039	GE	CR2940	MILD
HS-2253	G080-06-040	GE	CR2940	MILD
HS-2256	G080-29-072	GE	SBM	MILD
HS-2257	G080-06-041	GE	CR2940	MILD
HS-2258	G080-06-042	GE	CR2940	MILD
HS-2259	G080-29-073	GE	SBM	MILD
HS-2267A	G080-06-043	GE	CR2940	MILD
HS-2267B	G080-06-044	GE	CR2940	MILD
HS-2273	B371-01-001	BOURNS		MILD
HS-2299	G080-29-074	GE	SBM	MILD
HS-2300	G080-29-075	GE	SBM	MILD
HS-2311	G080-29-076	GE	SBM	MILD
HS-2312	G080-29-077	GE	SBM	MILD
HS-2315	G080-29-078	GE	SBM	MILD
HS-2316	G080-29-079	GE	SBM	MILD
HS-2318	G080-29-080	GE	SBM	MILD
HS-2321	G080-29-081	GE	SBM	MILD
HS-2322	G080-29-082	GE	SBM	MILD
HS-2400	G080-29-083	GE	SBM	MILD
HS-2401	G080-29-084	GE	SBM	MILD
HS-2449A	G080-06-045	GE	CR2940	MILD
HS-2449B	G080-06-046	GE	CR2940	MILD
HS-2458	G080-06-047	GE	CR2940	MILD
HS-2459	G080-06-048	GE	CR2940	MILD
HS-2481	G080-06-049	GE	CR2940	MILD
HS-2510	G080-29-085	GE	SBM	MILD
HS-2512	G080-31-001	GE	SMB	MILD
HS-2516	G080-29-086	GE	SBM	MILD
HS-2517	G080-29-087	GE	SBM	MILD
HS-2700	G080-29-088	GE	SBM	MILD
HS-2701	G080-29-089	GE	SBM	MILD
HS-2740	G080-29-090	GE	SBM	MILD
HS-2902A	G080-29-091	GE	SBM	MILD
HS-2902B	G080-29-092	GE	SBM	MILD
HS-2903A	G080-29-093	GE	SBM	MILD
HS-2903B	G080-29-094	GE	SBM	MILD

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PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
HS-2906A	G080-14-001	GE	CR2940-UB203	MILD
HS-2906B	G080-22-001	GE	CR2940-UB203	MILD
HS-2907A	G080-29-095	GE	SBM	MILD
HS-2907B	G080-29-096	GE	SBM	MILD
HS-2907C	G080-29-097	GE	SBM	MILD
HS-2907D	G080-29-098	GE	SBM	MILD
HS-2908A	G080-29-099	GE	SBM	MILD
HS-2908B	G080-29-100	GE	SBM	MILD
HS-2908C	G080-29-102	GE	SBM	MILD
HS-2908D	G080-29-103	GE	SBM	MILD
HS-2910A	G080-06-050	GE	CR2940	MILD
HS-3225A	0050-01-001	ONAN	DJA-MS/1T	MILD
HS-3225B	0050-01-002	ONAN	DJA-MS/1T	MILD
HS-3233A	G080-08-001	GE	CR2940 U301	MILD
HS-3233B	G080-08-002	GE	CR2940 U301	MILD
HS-3704	G080-29-104	GE	SBM	MILD
HS-3705	G080-29-105	GE	SBM	MILD
HS-3728	G080-29-106	GE	SBM	MILD
HS-3729	G080-29-107	GE	SBM	MILD
HS-4371A	G080-06-051	GE	CR2940	MILD
HS-4371B	G080-06-052	GE	CR2940	MILD
HS-4371C	G080-06-053	GE	CR2940	MILD
HS-4378A	G080-06-054	GE	CR2940	MILD
HS-4378B	G080-06-055	GE	CR2940	MILD
HS-4400	G080-06-056	GE	CR2940	MILD
HS-4402	G080-06-057	GE	CR2940	MILD
HS-4405	G080-06-058	GE	CR2940	MILD
HS-4406	G080-06-059	GE	CR2940	MILD
HS-4412A	G080-29-108	GE	SBM	MILD
HS-4413A	G080-29-109	GE	SBM	MILD
HS-4415A	G080-29-110	GE	SBM	MILD
HS-4416A	G080-29-111	GE	SBM	MILD
HS-4418A	G080-29-112	GE	SBM	MILD
HS-4419A	G080-29-113	GE	SBM	MILD
HS-4420A	G080-29-114	GE	SBM	MILD
HS-4421A	G080-29-115	GE	SBM	MILD
HS-4423	G080-29-116	GE	SBM	MILD
HS-4424	G080-29-117	GE	SBM	MILD
HS-4639	G080-29-118	GE	SBM	MILD
HS-4640	G080-29-119	GE	SBM	MILD
HS-4841	G080-29-120	GE	SBM	MILD
HS-4909A	G080-29-121	GE	SBM	MILD
HS-4909B	G080-29-122	GE	SBM	MILD
HS-4910A	G080-06-060	GE	CR2940	MILD
HS-4910B	G080-06-061	GE	CR2940	MILD
HS-4914	G080-11-001	GE	CR2940-UA202B	MILD
HS-4915	G080-21-001	GE	CR2940-UA202B	MILD
HS-4924A	G080-29-123	GE	SBM	MILD
HS-4924B	G080-29-124	GE	SBM	MILD

EQUIPMENT QUALIFICATION SUMMARY INDEX

PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
HS-4924C	G080-29-125	GE	SBM	MILD
HS-4924D	G080-29-126	GE	SBM	MILD
HS-4925A	G080-29-127	GE	SBM	MILD
HS-4925B	G080-29-128	GE	SBM	MILD
HS-4925C	G080-29-129	GE	SBM	MILD
HS-4925D	G080-29-130	GE	SBM	MILD
HS-4927A	G080-06-062	GE	CR2940	MILD
HS-4927B	G080-06-063	GE	CR2940	MILD
HS-4928A	G080-29-131	GE	SBM	MILD
HS-4928B	G080-29-132	GE	SBM	MILD
HS-4936A	G080-10-001	GE	CR2940-BC301A	MILD
HS-4936B	G080-10-002	GE	CR2940-BC301A	MILD
HS-5718A	G080-29-133	GE	SBM	MILD
HS-5718B	G080-29-134	GE	SBM	MILD
HS-5801A	G080-12-001	GE	CR2940-UB202A	MILD
HS-5801B	G080-12-002	GE	CR2940-UB202A	MILD
HS-5805A	G080-12-003	GE	CR2940-UB202A	MILD
HS-5805B	G080-12-004	GE	CR2940-UB202A	MILD
HS-5814A	G080-30-001	GE	SB1	MILD
HS-5814B	G080-30-002	GE	SB1	MILD
HS-5815A	G080-12-005	GE	CR2940-UB202A	MILD
HS-5815B	G080-12-006	GE	CR2940-UB202A	MILD
HS-5816A	G080-16-001	GE	CR2940-UB203E	MILD
HS-5816B	G080-16-002	GE	CR2940-UB203E	MILD
HS-5817A	G080-12-007	GE	CR2940-UB202A	MILD
HS-5817B	G080-12-008	GE	CR2940-UB202A	MILD
HS-5825A	G080-12-009	GE	CR2940-UB202A	MILD
HS-5825B	G080-12-010	GE	CR2940-UB202A	MILD
HS-5839A	G080-16-003	GE	CR2940-UB203E	MILD
HS-5839B	G080-16-004	GE	CR2940-UB203E	MILD
HS-6102	G080-06-064	GE	CR2940	MILD
HS-6104A	G080-20-001	GE	CR2940-US203E	MILD
HS-6104B	G080-20-002	GE	CR2940-US203E	MILD
HS-6104U	G080-20-003	GE	CR2940-US203E	MILD
HS-6104V	G080-20-004	GE	CR2940-US203E	MILD
HS-6113A	G080-20-005	GE	CR2940-US203E	MILD
HS-6113B	G080-20-006	GE	CR2940-US203E	MILD
HS-6113U	G080-20-007	GE	CR2940-US203E	MILD
HS-6113V	G080-20-008	GE	CR2940-US203E	MILD
HS-6131	G080-12-011	GE	CR2940-UB202A	MILD
HS-6132A	G080-12-012	GE	CR2940-UB202A	MILD
HS-6132B	G080-12-013	GE	CR2940-UB202A	MILD
HS-6132C	G080-12-014	GE	CR2940-UB202A	MILD
HS-6924A	G080-29-135	GE	SBM	MILD
HS-6924B	G080-29-136	GE	SBM	MILD
HS-6924U	G080-15-001	GE	CR2940-UB203A	MILD
HS-6924V	G080-15-002	GE	CR2940-UB203A	MILD
HS-6924X	G080-19-001	GE	CR2940-UN200D	MILD
HS-6924Y	G080-19-002	GE	CR2940-UN200D	MILD

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PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
HS-7000A	G080-07-001	GE	CR2940 US203E	MILD
HS-7000B	G080-07-002	GE	CR2940 US203E	MILD
HS-7003A	G080-20-009	GE	CR2940-US203E	MILD
HS-7003B	G080-23-001	GE	CR2940-US203E	MILD
HS-7108A	G080-12-015	GE	CR2940-UB202A	MILD
HS-7108B	G080-12-016	GE	CR2940-UB202A	MILD
HS-7116	G080-13-001	GE	CR2940-UB202D	MILD
HS-7119	G080-13-002	GE	CR2940-UB202D	MILD
HS-7301A	G080-15-003	GE	CR2940-UB203A	MILD
HS-7301B	G080-15-004	GE	CR2940-UB203A	MILD
HS-7304A	G080-12-017	GE	CR2940-UB202A	MILD
HS-7304B	G080-12-018	GE	CR2940-UB202A	MILD
HS-7318A	G080-12-019	GE	CR2940-UB202A	MILD
HS-7318B	G080-12-020	GE	CR2940-UB202A	MILD
HS-7319A	G080-12-021	GE	CR2940-UB202A	MILD
HS-7319B	G080-12-022	GE	CR2940-UB202A	MILD
HS-7322A	G080-12-023	GE	CR2940-UB202A	MILD
HS-7322B	G080-12-024	GE	CR2940-UB202A	MILD
HS-7328A	G080-01-001	GE	CR2940-UB202D	MILD
HS-7328B	G080-13-003	GE	CR2940-UB202D	MILD
HS-7538A	G080-18-001	GE	CR2940-UB2037	MILD
HS-7538B	G080-18-002	GE	CR2940-UB2037	MILD
HS-7600A	G080-29-137	GE	SBM	MILD
HS-7600B	G080-29-138	GE	SBM	MILD
HS-7601A	G080-16-005	GE	CR2940-UB203E	MILD
HS-7601B	G080-16-006	GE	CR2940-UB203E	MILD
HS-7714A	G080-13-004	GE	CR2940-UB202D	MILD
HS-7714B	G080-13-005	GE	CR2940-UB202D	MILD
HS-8401A	G080-29-139	GE	SBM	MILD
HS-8401B	G080-29-140	GE	SBM	MILD
HS-8401C	G080-29-141	GE	SBM	MILD
HS-8401D	G080-29-142	GE	SBM	MILD
HS-8402A	G080-29-143	GE	SBM	MILD
HS-8402B	G080-29-144	GE	SBM	MILD
HS-8402C	G080-29-145	GE	SBM	MILD
HS-8402D	G080-29-146	GE	SBM	MILD
HS-8403A	G080-06-065	GE	CR2940	MILD
HS-8403B	G080-06-066	GE	CR2940	MILD
HS-8403C	G080-06-067	GE	CR2940	MILD
HS-8403D	G080-06-068	GE	CR2940	MILD
HS-8410	G080-29-147	GE	SBM	MILD
HS-8413	G080-29-148	GE	SBM	MILD
HS-8417A	G080-29-149	GE	SBM	MILD
HS-8417B	G080-29-150	GE	SBM	MILD
HS-8417C	G080-29-151	GE	SBM	MILD
HS-8417D	G080-29-152	GE	SBM	MILD
HS-8418	G080-29-153	GE	SBM	MILD
HS-8772A	G080-17-001	GE	CR2940-UB203F	MILD
HS-8772B	G080-17-002	GE	CR2940-UB203F	MILD

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PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
HS-8773A	G080-15-005	GE	CR2940-UB203A	MILD
HS-8773B	G080-15-006	GE	CR2940-UB203A	MILD
INSTRUMENT CABLE	V115-02-001	VICTOREEN	878-1-9	HARSH
IRM-4572A	G080-37-001	GE	194X672G8	MILD
IRM-4572B	G080-37-002	GE	194X672G8	MILD
IRM-4572C	G080-37-003	GE	194X672G8	MILD
IRM-4572D	G080-37-004	GE	194X672G8	MILD
IRM-4572E	G080-37-005	GE	194X672G8	MILD
IRM-4572F	G080-37-006	GE	194X672G8	MILD
JX-101A	G080-88-001	GE	NS03	HARSH
JX-101B	G080-88-002	GE	NS03	HARSH
JX-103	G080-90-001	GE	NS02	HARSH
JX-104A	G080-84-001	GE	NS04	HARSH
JX-104B	G080-84-002	GE	NS04	HARSH
JX-104C	G080-84-003	GE	NS04	HARSH
JX-104D	G080-84-004	GE	NS04	HARSH
JX-105A	G080-89-001	GE	NS02-I	HARSH
JX-105B	G080-89-002	GE	NS02-I	HARSH
JX-105C	G080-89-003	GE	NS02-I	HARSH
JX-105D	G080-89-004	GE	NS02-I	HARSH
KS-2524A	E020-01-001	EAGLE SIGNAL	HP57A607	MILD
KS-2524B	E020-01-002	EAGLE SIGNAL	HP57A607	MILD
KS-2525A	E020-01-003	EAGLE SIGNAL	HP57A607	MILD
KS-2525B	E020-01-004	EAGLE SIGNAL	HP57A607	MILD
KS-3706A	B323-01-001	BLISS	HP52A6	MILD
KS-3706B	B323-01-002	BLISS	HP52A6	MILD
KS-3747A	B323-01-003	BLISS	HP52A6	MILD
KS-3747B	B323-01-004	BLISS	HP52A6	MILD
KY-1935	A001-02-001			MILD
KY-1940	G080-99-007	GE		MILD
KY-2009	A001-02-002			MILD
KY-2080	A001-02-003			MILD
KY-2902A	P062-01-001	PARAGON	CRIM	MILD
KY-2902B	P062-01-002	PARAGON	CRIM	MILD
KY-2902C	A109-01-001	AGASTAT	2400	MILD
KY-2903A	P062-01-003	PARAGON	CRIM	MILD
KY-2903B	P062-01-004	PARAGON	CRIM	MILD
KY-2903C	A109-01-002	AGASTAT	2400	MILD
KY-2908A	A109-02-001	AGASTAT	7012-PFLL	MILD
KY-2908B	A109-02-002	AGASTAT	7012-PFLL	MILD
KY-2908C	A109-02-003	AGASTAT	7012-PFLL	MILD
KY-2908D	A109-02-004	AGASTAT	7012-PFLL	MILD
KY-4400A	G080-04-001	GE	CR2820 B414AA41	MILD
KY-4400B	G080-04-002	GE	CR2820 B414AA41	MILD
LC-4559	G080-71-005	GE	563022CAAC1	MILD
LC-4560	G080-71-006	GE	563022CAAC1	MILD
LC-4561	G080-71-007	GE	563022CAAC1	MILD
LC-7328A	S345-01-001	SQUARE D	DG-253	MILD
LC-7328B	S345-01-002	SQUARE D	DG-253	MILD

EQUIPMENT QUALIFICATION SUMMARY INDEX

PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
LE-3701	D093-01-001	DELAVAL GEMS SENSORS	XM-33353-1	HARSH
LE-3721	D093-01-002	DELAVAL GEMS SENSORS	XM-33353-1	HARSH
LE-4936A	B350-01-003	BORG-WARNER	E-4-51-1201	MILD
LE-4936B	B350-01-004	BORG-WARNER	E-4-51-1201	MILD
LIS-4531	Y010-02-001	YARWAY	4418C	MILD
LIS-4532	Y010-02-002	YARWAY	4418C	MILD
LIS-4533	Y010-02-003	YARWAY	4418C	MILD
LIS-4534	Y010-02-004	YARWAY	4418C	MILD
LIS-4535	Y010-02-017	YARWAY	4418C	MILD
LIS-4536	Y010-02-005	YARWAY	4418C	MILD
LIS-4537	Y010-02-007	YARWAY	4418C	MILD
LIS-4538	Y010-02-008	YARWAY	4418C	MILD
LIS-4561	Y010-02-009	YARWAY	4418C	MILD
LIS-4562	Y010-02-010	YARWAY	4418C	MILD
LIS-4592A	B081-02-001	BARTON	288	MILD
LIS-4592B	B081-02-002	BARTON	288	MILD
LIS-4592C	B081-02-003	BARTON	288	MILD
LIS-4592D	B081-02-004	BARTON	288	MILD
LITS-4539	Y010-02-011	YARWAY	4418C	MILD
LITS-4540	Y010-02-012	YARWAY	4418C	MILD
LITS-4565	Y010-02-013	YARWAY	4418C	MILD
LITS-4566	Y010-02-014	YARWAY	4418C	MILD
LI-4396A	A001-03-001			MILD
LI-4396B	A001-03-002			MILD
LI-4397A	A001-03-003			MILD
LI-4397B	A001-03-004			MILD
LI-4539	Y010-05-001	YARWAY	4455	MILD
LI-4540	Y010-05-002	YARWAY	4455	MILD
LI-4541	G080-35-006	GE	180	MILD
LI-4559	G080-35-007	GE	180	MILD
LI-4560	G080-35-008	GE	180	MILD
LI-4561	G080-35-009	GE	180	MILD
LI-4565	Y010-05-003	YARWAY	4455	MILD
LPRM-4571A	G080-99-008	GE		MILD
LPRM-4571B	G080-99-009	GE		MILD
LPRM-4571C	G080-99-010	GE		MILD
LPRM-4571D	G080-99-011	GE		MILD
LPRM-4571E	G080-99-012	GE		MILD
LPRM-4571F	G080-99-013	GE		MILD
LPRM-4571G	G080-99-014	GE		MILD
LPRM-4571H	G080-99-015	GE		MILD
LPRM-4571I	G080-99-016	GE		MILD
LPRM-4571J	G080-99-017	GE		MILD
LPRM-4571K	G080-99-018	GE		MILD
LPRM-4571L	G080-99-019	GE		MILD
LPRM-4571M	G080-99-020	GE		MILD
LPRM-4571N	G080-99-021	GE		MILD
LPRM-4571O	G080-99-022	GE		MILD
LPRM-4571P	G080-99-023	GE		MILD

EQUIPMENT QUALIFICATION SUMMARY INDEX

PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
LPRM-4571Q	G080-99-024	GE		MILD
LPRM-4571R	G080-99-025	GE		MILD
LPRM-4571S	G080-99-026	GE		MILD
LPRM-4571T	G080-99-027	GE		MILD
LPRM-4571U	G080-99-028	GE		MILD
LPRM-4571V	G080-99-029	GE		MILD
LRS-4559	G080-52-002	GE	531	MILD
LRS-4560	G080-52-003	GE	531	MILD
LR-4396A	A001-04-001			MILD
LR-4396B	A001-04-002			MILD
LR-4566	G080-51-001	GE	530	MILD
LR-5830A	W120-02-001	WESTINGHOUSE	WL	MILD
LR-5830B	W120-02-002	WESTINGHOUSE	WL	MILD
LR-7315A	W120-03-001	WESTINGHOUSE	WL-3573A45-G01	MILD
LR-7315B	W120-03-002	WESTINGHOUSE	WL-3573A45-G01	MILD
LSS-3701	G080-02-001	GE	CR120A28802	MILD
LSS-3721	G080-02-002	GE	CR120A28802	MILD
LS-1861A	M040-01-001	MAGNETROL	SL5.0-751	MILD
LS-1861B	M040-01-002	MAGNETROL	SL5.0-751	MILD
LS-1861C	M040-01-003	MAGNETROL	SL5.0-751	MILD
LS-1861D	M040-01-004	MAGNETROL	SL5.0-751	MILD
LS-2206	R290-01-001	ROBERT SHAW	82938-G-1	MILD
LS-2219	R290-01-002	ROBERT SHAW	82938-G-1	MILD
LS-2222A	R290-02-001	ROBERT SHAW	83841-A2	MILD
LS-2222B	R290-02-002	ROBERT SHAW	83841-A2	MILD
LS-2319	R290-02-003	ROBERT SHAW	83841-A2	MILD
LS-2320	R290-02-004	ROBERT SHAW	83841-A2	MILD
LS-3208A	C470-03-001	COLT INDUSTRIES	80	MILD
LS-3208B	C470-03-002	COLT INDUSTRIES	80	MILD
LS-3210A	C470-03-003	COLT INDUSTRIES	80	MILD
LS-3210B	C470-03-004	COLT INDUSTRIES	80	MILD
LS-3701	D093-01-003	DELAVAL GEMS SENSORS	XM-33353-1	HARSH
LS-3721	D093-01-004	DELAVAL GEMS SENSORS	XM-33353-1	HARSH
LS-4936A	B350-01-001	BORG-WARNER	E-4-51-1201	MILD
LS-4936B	B350-01-002	BORG-WARNER	E-4-51-1201	MILD
LS-5218	B008-01-001	B/W CONTROL-LERS GROUP	E-IF/SO-201	MILD
LS-5219	B008-01-002	B/W CONTROL-LERS GROUP	E-IF/SO-201	MILD
LT-4396A	I204-02-003	ITT BARTON	764	HARSH
LT-4396B	I204-02-004	ITT BARTON	764	HARSH
LT-4396C	G182-04-003	G.E. SUPPLIED ITT BARTON	147D7706P736-2-1	MILD
LT-4396D	G182-04-004	G.E. SUPPLIED ITT BARTON	147D7706P736-2-1	MILD
LT-4397A	I204-02-005	ITT BARTON	764	HARSH
LT-4397B	I204-02-006	ITT BARTON	764	HARSH
LT-4541	G080-67-001	GE	555111BDAA-3PDF	MILD
LT-4559	G080-64-001	GE	555111BB AA3PDE	MILD
LT-4560	G080-64-002	GE	555111BB AA3PDE	MILD
LT-4561	G080-64-003	GE	555111BB AA3PDE	MILD
LY-4396A	B045-01-001	BAILEY METER	752210-AAAE1	MILD
LY-4396B	B045-01-002	BAILEY METER	752210-AAAE1	MILD

EQUIPMENT QUALIFICATION SUMMARY INDEX

PLANT ID	EQUIPMENT ID	MANUFACTURER	MODDEL	ENVIRONMENT
MO-1900	L200-02-001	LIMITORQUE	SMB-00, AC-CLASS H	HARSH
MO-1901	L200-12-001	LIMITORQUE	SMB-0, DC-CLASS B	MILD
MO-1902	L200-06-001	LIMITORQUE	SMB-2, AC-CLASS H	HARSH
MO-1903	L200-17-002	LIMITORQUE	SMB-2,AC-CLASS H	HARSH
MO-1904	E153-01-001	ELECTRODYNE	TN-24-400	HARSH
MO-1905	L200-09-001	LIMITORQUE	SMB-5, AC-CLASS B	HARSH
MO-1908	L200-17-001	LIMITORQUE	SMB-2,AC-CLASS H	HARSH
MO-1909	L200-19-001	LIMITORQUE	SMB-2,DC-CLASS H	HARSH
MO-1912	L200-10-001	LIMITORQUE	SMB-00, AC-CLASS B	HARSH
MO-1913	L200-10-002	LIMITORQUE	SMB-00, AC-CLASS B	HARSH
MO-1920	L200-10-003	LIMITORQUE	SMB-00, AC-CLASS B	HARSH
MO-1921	L200-10-004	LIMITORQUE	SMB-00, AC-CLASS B	HARSH
MO-1932	L200-01-002	LIMITORQUE	SMB-0,AC-CLASS B	HARSH
MO-1933	L200-10-005	LIMITORQUE	SMB-00, AC-CLASS B	HARSH
MO-1934	L200-06-005	LIMITORQUE	SMB-2, AC-CLASS H	HARSH
MO-1935	L200-03-001	LIMITORQUE	SMB-000, AC-CLASS B	HARSH
MO-1936	L200-10-006	LIMITORQUE	SMB-00, AC-CLASS B	HARSH
MO-1937	L200-14-002	LIMITORQUE	SMB-000, DC CLASS B	HARSH
MO-1939	L200-01-003	LIMITORQUE	SMB-0,AC-CLASS B	HARSH
MO-1940	L200-08-001	LIMITORQUE	SMB-4, AC-CLASS B	HARSH
MO-1941	L200-01-004	LIMITORQUE	SMB-0,AC-CLASS B	HARSH
MO-1942	L200-01-005	LIMITORQUE	SMB-0,AC-CLASS B	HARSH
MO-1943A	L200-02-008	LIMITORQUE	SMB-00, AC-CLASS H	HARSH
MO-1943B	L200-02-009	LIMITORQUE	SMB-00, AC-CLASS H	HARSH
MO-1947	L200-08-002	LIMITORQUE	SMB-4, AC-CLASS B	HARSH
MO-1949A	L200-03-003	LIMITORQUE	SMB-000, AC-CLASS B	HARSH
MO-1949B	L200-03-004	LIMITORQUE	SMB-000, AC-CLASS B	HARSH
MO-1967	L200-03-005	LIMITORQUE	SMB-000, AC-CLASS B	HARSH
MO-1970	L200-03-006	LIMITORQUE	SMB-000, AC-CLASS B	HARSH
MO-1989	L200-01-006	LIMITORQUE	SMB-0,AC-CLASS B	HARSH
MO-2000	L200-06-006	LIMITORQUE	SMB-2, AC-CLASS H	HARSH
MO-2001	L200-06-007	LIMITORQUE	SMB-2, AC-CLASS H	HARSH
MO-2003	L200-09-002	LIMITORQUE	SMB-5, AC-CLASS B	HARSH
MO-2004	E153-01-002	ELECTRODYNE	TN-24-400	HARSH
MO-2005	L200-01-008	LIMITORQUE	SMB-0,AC-CLASS B	HARSH
MO-2006	L200-02-007	LIMITORQUE	SMB-00, AC-CLASS H	HARSH
MO-2007	L200-06-008	LIMITORQUE	SMB-2, AC-CLASS H	HARSH
MO-2009	L200-03-007	LIMITORQUE	SMB-000, AC-CLASS B	HARSH
MO-2010	L200-05-001	LIMITORQUE	SMB-1, AC-CLASS B	HARSH
MO-2011	L200-10-008	LIMITORQUE	SMB-00, AC-CLASS B	HARSH
MO-2012	L200-10-009	LIMITORQUE	SMB-00, AC-CLASS B	HARSH
MO-2015	L200-10-010	LIMITORQUE	SMB-00, AC-CLASS B	HARSH
MO-2016	L200-10-011	LIMITORQUE	SMB-00, AC-CLASS B	HARSH
MO-2029	L200-01-009	LIMITORQUE	SMB-0,AC-CLASS B	HARSH
MO-2030	L200-08-005	LIMITORQUE	SMB-4, AC-CLASS B	HARSH
MO-2031	L200-01-010	LIMITORQUE	SMB-0,AC-CLASS B	HARSH
MO-2036	L200-03-008	LIMITORQUE	SMB-000, AC-CLASS B	HARSH
MO-2038	L200-03-009	LIMITORQUE	SMB-000, AC-CLASS B	HARSH
MO-2039A	L200-03-010	LIMITORQUE	SMB-000, AC-CLASS B	MILD

EQUIPMENT QUALIFICATION SUMMARY INDEX

PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
MO-2039B	L200-03-011	LIMITORQUE	SMB-000, AC-CLASS B	MILD
MO-2044A	L200-03-012	LIMITORQUE	SMB-000, AC-CLASS B	HARSH
MO-2044B	L200-03-013	LIMITORQUE	SMB-000, AC-CLASS B	HARSH
MO-2046	L200-08-004	LIMITORQUE	SMB-4, AC-CLASS B	HARSH
MO-2069	L200-01-011	LIMITORQUE	SMB-0,AC-CLASS B	HARSH
MO-2077	L200-03-014	LIMITORQUE	SMB-000, AC-CLASS B	MILD
MO-2078	L200-03-015	LIMITORQUE	SMB-000, AC-CLASS B	MILD
MO-2100	L200-02-016	LIMITORQUE	SMB-00, AC-CLASS H	HARSH
MO-2104	L200-03-016	LIMITORQUE	SMB-000, AC-CLASS B	HARSH
MO-2112	L200-05-002	LIMITORQUE	SMB-1, AC-CLASS B	HARSH
MO-2115	L200-01-012	LIMITORQUE	SMB-0,AC-CLASS B	HARSH
MO-2117	L200-06-009	LIMITORQUE	SMB-2, AC-CLASS H	HARSH
MO-2120	L200-10-013	LIMITORQUE	SMB-00, AC-CLASS B	HARSH
MO-2124	L200-03-017	LIMITORQUE	SMB-000, AC-CLASS B	HARSH
MO-2132	L200-05-003	LIMITORQUE	SMB-1, AC-CLASS B	HARSH
MO-2135	L200-01-013	LIMITORQUE	SMB-0,AC-CLASS B	HARSH
MO-2137	L200-06-010	LIMITORQUE	SMB-2, AC-CLASS H	HARSH
MO-2146	L200-02-018	LIMITORQUE	SMB-00, AC-CLASS H	HARSH
MO-2147	L200-02-019	LIMITORQUE	SMB-00, AC-CLASS H	HARSH
MO-2202	L200-16-002	LIMITORQUE	SMB-2, DC-CLASS H	MILD
MO-2238	L200-06-012	LIMITORQUE	SMB-2, AC-CLASS H	HARSH
MO-2239	L200-18-001	LIMITORQUE	SMB-3, DC-CLASS B	HARSH
MO-2247	L200-15-001	LIMITORQUE	SMB-000, DC-CLASS H	MILD
MO-2290A	L200-03-019	LIMITORQUE	SMB-000, AC-CLASS B	HARSH
MO-2290B	L200-03-020	LIMITORQUE	SMB-000, AC-CLASS B	HARSH
MO-2300	L200-13-001	LIMITORQUE	SMB-00,DC-CLASS B	MILD
MO-2311	L200-07-002	LIMITORQUE	SMB-3, DC-CLASS B	MILD
MO-2312	L200-07-003	LIMITORQUE	SMB-3, DC-CLASS B	HARSH
MO-2315	L200-07-004	LIMITORQUE	SMB-3, DC-CLASS B	MILD
MO-2316	L200-12-002	LIMITORQUE	SMB-0, DC-CLASS B	MILD
MO-2318	L200-12-003	LIMITORQUE	SMB-0, DC-CLASS B	MILD
MO-2321	L200-13-002	LIMITORQUE	SMB-00,DC-CLASS B	HARSH
MO-2322	L200-13-003	LIMITORQUE	SMB-00,DC-CLASS B	MILD
MO-2400	L200-02-023	LIMITORQUE	SMB-00, AC-CLASS H	HARSH
MO-2401	L200-13-004	LIMITORQUE	SMB-00,DC-CLASS B	HARSH
MO-2510	L200-11-001	LIMITORQUE	SMB-00, DC-CLASS H	MILD
MO-2512	L200-13-005	LIMITORQUE	SMB-00,DC-CLASS B	HARSH
MO-2516	L200-03-021	LIMITORQUE	SMB-000, AC-CLASS B	HARSH
MO-2517	L200-14-001	LIMITORQUE	SMB-000, DC CLASS B	HARSH
MO-2700	L200-02-027	LIMITORQUE	SMB-00, AC-CLASS H	HARSH
MO-2701	L200-13-006	LIMITORQUE	SMB-00,DC-CLASS B	HARSH
MO-2740	L200-10-012	LIMITORQUE	SMB-00, AC-CLASS B	MILD
MO-2902	L200-04-001	LIMITORQUE	SMB-000-2	MILD
MO-2903	L200-04-003	LIMITORQUE	SMB-000-2	MILD
MO-2910A	Z010-01-001	ZURN INDUSTRIES	MAR-8	MILD
MO-2910B	Z010-01-002	ZURN INDUSTRIES	MAR-8	MILD
MO-4320A	L200-03-023	LIMITORQUE	SMB-000, AC-CLASS B	HARSH
MO-4320B	L200-03-024	LIMITORQUE	SMB-000, AC-CLASS B	HARSH
MO-4323A	L200-02-029	LIMITORQUE	SMB-00, AC-CLASS H	MILD

EQUIPMENT QUALIFICATION SUMMARY INDEX

PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
MO-4323B	L200-02-030	LIMITORQUE	SMB-00, AC-CLASS H	MILD
MO-4423	L200-02-031	LIMITORQUE	SMB-00, AC-CLASS H	HARSH
MO-4424	L200-13-007	LIMITORQUE	SMB-00,DC-CLASS B	HARSH
MO-4627	L200-16-003	LIMITORQUE	SMB-2, DC-CLASS H	HARSH
MO-4628	L200-16-004	LIMITORQUE	SMB-2, DC-CLASS H	HARSH
MO-4841A	L200-03-025	LIMITORQUE	SMB-000, AC-CLASS B	HARSH
MO-4841B	L200-03-026	LIMITORQUE	SMB-000, AC-CLASS B	HARSH
MO-8401A	L200-03-027	LIMITORQUE	SMB-000, AC-CLASS B	HARSH
MO-8401B	L200-03-028	LIMITORQUE	SMB-000, AC-CLASS B	HARSH
MO-8401C	L200-03-029	LIMITORQUE	SMB-000, AC-CLASS B	HARSH
MO-8401D	L200-03-030	LIMITORQUE	SMB-000, AC-CLASS B	HARSH
MO-8402A	L200-03-031	LIMITORQUE	SMB-000, AC-CLASS B	HARSH
MO-8402B	L200-03-032	LIMITORQUE	SMB-000, AC-CLASS B	HARSH
MO-8402C	L200-03-033	LIMITORQUE	SMB-000, AC-CLASS B	HARSH
MO-8402D	L200-03-034	LIMITORQUE	SMB-000, AC-CLASS B	HARSH
MO-8403A	L200-03-035	LIMITORQUE	SMB-000, AC-CLASS B	HARSH
MO-8403B	L200-03-036	LIMITORQUE	SMB-000, AC-CLASS B	HARSH
MO-8403C	L200-03-037	LIMITORQUE	SMB-000, AC-CLASS B	HARSH
MO-8403D	L200-03-038	LIMITORQUE	SMB-000, AC-CLASS B	HARSH
OT-7304A	C251-02-001	CHANNEL MASTER	CFEI-74C	MILD
OT-7304B	C251-02-002	CHANNEL MASTER	CFEI-74C	MILD
PB-5831A	G080-05-001	GE	CR2940U201	MILD
PB-5831B	G080-05-002	GE	CR2940U201	MILD
PB-5837A	G080-03-001	GE	CR2040U201	MILD
PB-5837B	G080-05-003	GE	CR2940U201	MILD
PB-5838A	G080-05-004	GE	CR2940U201	MILD
PB-5838B	G080-05-005	GE	CR2940U201	MILD
PB-7316A	G080-09-001	GE	CR2940U201	MILD
PB-7316B	G080-09-002	GE	CR2940U201	MILD
PB-7328A	G080-09-003	GE	CR2940U201	MILD
PB-7328B	G080-09-004	GE	CR2940U201	MILD
PB-7329A	G080-09-005	GE	CR2940U201	MILD
PB-7329B	G080-09-006	GE	CR2940U201	MILD
PDIS-1971A	B081-03-004	BARTON	289	HARSH
PDIS-1971B	B081-03-005	BARTON	289	HARSH
PDIS-2244	B081-02-005	BARTON	288	MILD
PDIS-2245	B081-02-006	BARTON	288	MILD
PDIS-2441	B081-02-007	BARTON	288	MILD
PDIS-2442	B081-02-008	BARTON	288	MILD
PDIS-2902	B081-03-006	BARTON	289	MILD
PDIS-2903	B081-03-007	BARTON	289	MILD
PDIS-4304	B081-02-037	BARTON	288	HARSH
PDIS-4305	B081-02-038	BARTON	288	HARSH
PDIS-4432A	B081-02-009	BARTON	288	MILD
PDIS-4432B	B081-02-010	BARTON	288	MILD
PDIS-4432C	B081-02-011	BARTON	288	MILD
PDIS-4432D	B081-02-012	BARTON	288	MILD
PDIS-4434A	B081-02-013	BARTON	288	MILD
PDIS-4434B	B081-02-014	BARTON	288	MILD

EQUIPMENT QUALIFICATION SUMMARY INDEX

PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
PDIS-4434C	B081-02-015	BARTON	288	MILD
PDIS-4434D	B081-02-016	BARTON	288	MILD
PDIS-4436A	B081-02-017	BARTON	288	MILD
PDIS-4436B	B081-02-018	BARTON	288	MILD
PDIS-4436C	B081-02-019	BARTON	288	MILD
PDIS-4436D	B081-02-020	BARTON	288	MILD
PDIS-4438A	B081-02-021	BARTON	288	MILD
PDIS-4438B	B081-02-022	BARTON	288	MILD
PDIS-4438C	B081-02-023	BARTON	288	MILD
PDIS-4438D	B081-02-024	BARTON	288	MILD
PDIS-4625A	B081-02-025	BARTON	288	HARSH
PDIS-4625B	B081-02-026	BARTON	288	HARSH
PDIS-4625C	B081-02-027	BARTON	288	HARSH
PDIS-4625D	B081-02-028	BARTON	288	HARSH
PDIS-4626A	B081-02-029	BARTON	288	MILD
PDIS-4626B	B081-02-030	BARTON	288	MILD
PDIS-4626C	B081-02-031	BARTON	288	MILD
PDIS-4626D	B081-02-032	BARTON	288	MILD
PDIS-4641	B081-02-033	BARTON	288	MILD
PDIS-4642	B081-02-034	BARTON	288	MILD
PDIS-4643	B081-02-035	BARTON	288	MILD
PDIS-4644	B081-02-036	BARTON	288	MILD
PDI-4623	G080-35-010	GE	180	MILD
PDI-4624	G080-35-011	GE	180	MILD
PDS-2910A	Z010-02-002	ZURN INDUSTRIES	150	MILD
PDS-2910B	Z010-02-001	ZURN INDUSTRIES	150	MILD
PDT-1947	G080-48-001	GE	DIFF PRESSURE TRANSMITTER	HARSH
PDT-2046	G080-48-002	GE	DIFF PRESSURE TRANSMITTER	HARSH
PDT-4623	B081-04-006	BARTON	368	HARSH
PDT-4624	B081-04-007	BARTON	368	MILD
PI-1018	G080-35-012	GE	180	MILD
PI-1019	G080-35-013	GE	180	MILD
PI-2106	G080-35-014	GE	180	MILD
PI-2126	G080-35-015	GE	180	MILD
PI-2207	G080-35-016	GE	180	MILD
PI-2306	G080-35-017	GE	180	MILD
PI-2403	G080-35-018	GE	180	MILD
PI-4398A	A001-05-001			MILD
PI-4398B	A001-05-002			MILD
PI-4399A	A001-05-003			MILD
PI-4399B	A001-05-004			MILD
PI-4563	G080-35-019	GE	180	MILD
PI-4564	G080-35-020	GE	180	MILD
PI-4565	G080-35-021	GE	180	MILD
PI-4599A	A001-05-005			MILD
PI-4599B	A001-05-006			MILD
PR-4384A	H260-01-009	HONEYWELL	37303-6020-0222-000-610-00	MILD
PR-4385A	H260-01-010	HONEYWELL	37303-6020-0222-000-610-00	MILD
PR-4398A	A001-06-001			MILD

EQUIPMENT QUALIFICATION SUMMARY INDEX

PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
PR-4398B	A001-06-002			MILD
PR-4542	G080-52-004	GE	531	MILD
PR-4599A	A001-06-003			MILD
PR-4599B	A001-06-004			MILD
PS-1005A	B069-01-002	BARKSDALE	B2T M12SS	MILD
PS-1005B	B069-01-003	BARKSDALE	B2T M12SS	MILD
PS-1005C	B069-01-004	BARKSDALE	B2T M12SS	MILD
PS-1005D	B069-01-005	BARKSDALE	B2T M12SS	MILD
PS-1014	B069-01-006	BARKSDALE	B2T M12SS	MILD
PS-1015	B069-01-007	BARKSDALE	B2T M12SS	MILD
PS-1016	B069-01-008	BARKSDALE	B2T M12SS	MILD
PS-1017	B069-01-009	BARKSDALE	B2T M12SS	MILD
PS-1026A	B069-08-001	BARKSDALE	TC-9022-3	MILD
PS-1026B	B069-08-002	BARKSDALE	TC-9022-3	MILD
PS-1026C	B069-08-003	BARKSDALE	TC-9022-3	MILD
PS-1026D	B069-08-004	BARKSDALE	TC-9022-3	MILD
PS-1096A	B069-03-001	BARKSDALE	DIT-M18SS	MILD
PS-1096B	B069-03-002	BARKSDALE	DIT-M18SS	MILD
PS-1096C	B069-03-003	BARKSDALE	DIT-M18SS	MILD
PS-1096D	B069-03-004	BARKSDALE	DIT-M18SS	MILD
PS-1917A	S382-03-001	STATIC-O-RING	5N-AA3	HARSH
PS-1917B	S382-02-001	STATIC-O-RING	12N-AA5	HARSH
PS-1925A	S382-03-002	STATIC-O-RING	5N-AA3	HARSH
PS-1925B	S382-02-002	STATIC-O-RING	12N-AA5	HARSH
PS-2023A	S382-03-003	STATIC-O-RING	5N-AA3	HARSH
PS-2023B	S382-02-003	STATIC-O-RING	12N-AA5	HARSH
PS-2024A	S382-03-004	STATIC-O-RING	5N-AA3	HARSH
PS-2024B	S382-03-005	STATIC-O-RING	5N-AA3	HARSH
PS-2107A	S382-03-006	STATIC-O-RING	5N-AA3	HARSH
PS-2107B	S382-03-007	STATIC-O-RING	5N-AA3	HARSH
PS-2127A	S382-03-008	STATIC-O-RING	5N-AA3	HARSH
PS-2127B	S382-03-009	STATIC-O-RING	5N-AA3	HARSH
PS-2215A	S382-04-001	STATIC-O-RING	6N-AA2	MILD
PS-2215B	S382-04-002	STATIC-O-RING	6N-AA2	MILD
PS-2215C	S382-04-003	STATIC-O-RING	6N-AA2	MILD
PS-2215D	S382-04-004	STATIC-O-RING	6N-AA2	MILD
PS-2233A	S382-03-010	STATIC-O-RING	5N-AA3	MILD
PS-2233B	S382-03-011	STATIC-O-RING	5N-AA3	MILD
PS-2246A	B069-01-010	BARKSDALE	B2T M12SS	MILD
PS-2246B	B069-01-011	BARKSDALE	B2T M12SS	MILD
PS-2246C	B069-01-012	BARKSDALE	B2T M12SS	MILD
PS-2246D	B069-01-013	BARKSDALE	B2T M12SS	MILD
PS-2288	S382-04-005	STATIC-O-RING	6N-AA2	MILD
PS-2304A	S382-04-006	STATIC-O-RING	6N-AA2	MILD
PS-2304B	S382-04-007	STATIC-O-RING	6N-AA2	MILD
PS-2324	B069-01-038	BARKSDALE	B2T M12SS	MILD
PS-2443A	B069-01-014	BARKSDALE	B2T M12SS	MILD
PS-2443B	B069-01-015	BARKSDALE	B2T M12SS	MILD
PS-2443C	B069-01-016	BARKSDALE	B2T M12SS	MILD

EQUIPMENT QUALIFICATION SUMMARY INDEX

PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
PS-2443D	B069-01-017	BARKSDALE	B2T M12SS	MILD
PS-2902	B069-04-003	BARKSDALE	D1T-A80	MILD
PS-2903	B069-04-004	BARKSDALE	D1T-A80	MILD
PS-3241A	C470-01-001	COLT INDUSTRIES	2584-B1	MILD
PS-3241B	C470-01-002	COLT INDUSTRIES	2584-B1	MILD
PS-3242A	C470-01-003	COLT INDUSTRIES	2584-B1	MILD
PS-3242B	C470-01-004	COLT INDUSTRIES	2584-B1	MILD
PS-4310A	S382-02-004	STATIC-O-RING	12N-AA5	MILD
PS-4310B	S382-02-005	STATIC-O-RING	12N-AA5	MILD
PS-4311A	S382-02-006	STATIC-O-RING	12N-AA5	MILD
PS-4311B	S382-02-007	STATIC-O-RING	12N-AA5	MILD
PS-4312A	S382-02-008	STATIC-O-RING	12N-AA5	MILD
PS-4312B	S382-02-009	STATIC-O-RING	12N-AA5	MILD
PS-4313A	S382-02-010	STATIC-O-RING	12N-AA5	MILD
PS-4313B	S382-02-011	STATIC-O-RING	12N-AA5	MILD
PS-4315A	S382-01-001	STATIC-O-RING	12N-AA4	MILD
PS-4315B	S382-01-002	STATIC-O-RING	12N-AA4	MILD
PS-4315C	S382-01-003	STATIC-O-RING	12N-AA4	MILD
PS-4315D	S382-01-004	STATIC-O-RING	12N-AA4	MILD
PS-4346	S382-07-004	STATIC-O-RING	9N-AA45-(X9)-TT	MILD
PS-4348	B081-03-008	BARTON	289	HARSH
PS-4365A	B069-04-001	BARKSDALE	D1T-A80	MILD
PS-4365B	B069-04-002	BARKSDALE	D1T-A80	MILD
PS-4400A	P381-01-001	PRESSURE CONTROLS	219B4562	HARSH
PS-4400B	P381-01-002	PRESSURE CONTROLS	219B4562	HARSH
PS-4400C	P381-01-003	PRESSURE CONTROLS	219B4562	HARSH
PS-4401A	P381-01-004	PRESSURE CONTROLS	219B4562	HARSH
PS-4401B	P381-01-005	PRESSURE CONTROLS	219B4562	HARSH
PS-4401C	P381-01-006	PRESSURE CONTROLS	219B4562	HARSH
PS-4402A	P381-01-007	PRESSURE CONTROLS	219B4562	HARSH
PS-4402B	P381-01-008	PRESSURE CONTROLS	219B4562	HARSH
PS-4402C	P381-01-009	PRESSURE CONTROLS	219B4562	HARSH
PS-4403A	P381-01-010	PRESSURE CONTROLS	219B4562	HARSH
PS-4403B	P381-01-011	PRESSURE CONTROLS	219B4562	HARSH
PS-4403C	P381-01-012	PRESSURE CONTROLS	219B4562	HARSH
PS-4404A	P381-01-013	PRESSURE CONTROLS	219B4562	HARSH
PS-4404B	P381-01-014	PRESSURE CONTROLS	219B4562	HARSH
PS-4404C	P381-01-015	PRESSURE CONTROLS	219B4562	HARSH
PS-4405A	P381-01-016	PRESSURE CONTROLS	219B4562	HARSH
PS-4405B	P381-01-017	PRESSURE CONTROLS	219B4562	HARSH
PS-4405C	P381-01-018	PRESSURE CONTROLS	219B4562	HARSH
PS-4406A	P381-01-019	PRESSURE CONTROLS	219B4562	HARSH
PS-4406B	P381-01-020	PRESSURE CONTROLS	219B4562	HARSH
PS-4406C	P381-01-021	PRESSURE CONTROLS	219B4562	HARSH
PS-4407A	P381-01-022	PRESSURE CONTROLS	219B4562	HARSH
PS-4407B	P381-01-023	PRESSURE CONTROLS	219B4562	HARSH
PS-4407C	P381-01-024	PRESSURE CONTROLS	219B4562	HARSH
PS-4529	B069-01-018	BARKSDALE	B2T M12SS	MILD
PS-4530	B069-01-019	BARKSDALE	B2T M12SS	MILD

EQUIPMENT QUALIFICATION SUMMARY INDEX

PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
PS-4543	B069-01-020	BARKSDALE	B2T M12SS	MILD
PS-4544	B069-01-021	BARKSDALE	B2T M12SS	MILD
PS-4545	B069-01-022	BARKSDALE	B2T M12SS	MILD
PS-4546	B069-01-023	BARKSDALE	B2T M12SS	MILD
PS-4547	B069-01-024	BARKSDALE	B2T M12SS	MILD
PS-4548	B069-01-025	BARKSDALE	B2T M12SS	MILD
PS-4549	B069-01-026	BARKSDALE	B2T M12SS	MILD
PS-4550	B069-01-027	BARKSDALE	B2T M12SS	MILD
PS-4551	B069-01-028	BARKSDALE	B2T M12SS	MILD
PS-4552	B069-01-029	BARKSDALE	B2T M12SS	MILD
PS-4555	B069-01-030	BARKSDALE	B2T M12SS	MILD
PS-4556	B069-01-031	BARKSDALE	B2T M12SS	MILD
PS-4557	B069-01-032	BARKSDALE	B2T M12SS	MILD
PS-4558	B069-01-033	BARKSDALE	B2T M12SS	MILD
PS-4593A	S382-07-001	STATIC-O-RING	9N-AA45-(X9)-TT	MILD
PS-4593B	S382-07-005	STATIC-O-RING	9N-AA45-(X9)-TT	MILD
PS-4593C	S382-07-002	STATIC-O-RING	9N-AA45-(X9)-TT	MILD
PS-4593D	S382-07-003	STATIC-O-RING	9N-AA45-(X9)-TT	MILD
PS-4637	B069-01-001	BARKSDALE	B2T M12SS	MILD
PS-4638A	B069-07-001	BARKSDALE	PIH-M34055-V	MILD
PS-4638B	B069-07-002	BARKSDALE	PIH-M34055-V	MILD
PS-7333A	U075-01-001	UNITED ELECTRIC CONTROLS	270	MILD
PS-7333B	U075-01-002	UNITED ELECTRIC CONTROLS	270	MILD
PS-7334A	U075-01-003	UNITED ELECTRIC CONTROLS	270	MILD
PS-7334B	U075-01-004	UNITED ELECTRIC CONTROLS	270	MILD
PS-7335A	M235-01-001	MERCOND CORP.	DA7031-153	MILD
PS-7335B	M235-01-002	MERCOND CORP.	DA7031-153	MILD
PS-8404A	B069-09-001	BARKSDALE	P1H-M85SS-V	HARSH
PS-8404B	B069-09-002	BARKSDALE	P1H-M85SS-V	HARSH
PS-8404C	B069-09-003	BARKSDALE	P1H-M85SS-V	HARSH
PS-8404D	B069-09-004	BARKSDALE	P1H-M85SS-V	HARSH
PS-8415A	B069-01-034	BARKSDALE	B2T M12SS	MILD
PS-8415B	B069-01-035	BARKSDALE	B2T M12SS	MILD
PS-8415C	B069-01-036	BARKSDALE	B2T M12SS	MILD
PS-8415D	B069-01-037	BARKSDALE	B2T M12SS	MILD
PT-1018	S052-01-001	SCHAEVITZ	501X5A	MILD
PT-1019	S052-01-002	SCHAEVITZ	501X5A	MILD
PT-2106	G080-59-002	GE	551032EKZZ2	HARSH
PT-2126	G080-59-001	GE	551032EKZZ2	HARSH
PT-2207	G080-49-002	GE	551032GK222	HARSH
PT-2306	G080-49-001	GE	551032GK222	HARSH
PT-4343	G080-68-001	GE	556	MILD
PT-4365A	G080-68-002	GE	556	MILD
PT-4365B	G080-68-003	GE	556	MILD
PT-4398A	I204-02-001	ITT BARTON	764	HARSH
PT-4398B	I204-02-002	ITT BARTON	764	HARSH
PT-4399A	I204-01-001	ITT BARTON	763	MILD
PT-4399B	I204-01-002	ITT BARTON	763	MILD
PT-4542	B081-04-005	BARTON	368	MILD

EQUIPMENT QUALIFICATION SUMMARY INDEX

PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
PT-4563	G080-60-003	GE	551032-GM772	MILD
PT-4564	G080-60-001	GE	551032-GM772	MILD
PT-4565	G080-60-002	GE	551032-GM772	MILD
PT-4599A	I204-01-003	ITT BARTON	763	MILD
PT-4599B	I204-01-004	ITT BARTON	763	MILD
P/ER-7334A	P129-04-001	PENN	P47BA-6	MILD
P/ER-7334B	P129-04-002	PENN	P47BA-6	MILD
P/ER-7600A	G080-80-001	GE	6-271	MILD
P/ER-7600B	G080-80-002	GE	6-271	MILD
RC-4448A	G080-40-001	GE	238X660G3	MILD
RC-4448B	G080-40-002	GE	238X660G3	MILD
RC-4448C	G080-40-003	GE	238X660G3	MILD
RC-4448D	G080-40-004	GE	238X660G3	MILD
RE-4131A	G080-38-001	GE	194X927G11	MILD
RE-4131B	G080-38-002	GE	194X927G11	MILD
RE-4448A	G080-91-001	GE	237X731G001	HARSH
RE-4448B	G080-91-002	GE	237X731G001	HARSH
RE-4448C	G080-91-003	GE	237X731G001	HARSH
RE-4448D	G080-91-004	GE	237X731G001	HARSH
RE-4571A	G080-87-001	GE		MILD
RE-4571B	G080-87-002	GE		MILD
RE-4571C	G080-87-003	GE		MILD
RE-4571D	G080-87-004	GE		MILD
RE-4571E	G080-87-005	GE		MILD
RE-4571F	G080-87-006	GE		MILD
RE-4571G	G080-87-007	GE		MILD
RE-4571H	G080-87-008	GE		MILD
RE-4571I	G080-87-009	GE		MILD
RE-4571J	G080-87-010	GE		MILD
RE-4571K	G080-87-011	GE		MILD
RE-4571L	G080-87-012	GE		MILD
RE-4571M	G080-87-013	GE		MILD
RE-4571N	G080-87-014	GE		MILD
RE-4571O	G080-87-022	GE		MILD
RE-4571P	G080-87-015	GE		MILD
RE-4571Q	G080-87-016	GE		MILD
RE-4571R	G080-87-017	GE		MILD
RE-4571S	G080-87-018	GE		MILD
RE-4571T	G080-87-019	GE		MILD
RE-4571U	G080-87-020	GE		MILD
RE-4571V	G080-87-021	GE		MILD
RE-4572A	G080-85-001	GE	112C3144G008	MILD
RE-4572B	G080-85-002	GE	112C3144G008	MILD
RE-4572C	G080-85-003	GE	112C3144G008	MILD
RE-4572D	G080-85-004	GE	112C3144G008	MILD
RE-4572E	G080-85-005	GE	112C3144G008	MILD
RE-4572F	G080-85-006	GE	112C3144G008	MILD
RE-4573A	G080-86-001	GE	112C3144G007	MILD
RE-4573B	G080-86-002	GE	112C3144G007	MILD

EQUIPMENT QUALIFICATION SUMMARY INDEX

PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
RE-4573C	G080-86-003	GE	112C3144G007	MILD
RE-4573D	G080-86-004	GE	112C3144G007	MILD
RE-6101A	N003-05-001	NMC	GA-2TO	MILD
RE-6101B	N003-05-002	NMC	GA-2TO	MILD
RE-7606A	N003-05-003	NMC	GA-2TO	HARSH
RE-7606B	N003-05-004	NMC	GA-2TO	HARSH
RE-8101A	N003-01-001	NMC	RAK-22IF	MILD
RE-8101B	N003-01-002	NMC	RAK-22IF	MILD
RE-8102A	N003-01-003	NMC	RAK-22IF	MILD
RE-8102B	N003-01-004	NMC	RAK-22IF	MILD
RE-8103A	N003-01-005	NMC	RAK-22IF	MILD
RE-8103B	N003-01-006	NMC	RAK-22IF	MILD
RE-9184A	V115-01-002	VICTOREEN	877-1	HARSH
RE-9184B	V115-01-004	VICTOREEN	877-1	HARSH
RE-9185A	V115-01-006	VICTOREEN	877-1	HARSH
RE-9185B	V115-01-008	VICTOREEN	877-1	HARSH
RIM-6101A	N003-02-003	NMC	GA-2TMO	MILD
RIM-6101B	N003-02-004	NMC	GA-2TMO	MILD
RIM-7606A	N003-02-005	NMC	GA-2TMO	MILD
RIM-7606B	N003-02-006	NMC	GA-2TMO	MILD
RIM-9184A	V115-03-001			MILD
RIM-9184B	V115-03-002			MILD
RIM-9185A	V115-03-003			MILD
RIM-9185B	V115-03-004			MILD
RIS-4131A	G080-33-001	GE	129B2802	MILD
RIS-4131B	G080-33-002	GE	129B2802	MILD
RIT-8101A	N003-01-007	NMC	RAK-22IF	MILD
RIT-8101B	N003-01-008	NMC	RAK-22IF	MILD
RIT-8102A	N003-01-009	NMC	RAK-22IF	MILD
RIT-8102B	N003-01-010	NMC	RAK-22IF	MILD
RIT-8103A	N003-01-011	NMC	RAK-22IF	MILD
RIT-8103B	N003-01-012	NMC	RAK-22IF	MILD
RR-4131	G080-50-001	GE	521	MILD
RR-4379A	H260-01-004	HONEYWELL	37303-6020-0222-000-610-00	MILD
RR-4379B	H260-01-005	HONEYWELL	37303-6020-0222-000-610-00	MILD
RR-4448A	G080-50-002	GE	521	MILD
RR-4448B	G080-50-003	GE	521	MILD
RR-7606A	H260-01-002	HONEYWELL	37303-6020-0222-000-610-00	MILD
RR-7606B	H260-01-003	HONEYWELL	37303-6020-0222-000-610-00	MILD
RR-9184A	W120-06-001	WESTINGHOUSE	PAM	MILD
RR-9184B	W120-06-002	WESTINGHOUSE	PAM	MILD
SPECIAL COAXIAL C*	R098-01-001	RAYCHEM	N/A	HARSH
SPLICING KITS	R098-02-001	RAYCHEM	WCSF-N	HARSH
SQ-5829A	G080-73-005	GE	565	MILD
SQ-5829B	G080-73-006	GE	565	MILD
SQ-7321A	G080-73-007	GE	565	MILD
SQ-7321B	G080-73-008	GE	565	MILD
SRM-4573A	G080-36-001	GE	194X400G17	MILD
SRM-4573B	G080-36-002	GE	194X400G17	MILD

EQUIPMENT QUALIFICATION SUMMARY INDEX

PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
SRM-4573C	G080-36-003	GE	194X400G17	MILD
SRM-4573D	G080-36-004	GE	194X400G17	MILD
SS-3236A	W120-01-001	WESTINGHOUSE		MILD
SS-3236B	W120-01-002	WESTINGHOUSE		MILD
SS-3237A	W120-01-003	WESTINGHOUSE		MILD
SS-3237B	W120-01-004	WESTINGHOUSE		MILD
SV-1804A	A499-34-010	ASCO	8320A6	MILD
SV-1804B	A499-34-011	ASCO	8320A6	MILD
SV-1840A	A499-34-012	ASCO	8320A6	MILD
SV-1840B	A499-34-013	ASCO	8320A6	MILD
SV-1855	A499-11-001	ASCO	HVA-90-405	MILD
SV-1856	A499-11-002	ASCO	HVA-90-405	MILD
SV-1868	A499-41-001	ASCO	8323-22	MILD
SV-1869	A499-41-002	ASCO	8323-22	MILD
SV-1942	T020-01-008	TARGET ROCK	72V AND 81K	HARSH
SV-1956A	A499-29-001	ASCO	8300A203U	MILD
SV-1956B	A499-29-002	ASCO	8300A203U	MILD
SV-1963	A499-34-006	ASCO	8320A6	HARSH
SV-1964	A499-03-001	ASCO	NP8320A173E	HARSH
SV-1966	A499-34-007	ASCO	8320A6	HARSH
SV-1972	T020-01-003	TARGET ROCK	72V AND 81K	HARSH
SV-1973	T020-01-004	TARGET ROCK	72V AND 81K	HARSH
SV-2033	A499-34-008	ASCO	8320A6	HARSH
SV-2034	A499-03-002	ASCO	NP8320A173E	HARSH
SV-2037	A499-34-009	ASCO	8320A6	HARSH
SV-2051	T020-01-005	TARGET ROCK	72V AND 81K	HARSH
SV-2052	T020-01-006	TARGET ROCK	72V AND 81K	HARSH
SV-2080	A499-02-028	ASCO	FT8321A5	MILD
SV-2081	A499-02-029	ASCO	FT8321A5	MILD
SV-2206	A499-22-001	ASCO	206	MILD
SV-2211	A499-22-002	ASCO	206	MILD
SV-2212	A499-22-003	ASCO	206	MILD
SV-2219	T020-01-007	TARGET ROCK	72V AND 81K	MILD
SV-2234	A499-22-004	ASCO	206	MILD
SV-2235	A499-22-005	ASCO	206	MILD
SV-2259	S212-01-001	SKINNER	L2DB5150	MILD
SV-3704	A499-12-001	ASCO	NP831665E	HARSH
SV-3705	A499-12-002	ASCO	NP831665E	HARSH
SV-3728	A499-12-003	ASCO	NP831665E	HARSH
SV-3729	A499-12-004	ASCO	NP831665E	HARSH
SV-4129A	A499-26-001	ASCO	8030A71	MILD
SV-4129B	A499-25-001	ASCO	8030A17	MILD
SV-4300	A499-01-021	ASCO	AT831665	MILD
SV-4300X	A499-12-008	ASCO	NP831665E	HARSH
SV-4301	A499-01-022	ASCO	AT831665	MILD
SV-4302	A499-01-013	ASCO	AT831665	MILD
SV-4302X	A499-12-009	ASCO	NP831665E	HARSH
SV-4303	A499-01-014	ASCO	AT831665	HARSH
SV-4304	A499-01-023	ASCO	AT831665	MILD

EQUIPMENT QUALIFICATION SUMMARY INDEX

PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
SV-4305	A499-01-024	ASCO	AT831665	MILD
SV-4306	A499-01-015	ASCO	AT831665	HARSH
SV-4307	A499-01-016	ASCO	AT831665	HARSH
SV-4308	A499-01-017	ASCO	AT831665	HARSH
SV-4309	A499-04-001	ASCO 8	8302625	HARSH
SV-4310	A499-12-010	ASCO	NP831665E	HARSH
SV-4311	A499-01-018	ASCO	AT831665	HARSH
SV-4312	A499-01-019	ASCO	AT831665	HARSH
SV-4313	A499-01-020	ASCO	AT831665	HARSH
SV-4331A	T020-01-030	TARGET ROCK	72V AND 81K	HARSH
SV-4331B	T020-01-031	TARGET ROCK	72V AND 81K	HARSH
SV-4332A	T020-01-032	TARGET ROCK	72V AND 81K	HARSH
SV-4332B	T020-01-033	TARGET ROCK	72V AND 81K	HARSH
SV-4333A	T020-01-034	TARGET ROCK	72V AND 81K	HARSH
SV-4333B	T020-01-035	TARGET ROCK	72V AND 81K	HARSH
SV-4334A	T020-01-036	TARGET ROCK	72V AND 81K	HARSH
SV-4334B	T020-01-037	TARGET ROCK	72V AND 81K	HARSH
SV-4371A	A499-01-026	ASCO	AT831665	MILD
SV-4371B	A499-12-005	ASCO	NP831665E	HARSH
SV-4371C	A499-01-027	ASCO	AT831665	MILD
SV-4378A	A499-01-028	ASCO	AT831665	MILD
SV-4378B	A499-01-029	ASCO	AT831665	MILD
SV-4400	A613-01-001	AUTOMATIC VALVE CO.	C5450-5	HARSH
SV-4402	A613-01-002	AUTOMATIC VALVE CO.	C5450-5	HARSH
SV-4405	A613-01-003	AUTOMATIC VALVE CO.	C5450-5	HARSH
SV-4406	A613-01-004	AUTOMATIC VALVE CO.	C5450-5	HARSH
SV-4412A	A499-15-003	ASCO	NP8320A183E	HARSH
SV-4412B	A499-18-009	ASCO	NP8323A36V	HARSH
SV-4412C	A499-18-001	ASCO	NP8323A36V	HARSH
SV-4413A	A499-15-004	ASCO	NP8320A183E	HARSH
SV-4413B	A499-18-010	ASCO	NP8323A36V	HARSH
SV-4413C	A499-18-002	ASCO	NP8323A36V	HARSH
SV-4415A	A499-15-005	ASCO	NP8320A183E	HARSH
SV-4415B	A499-18-011	ASCO	NP8323A36V	HARSH
SV-4415C	A499-18-003	ASCO	NP8323A36V	HARSH
SV-4416A	A499-15-006	ASCO	NP8320A183E	HARSH
SV-4416B	A499-18-012	ASCO	NP8323A36V	HARSH
SV-4416C	A499-18-004	ASCO	NP8323A36V	HARSH
SV-4418A	A499-15-007	ASCO	NP8320A183E	HARSH
SV-4418B	A499-18-013	ASCO	NP8323A36V	HARSH
SV-4418C	A499-18-005	ASCO	NP8323A36V	HARSH
SV-4419A	A499-15-008	ASCO	NP8320A183E	HARSH
SV-4419B	A499-18-014	ASCO	NP8323A36V	HARSH
SV-4419C	A499-18-006	ASCO	NP8323A36V	HARSH
SV-4420A	A499-15-009	ASCO	NP8320A183E	HARSH
SV-4420B	A499-18-015	ASCO	NP8323A36V	HARSH
SV-4420C	A499-18-007	ASCO	NP8323A36V	HARSH
SV-4421A	A499-15-010	ASCO	NP8320A183E	HARSH
SV-4421B	A499-18-016	ASCO	NP8323A36V	HARSH

EQUIPMENT QUALIFICATION SUMMARY INDEX

PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
SV-4421C	A499-18-008	ASCO	NP8323A36V	HARSH
SV-4639	A499-22-006	ASCO	206	HARSH
SV-4640	A499-04-002	ASCO 8	8302625	HARSH
SV-4909	A499-34-001	ASCO	8320A6	MILD
SV-4910A	A499-34-002	ASCO	8320A6	MILD
SV-4910B	A499-34-003	ASCO	8320A6	MILD
SV-4914	A499-34-004	ASCO	8320A6	MILD
SV-4915	A499-34-005	ASCO	8320A6	MILD
SV-5703A	A499-22-007	ASCO	206	HARSH
SV-5703B	A499-22-008	ASCO	206	HARSH
SV-5704A	A499-22-009	ASCO	206	HARSH
SV-5704B	A499-22-010	ASCO	206	HARSH
SV-5718A	A499-22-011	ASCO	206	HARSH
SV-5718B	A499-22-012	ASCO	206	HARSH
SV-5719A	A499-22-013	ASCO	206	HARSH
SV-5719B	A499-22-014	ASCO	206	HARSH
SV-5801A	A499-01-007	ASCO	AT831665	HARSH
SV-5801B	A499-01-008	ASCO	AT831665	HARSH
SV-5815A	A499-01-001	ASCO	AT831665	HARSH
SV-5815B	A499-01-002	ASCO	AT831665	HARSH
SV-5817A	A499-01-003	ASCO	AT831665	MILD
SV-5817B	A499-01-004	ASCO	AT831665	MILD
SV-5825A	A499-01-005	ASCO	AT831665	HARSH
SV-5825B	A499-01-006	ASCO	AT831665	HARSH
SV-5837A	A499-01-009	ASCO	AT831665	MILD
SV-5837B	A499-01-010	ASCO	AT831665	MILD
SV-6107A	A499-02-021	ASCO	FT8321A5	MILD
SV-6107B	A499-02-022	ASCO	FT8321A5	MILD
SV-6109A	A499-28-001	ASCO	8221A1	MILD
SV-6109B	A499-02-025	ASCO	FT8321A5	MILD
SV-6110A	A499-02-019	ASCO	FT8321A5	MILD
SV-6110B	A499-02-020	ASCO	FT8321A5	MILD
SV-6113A	J073-03-001	JOHNSON CONTROLS	V-24	MILD
SV-6113B	J073-03-002	JOHNSON CONTROLS	V-24	MILD
SV-6127A	A499-02-026	ASCO	FT8321A5	MILD
SV-6127B	A499-02-027	ASCO	FT8321A5	MILD
SV-7000A	J073-03-009	JOHNSON CONTROLS	V-24	MILD
SV-7000B	J073-03-010	JOHNSON CONTROLS	V-24	MILD
SV-7001A	J073-03-012	JOHNSON CONTROLS	V-24	MILD
SV-7001B	J073-03-011	JOHNSON CONTROLS	V-24	MILD
SV-7002A	J073-03-013	JOHNSON CONTROLS	V-24	MILD
SV-7002B	J073-03-014	JOHNSON CONTROLS	V-24	MILD
SV-7301A	A499-02-034	ASCO	FT8321A5	MILD
SV-7301B	A499-02-035	ASCO	FT8321A5	MILD
SV-7318A	A499-06-001	ASCO	HT-8300B9U	MILD
SV-7318B	A499-06-002	ASCO	HT-8300B9U	MILD
SV-7322A	A499-02-030	ASCO	FT8321A5	MILD
SV-7322B	A499-02-031	ASCO	FT8321A5	MILD
SV-7328A	A499-01-030	ASCO	AT831665	MILD

EQUIPMENT QUALIFICATION SUMMARY INDEX

PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
SV-7328B	A499-01-031	ASCO	AT831665	MILD
SV-7333A	A499-27-001	ASCO	8210B27	MILD
SV-7333B	A499-27-002	ASCO	8210B27	MILD
SV-7334A	A499-27-003	ASCO	8210B27	MILD
SV-7334B	A499-27-004	ASCO	8210B27	MILD
SV-7536	J073-03-003	JOHNSON CONTROLS	V-24	MILD
SV-7537	J073-03-004	JOHNSON CONTROLS	V-24	MILD
SV-7538A	J073-03-005	JOHNSON CONTROLS	V-24	MILD
SV-7538B	J073-03-006	JOHNSON CONTROLS	V-24	MILD
SV-7539A	J073-03-007	JOHNSON CONTROLS	V-24	MILD
SV-7539B	J073-03-008	JOHNSON CONTROLS	V-24	MILD
SV-7600A	A499-02-017	ASCO	FT8321A5	MILD
SV-7600B	A499-02-018	ASCO	FT8321A5	MILD
SV-7602A	A499-01-011	ASCO	AT831665	HARSH
SV-7602B	A499-01-012	ASCO	AT831665	HARSH
SV-7605A	A499-12-006	ASCO	NP831665E	HARSH
SV-7605B	A499-12-007	ASCO	NP831665E	HARSH
SV-7607A	A499-02-032	ASCO	FT8321A5	MILD
SV-7607B	A499-02-033	ASCO	FT8321A5	MILD
SV-7610A	A499-02-001	ASCO	FT8321A5	MILD
SV-7610B	A499-02-002	ASCO	FT8321A5	MILD
SV-7612A	A499-02-003	ASCO	FT8321A5	MILD
SV-7612B	A499-02-004	ASCO	FT8321A5	MILD
SV-7630A	A499-02-012	ASCO	FT8321A5	MILD
SV-7630B	A499-02-013	ASCO	FT8321A5	MILD
SV-7631A	A499-02-014	ASCO	FT8321A5	MILD
SV-7631B	A499-02-015	ASCO	FT8321A5	MILD
SV-7632A	A499-02-005	ASCO	FT8321A5	MILD
SV-7632B	A499-02-006	ASCO	FT8321A5	MILD
SV-7633A	A499-02-007	ASCO	FT8321A5	MILD
SV-7633B	A499-02-008	ASCO	FT8321A5	MILD
SV-7634A	A499-02-009	ASCO	FT8321A5	MILD
SV-7634B	A499-02-016	ASCO	FT8321A5	MILD
SV-7636A	A499-33-001	ASCO	8317A29	MILD
SV-7636B	A499-33-002	ASCO	8317A29	MILD
SV-7637A	A499-02-010	ASCO	FT8321A5	MILD
SV-7637B	A499-02-011	ASCO	FT8321A5	MILD
SV-7639A	A499-16-003	ASCO	NP8321A5E	MILD
SV-7639B	A499-16-004	ASCO	NP8321A5E	MILD
SV-7641A	A499-02-023	ASCO	FT8321A5	MILD
SV-7641B	A499-02-024	ASCO	FT8321A5	MILD
SV-8101A	T020-01-009	TARGET ROCK	72V AND 81K	HARSH
SV-8101B	T020-01-010	TARGET ROCK	72V AND 81K	HARSH
SV-8102A	T020-01-011	TARGET ROCK	72V AND 81K	HARSH
SV-8102B	T020-01-012	TARGET ROCK	72V AND 81K	HARSH
SV-8103A	T020-01-013	TARGET ROCK	72V AND 81K	HARSH
SV-8103B	T020-01-014	TARGET ROCK	72V AND 81K	HARSH
SV-8104A	T020-01-015	TARGET ROCK	72V AND 81K	HARSH
SV-8104B	T020-01-016	TARGET ROCK	72V AND 81K	HARSH

EQUIPMENT QUALIFICATION SUMMARY INDEX

PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
SV-8105A	T020-01-017	TARGET ROCK	72V AND 81K	HARSH
SV-8105B	T020-01-018	TARGET ROCK	72V AND 81K	HARSH
SV-8106A	T020-01-019	TARGET ROCK	72V AND 81K	HARSH
SV-8106B	T020-01-020	TARGET ROCK	72V AND 81K	HARSH
SV-8107A	T020-01-021	TARGET ROCK	72V AND 81K	HARSH
SV-8107B	T020-01-022	TARGET ROCK	72V AND 81K	HARSH
SV-8108A	T020-01-023	TARGET ROCK	72V AND 81K	HARSH
SV-8108B	T020-01-024	TARGET ROCK	72V AND 81K	HARSH
SV-8109A	T020-01-025	TARGET ROCK	72V AND 81K	HARSH
SV-8109B	T020-01-026	TARGET ROCK	72V AND 81K	HARSH
SV-8110A	T020-01-028	TARGET ROCK	72V AND 81K	HARSH
SV-8110B	T020-01-029	TARGET ROCK	72V AND 81K	HARSH
SV-8114A	A535-01-001	ATKOMATIC	31840	HARSH
SV-8114B	A535-01-002	ATKOMATIC	31840	HARSH
SV-8115A	A535-01-003	ATKOMATIC	31840	HARSH
SV-8115B	A535-01-004	ATKOMATIC	31840	HARSH
SV-8116A	A535-01-005	ATKOMATIC	31840	HARSH
SV-8116B	A535-01-006	ATKOMATIC	31840	HARSH
SV-8117A	A535-01-007	ATKOMATIC	31840	HARSH
SV-8117B	A535-01-008	ATKOMATIC	31840	HARSH
SV-8117C	A535-01-009	ATKOMATIC	31840	HARSH
SV-8117D	A535-01-010	ATKOMATIC	31840	HARSH
SV-8772A	T020-01-002	TARGET ROCK	72V AND 81K	HARSH
SV-8772B	T020-01-001	TARGET ROCK	72V AND 81K	HARSH
SV-8773A	A499-16-001	ASCO	NP8321A5E	HARSH
SV-8773B	A499-16-002	ASCO	NP8321A5E	HARSH
TDS-2085A	A001-09-001			MILD
TDS-2085B	A001-09-002			MILD
TDS-2260A	T287-01-001	TRANSMATION	610A	MILD
TDS-2260B	T287-01-002	TRANSMATION	610A	MILD
TDS-2445A	T287-02-001	TRANSMATION	630A	MILD
TDS-2445B	T287-02-002	TRANSMATION	630A	MILD
TDS-2521A	T287-02-003	TRANSMATION	630A	MILD
TDS-2521B	T287-02-004	TRANSMATION	630A	MILD
TDS-2521C	T287-02-005	TRANSMATION	630A	MILD
TDS-2521D	T287-02-006	TRANSMATION	630A	MILD
TDS-2743A	T287-02-007	TRANSMATION	630A	MILD
TDS-2743B	T287-02-008	TRANSMATION	630A	MILD
TDS-2743C	T287-02-009	TRANSMATION	630A	MILD
TDS-2743D	T287-02-010	TRANSMATION	630A	MILD
TDS-2743E	T287-02-011	TRANSMATION	630A	MILD
TDS-2743F	T287-02-012	TRANSMATION	630A	MILD
TDS-4451	R344-01-001	RI 8	86UTFF	MILD
TERMINAL BLOCKS	A000-02-001	AMERACE CORP	NQB	HARSH
TE-2082A	N070-02-025	NECI	N145C3023	MILD
TE-2082B	N070-02-027	NECI	N145C3023	MILD
TE-2083A	N070-02-030	NECI	N145C3023	MILD
TE-2083B	N070-02-026	NECI	N145C3023	MILD
TE-2084A	N070-02-028	NECI	N145C3023	MILD

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PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
TE-2084B	N070-02-029	NECI	N145C3023	MILD
TE-2262A	N070-02-001	NECI	N145C3023	HARSH
TE-2262B	N070-02-002	NECI	N145C3023	HARSH
TE-2263A	N070-02-003	NECI	N145C3023	HARSH
TE-2263B	N070-02-004	NECI	N145C3023	HARSH
TE-2264A	N070-02-005	NECI	N145C3023	HARSH
TE-2264B	N070-02-006	NECI	N145C3023	HARSH
TE-2265	N070-05-004	NECI	N145C3023	HARSH
TE-2446A	N070-02-007	NECI	N145C3023	MILD
TE-2446B	N070-02-008	NECI	N145C3023	MILD
TE-2447A	N070-02-009	NECI	N145C3023	MILD
TE-2447B	N070-02-010	NECI	N145C3023	MILD
TE-2451A	N070-02-011	NECI	N145C3023	MILD
TE-2451B	N070-02-012	NECI	N145C3023	MILD
TE-2453	N070-02-031	NECI	N145C3023	HARSH
TE-2522A	N070-02-013	NECI	N145C3023	HARSH
TE-2522B	N070-02-014	NECI	N145C3023	HARSH
TE-2522C	N070-02-015	NECI	N145C3023	HARSH
TE-2522D	N070-02-016	NECI	N145C3023	HARSH
TE-2523A	N070-02-017	NECI	N145C3023	HARSH
TE-2523B	N070-02-018	NECI	N145C3023	HARSH
TE-2523C	N070-02-019	NECI	N145C3023	HARSH
TE-2523D	N070-02-020	NECI	N145C3023	HARSH
TE-2526A	N070-02-021	NECI	N145C3023	HARSH
TE-2526B	N070-02-022	NECI	N145C3023	HARSH
TE-2526C	N070-02-023	NECI	N145C3023	HARSH
TE-2526D	N070-02-024	NECI	N145C3023	HARSH
TE-2742A	N070-04-001	NECI	N145C3224	HARSH
TE-2742B	N070-04-002	NECI	N145C3224	HARSH
TE-2742C	N070-04-003	NECI	N145C3224	HARSH
TE-2742D	N070-04-004	NECI	N145C3224	HARSH
TE-2742E	N070-04-005	NECI	N145C3224	HARSH
TE-2742F	N070-04-006	NECI	N145C3224	HARSH
TE-2743A	N070-04-018	NECI	N145C3224	HARSH
TE-2743B	N070-04-007	NECI	N145C3224	HARSH
TE-2743C	N070-04-008	NECI	N145C3224	HARSH
TE-2743D	N070-04-009	NECI	N145C3224	HARSH
TE-2743E	N070-04-010	NECI	N145C3224	HARSH
TE-2743F	N070-04-011	NECI	N145C3224	HARSH
TE-2744A	N070-04-012	NECI	N145C3224	HARSH
TE-2744B	N070-04-013	NECI	N145C3224	HARSH
TE-2744C	N070-04-014	NECI	N145C3224	HARSH
TE-2744D	N070-04-015	NECI	N145C3224	HARSH
TE-2744E	N070-04-016	NECI	N145C3224	HARSH
TE-2744F	N070-04-017	NECI	N145C3224	HARSH
TE-3724	A001-10-001	LATER L	LATER	HARSH
TE-4328A	L130-01-001	LEEDS & NORTHRUP	8197-10-S	HARSH
TE-4328B	L130-01-002	LEEDS & NORTHRUP	8197-10-S	HARSH
TE-4328C	L130-01-003	LEEDS & NORTHRUP	8197-10-S	HARSH

EQUIPMENT QUALIFICATION SUMMARY INDEX

PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
TE-4328D	L130-01-004	LEEDS & NORTHRUP	8197-10-S	HARSH
TE-4328E	L130-01-005	LEEDS & NORTHRUP	8197-10-S	HARSH
TE-4328F	L130-01-006	LEEDS & NORTHRUP	8197-10-S	HARSH
TE-4328G	L130-01-007	LEEDS & NORTHRUP	8197-10-S	HARSH
TE-4328H	L130-01-008	LEEDS & NORTHRUP	8197-10-S	HARSH
TE-4328J	L130-01-009	LEEDS & NORTHRUP	8197-10-S	HARSH
TE-4328K	L130-01-010	LEEDS & NORTHRUP	8197-10-S	HARSH
TE-4328L	L130-01-011	LEEDS & NORTHRUP	8197-10-S	HARSH
TE-4328M	L130-01-012	LEEDS & NORTHRUP	8197-10-S	HARSH
TE-4386A	L130-02-001	LEEDS & NORTHRUP	8920-404-00-3-21	HARSH
TE-4386B	L130-02-002	LEEDS & NORTHRUP	8920-404-00-3-21	HARSH
TE-4386C	L130-02-003	LEEDS & NORTHRUP	8920-404-00-3-21	HARSH
TE-4386D	L130-02-004	LEEDS & NORTHRUP	8920-404-00-3-21	HARSH
TE-4386E	L130-02-005	LEEDS & NORTHRUP	8920-404-00-3-21	HARSH
TE-4386F	L130-02-006	LEEDS & NORTHRUP	8920-404-00-3-21	HARSH
TE-4386G	L130-02-007	LEEDS & NORTHRUP	8920-404-00-3-21	HARSH
TE-4386H	L130-02-008	LEEDS & NORTHRUP	8920-404-00-3-21	HARSH
TE-4386J	L130-02-009	LEEDS & NORTHRUP	8920-404-00-3-21	HARSH
TE-4386K	L130-02-010	LEEDS & NORTHRUP	8920-404-00-3-21	HARSH
TE-4386L	L130-02-011	LEEDS & NORTHRUP	8920-404-00-3-21	HARSH
TE-4386M	L130-02-012	LEEDS & NORTHRUP	8920-404-00-3-21	HARSH
TE-4400	N070-06-001	NECI 1	110-5009-00345	HARSH
TE-4401	N070-06-002	NECI 1	110-5009-00345	HARSH
TE-4402	N070-06-003	NECI 1	110-5009-00345	HARSH
TE-4403	N070-06-004	NECI 1	110-5009-00345	HARSH
TE-4404	N070-06-005	NECI 1	110-5009-00345	HARSH
TE-4405	N070-06-006	NECI 1	110-5009-00345	HARSH
TE-4406	N070-06-007	NECI 1	110-5009-00345	HARSH
TE-4407	N070-06-008	NECI 1	110-5009-00345	HARSH
TE-4443A	R369-01-001	ROSEMOUNT	104MA23ABBB	HARSH
TE-4443B	R369-01-002	ROSEMOUNT	104MA23ABBB	HARSH
TE-4443C	R369-01-003	ROSEMOUNT	104MA23ABBB	HARSH
TE-4443D	R369-01-004	ROSEMOUNT	104MA23ABBB	HARSH
TE-4444A	R369-01-005	ROSEMOUNT	104MA23ABBB	HARSH
TE-4444B	R369-01-006	ROSEMOUNT	104MA23ABBB	HARSH
TE-4444C	R369-01-007	ROSEMOUNT	104MA23ABBB	HARSH
TE-4444D	R369-01-008	ROSEMOUNT	104MA23ABBB	HARSH
TE-4445A	R369-01-009	ROSEMOUNT	104MA23ABBB	HARSH
TE-4445B	R369-01-010	ROSEMOUNT	104MA23ABBB	HARSH
TE-4445C	R369-01-011	ROSEMOUNT	104MA23ABBB	HARSH
TE-4445D	R369-01-012	ROSEMOUNT	104MA23ABBB	HARSH
TE-4446A	R369-01-013	ROSEMOUNT	104MA23ABBB	HARSH
TE-4446B	R369-01-014	ROSEMOUNT	104MA23ABBB	HARSH
TE-4446C	R369-01-015	ROSEMOUNT	104MA23ABBB	HARSH
TE-4446D	R369-01-016	ROSEMOUNT	104MA23ABBB	HARSH
TE-4447	N070-05-001	NECI	N145C3023	HARSH
TE-4451A	N070-05-002	NECI	N145C3023	HARSH
TE-4451B	N070-05-003	NECI	N145C3023	HARSH
TE-4477A	R369-01-017	ROSEMOUNT	104MA23ABBB	HARSH

EQUIPMENT QUALIFICATION SUMMARY INDEX

PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
TE-4477B	R369-01-018	ROSEMOUNT	104MA23ABBB	HARSH
TE-4478A	R369-01-019	ROSEMOUNT	104MA23ABBB	HARSH
TE-4478B	R369-01-020	ROSEMOUNT	104MA23ABBB	HARSH
TE-4479A	R369-01-021	ROSEMOUNT	104MA23ABBB	HARSH
TE-4479B	R369-01-022	ROSEMOUNT	104MA23ABBB	HARSH
TE-4480A	R369-01-023	ROSEMOUNT	104MA23ABBB	HARSH
TE-4480B	R369-01-024	ROSEMOUNT	104MA23ABBB	HARSH
TE-5805A	G315-01-001	GULTON INDUSTRIES	TCA-0646	HARSH
TE-5805B	G315-01-002	GULTON INDUSTRIES	TCA-0646	HARSH
TE-5805U	G315-01-003	GULTON INDUSTRIES	TCA-0646	HARSH
TE-5805V	G315-01-004	GULTON INDUSTRIES	TCA-0646	HARSH
TE-5805W	G315-01-005	GULTON INDUSTRIES	TCA-0646	HARSH
TE-5805X	G315-01-006	GULTON INDUSTRIES	TCA-0646	HARSH
TE-7304A	C251-03-002	CHANNEL MASTER	CNOF-76D	MILD
TE-7304B	C251-03-001	CHANNEL MASTER	CNOF-76D	MILD
TIC-7538A	P129-05-001	PENN	T2J-1	MILD
TIC-7538B	P129-05-002	PENN	T2J-1	MILD
TIS-3724	G080-39-001	GE	195	MILD
TIS-4443	R369-02-001	ROSEMOUNT	3000A-1-4-2-20	MILD
TIS-4444	R369-02-002	ROSEMOUNT	3000A-1-4-2-20	MILD
TIS-4445	R369-02-003	ROSEMOUNT	3000A-1-4-2-20	MILD
TIS-4446	R369-02-004	ROSEMOUNT	3000A-1-4-2-20	MILD
TIS-4477	R369-02-005	ROSEMOUNT	3000A-1-4-2-20	MILD
TIS-4478	R369-02-006	ROSEMOUNT	3000A-1-4-2-20	MILD
TIS-4479	R369-02-007	ROSEMOUNT	3000A-1-4-2-20	MILD
TIS-4480	R369-02-008	ROSEMOUNT	3000A-1-4-2-20	MILD
TI-4328	L130-03-001	LEEDS & NORTHRUP	900	MILD
TI-5805A	G080-35-022	GE	180	MILD
TI-5805B	G080-35-023	GE	180	MILD
TI-5822A	W124-01-001	METER WESTON	2031	MILD
TI-5822B	W124-01-002	METER WESTON	2031	MILD
TI-5838A	G080-35-024	GE	180	MILD
TI-5838B	G080-35-025	GE	180	MILD
TR-4383A	H260-01-011	HONEYWELL	37303-6020-0222-000-610-00	MILD
TR-4383B	H260-01-012	HONEYWELL	37303-6020-0222-000-610-00	MILD
TR-4383C	H260-01-013	HONEYWELL	37303-6020-0222-000-610-00	MILD
TR-4386A	H260-01-014	HONEYWELL	37303-6020-0222-000-610-00	MILD
TR-4386B	H260-01-016	HONEYWELL	37303-6020-0222-000-610-00	MILD
TR-4400	G080-26-001	GE H	HG	MILD
TS-2082B	A001-08-002			MILD
TS-2261A	T287-01-003	TRANSMATION	610A	MILD
TS-2261B	T287-01-004	TRANSMATION	610A	MILD
TS-2265	T287-01-005	TRANSMATION	610A	MILD
TS-2450A	T287-01-006	TRANSMATION	610A	MILD
TS-2450B	T287-01-007	TRANSMATION	610A	MILD
TS-2453	T287-01-008	TRANSMATION	610A	MILD
TS-2526A	T287-01-009	TRANSMATION	610A	MILD
TS-2526B	T287-01-010	TRANSMATION	610A	MILD
TS-2526C	T287-01-011	TRANSMATION	610A	MILD

EQUIPMENT QUALIFICATION SUMMARY INDEX

PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
TS-2526D	T287-01-012	TRANSMATION	610A	MILD
TS-2742A	T287-01-013	TRANSMATION	610A	MILD
TS-2742B	T287-01-014	TRANSMATION	610A	MILD
TS-2742C	T287-01-015	TRANSMATION	610A	MILD
TS-2742D	T287-01-016	TRANSMATION	610A	MILD
TS-2742E	T287-01-017	TRANSMATION	610A	MILD
TS-2742F	T287-01-018	TRANSMATION	610A	MILD
TS-3226	F081-01-001	FENWAL	27020	MILD
TS-3227	F081-01-002	FENWAL	27020	MILD
TS-4447	T287-01-019	TRANSMATION	610A	MILD
TS-5805A	G080-69-009	GE	560	MILD
TS-5805B	G080-69-010	GE	560	MILD
TS-5808A	P129-02-001	PENN	A-19ABB-6	HARSH
TS-5808B	P129-02-002	PENN	A-19ABB-6	HARSH
TS-5836A	I045-01-001	INDUSTRIAL ENG.$EQUIPMENT C*	CT32-23	HARSH
TS-5836B	I045-01-002	INDUSTRIAL ENG.$EQUIPMENT C*	CT32-23	HARSH
TS-6124A	P129-01-001	PENN	A-19AAF-20	MILD
TS-6124B	P129-01-002	PENN	A-19AAF-20	MILD
TS-7304A	C251-01-001	CHANNEL MASTER	ARC290	MILD
TS-7304B	C251-01-002	CHANNEL MASTER	ARC290	MILD
TS-7538C	P129-05-003	PENN	T2J-1	MILD
TS-7538D	P129-05-004	PENN	T2J-1	MILD
TS-7540A	P129-02-003	PENN	A-19ABB-6	MILD
TS-7540B	P129-02-004	PENN	A-19ABB-6	MILD
TS-7701	C332-02-001	CHROMALOX	972D	MILD
TS-7702	C332-02-002	CHROMALOX	972D	MILD
TS-7703	C332-02-003	CHROMALOX	972D	MILD
TS-7704	C332-02-004	CHROMALOX	972D	MILD
TS-7705	C332-02-005	CHROMALOX	972D	MILD
TS-7706	C332-02-006	CHROMALOX	972D	MILD
TS-7707	C332-02-007	CHROMALOX	972D	MILD
TS-7708	C332-02-008	CHROMALOX	972D	MILD
TT-4386A	H260-05-001	HONEYWELL	39521-4010-912-00-00	MILD
TT-4386B	H260-05-002	HONEYWELL	39521-4010-912-00-00	MILD
TT-4386C	H260-05-003	HONEYWELL	39521-4010-912-00-00	MILD
TT-4386D	H260-05-004	HONEYWELL	39521-4010-912-00-00	MILD
TT-4386E	H260-05-005	HONEYWELL	39521-4010-912-00-00	MILD
TT-4386F	H260-05-006	HONEYWELL	39521-4010-912-00-00	MILD
TT-4386G	H260-05-007	HONEYWELL	39521-4010-912-00-00	MILD
TT-4386H	H260-05-008	HONEYWELL	39521-4010-912-00-00	MILD
TT-4386I	H260-05-009	HONEYWELL	39521-4010-912-00-00	MILD
TT-4386J	H260-05-010	HONEYWELL	39521-4010-912-00-00	MILD
TT-4386K	H260-05-011	HONEYWELL	39521-4010-912-00-00	MILD
TT-4386L	H260-05-012	HONEYWELL	39521-4010-912-00-00	MILD
TT-4386M	H260-05-013	HONEYWELL	39521-4010-912-00-00	MILD
TT-5805A	G080-57-001	GE	550	MILD
TT-5805B	G080-57-002	GE	550	MILD
TT-5838A	G080-57-003	GE	550	MILD
TT-5838B	G080-57-004	GE	550	MILD

EQUIPMENT QUALIFICATION SUMMARY INDEX

PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
ZM-1947	G080-56-001	GE	543151AAAZZ	MILD
ZM-2046	G080-56-002	GE	543151AAAZZ	MILD
ZS-1076A	N007-01-001	NAMCO	D-2400X-R1	MILD
ZS-1076B	N007-01-002	NAMCO	D-2400X-R1	MILD
ZS-1076C	N007-01-003	NAMCO	D-2400X-R1	MILD
ZS-1076D	N007-01-004	NAMCO	D-2400X-R1	MILD
ZS-1906A	N007-03-009	NAMCO	EA 740	HARSH
ZS-1906B	N007-07-002	NAMCO	SL-2C-11	HARSH
ZS-1972	T020-02-001	TARGET ROCK	72V001 (ZS)	HARSH
ZS-1973	T020-02-002	TARGET ROCK	72V001 (ZS)	HARSH
ZS-2002A	N007-07-001	NAMCO	SL-2C-11	HARSH
ZS-2002B	N007-03-010	NAMCO	EA 740	HARSH
ZS-2051	T020-02-003	TARGET ROCK	72V001 (ZS)	HARSH
ZS-2052	T020-02-004	TARGET ROCK	72V001 (ZS)	HARSH
ZS-2201	N007-02-001	NAMCO	D1200G-2	MILD
ZS-2211	N007-06-004	NAMCO	SAI-31	HARSH
ZS-2212	N007-06-005	NAMCO	SAI-31	HARSH
ZS-2234	N007-05-001	NAMCO	SAI-131	HARSH
ZS-2235	N007-05-002	NAMCO	SAI-131	HARSH
ZS-2435	N007-05-003	NAMCO	SAI-131	HARSH
ZS-2436	N007-05-004	NAMCO	SAI-131	HARSH
ZS-2902	L200-04-002	LIMITORQUE	SMB-000-2	MILD
ZS-2903	L200-04-004	LIMITORQUE	SMB-000-2	MILD
ZS-3704	M302-02-001	MICRO SWITCH	DTF2-2RN-RH	HARSH
ZS-3705	M302-02-002	MICRO SWITCH	DTF2-2RN-RH	HARSH
ZS-3728	M302-02-003	MICRO SWITCH	DTF2-2RN-RH	HARSH
ZS-3729	M302-02-004	MICRO SWITCH	DTF2-2RN-RH	HARSH
ZS-4300	M302-03-014	MICRO SWITCH	OPD-AR	MILD
ZS-4301	M302-03-012	MICRO SWITCH	OPD-AR	HARSH
ZS-4302	M302-03-013	MICRO SWITCH	OPD-AR	MILD
ZS-4303	M302-03-001	MICRO SWITCH	OPD-AR	HARSH
ZS-4304	M302-03-015	MICRO SWITCH	OPD-AR	HARSH
ZS-4305	M302-03-007	MICRO SWITCH	OPD-AR	HARSH
ZS-4306	M302-03-002	MICRO SWITCH	OPD-AR	HARSH
ZS-4307	M302-03-003	MICRO SWITCH	OPD-AR	HARSH
ZS-4308	M302-03-004	MICRO SWITCH	OPD-AR	HARSH
ZS-4309	N007-06-006	NAMCO	SAI-31	HARSH
ZS-4310	N007-06-003	NAMCO	SAI-31	HARSH
ZS-4311	M302-02-005	MICRO SWITCH	DTF2-2RN-RH	HARSH
ZS-4312	M302-02-006	MICRO SWITCH	DTF2-2RN-RH	HARSH
ZS-4313	M302-02-007	MICRO SWITCH	DTF2-2RN-RH	HARSH
ZS-4412	N007-03-001	NAMCO	EA 740	MILD
ZS-4413	N007-03-002	NAMCO	EA 740	HARSH
ZS-4415	N007-03-003	NAMCO	EA 740	HARSH
ZS-4416	N007-03-004	NAMCO	EA 740	HARSH
ZS-4418	N007-03-005	NAMCO	EA 740	HARSH
ZS-4419	N007-03-006	NAMCO	EA 740	HARSH
ZS-4420	N007-03-007	NAMCO	EA 740	HARSH
ZS-4421	N007-03-008	NAMCO	EA 740	HARSH

EQUIPMENT QUALIFICATION SUMMARY INDEX

PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
ZS-4639	N007-06-007	NAMCO	SAI-31	HARSH
ZS-4640	N007-05-005	NAMCO	SAI-131	HARSH
ZS-5703A	M302-02-008	MICRO SWITCH	DTF2-2RN-RH	HARSH
ZS-5703B	M302-02-009	MICRO SWITCH	DTF2-2RN-RH	HARSH
ZS-5704A	M302-02-010	MICRO SWITCH	DTF2-2RN-RH	HARSH
ZS-5704B	M302-02-011	MICRO SWITCH	DTF2-2RN-RH	HARSH
ZS-5718A	M302-02-012	MICRO SWITCH	DTF2-2RN-RH	HARSH
ZS-5718B	M302-02-013	MICRO SWITCH	DTF2-2RN-RH	HARSH
ZS-5719A	M302-02-014	MICRO SWITCH	DTF2-2RN-RH	HARSH
ZS-5719B	M302-02-015	MICRO SWITCH	DTF2-2RN-RH	HARSH
ZS-5817A	M302-03-016	MICRO SWITCH	OPD-AR	MILD
ZS-5817B	M302-03-017	MICRO SWITCH	OPD-AR	MILD
ZS-5825A	M302-03-018	MICRO SWITCH	OPD-AR	HARSH
ZS-5825B	M302-03-019	MICRO SWITCH	OPD-AR	HARSH
ZS-7602A	M302-03-008	MICRO SWITCH	OPD-AR	HARSH
ZS-7602B	M302-03-009	MICRO SWITCH	OPD-AR	HARSH
ZS-7604U	M302-03-010	MICRO SWITCH	OPD-AR	MILD
ZS-7604V	M302-03-011	MICRO SWITCH	OPD-AR	MILD
ZS-7610A	M302-04-001	MICRO SWITCH L	LATER	MILD
ZS-7610B	M302-04-002	MICRO SWITCH L	LATER	MILD
ZS-7612A	M302-04-003	MICRO SWITCH L	LATER	MILD
ZS-7612B	M302-04-004	MICRO SWITCH L	LATER	MILD
ZS-7630A	M302-01-015	MICRO SWITCH	BZE6-2RN	MILD
ZS-7630B	M302-01-010	MICRO SWITCH	BZE6-2RN	MILD
ZS-7631A	M302-01-004	MICRO SWITCH	BZE6-2RN	MILD
ZS-7631B	M302-01-005	MICRO SWITCH	BZE6-2RN	MILD
ZS-7632A	M302-01-006	MICRO SWITCH	BZE6-2RN	MILD
ZS-7632B	M302-01-007	MICRO SWITCH	BZE6-2RN	MILD
ZS-7633A	M302-01-008	MICRO SWITCH	BZE6-2RN	MILD
ZS-7633B	M302-01-009	MICRO SWITCH	BZE6-2RN	MILD
ZS-7634A	M302-01-011	MICRO SWITCH	BZE6-2RN	MILD
ZS-7634B	M302-01-012	MICRO SWITCH	BZE6-2RN	MILD
ZS-7636A	M302-01-013	MICRO SWITCH	BZE6-2RN	MILD
ZS-7636B	M302-01-014	MICRO SWITCH	BZE6-2RN	MILD
ZS-7641A	M302-03-005	MICRO SWITCH	OPD-AR	MILD
ZS-7641B	M302-03-006	MICRO SWITCH	OPD-AR	MILD
ZS-8773A	N007-04-001	NAMCO	EA170-41302	HARSH
ZS-8773B	N007-04-002	NAMCO	EA170-41302	HARSH
ZT-1947	L200-99-001	LIMITORQUE	NONE	HARSH
ZT-2046	L200-99-002	LIMITORQUE	NONE	HARSH
1A3	G080-24-001	GE	HFA-511	MILD
1A4	G080-24-002	GE	HFA-511	MILD
1B20	I202-08-001	ITE IMPERIAL	47855-B1	MILD
1B21	A180-04-001	ALLIS-CHALMERS	VALUELINE	MILD
1B3	I202-05-001	ITE IMPERIAL	47844-A	MILD
1B32	A180-04-002	ALLIS-CHALMERS	VALUELINE	MILD
1B34	A180-03-001	ALLIS-CHALMERS	MARK 1	MILD
1B34A	A180-04-003	ALLIS-CHALMERS	VALUELINE	MILD
1B36	A180-04-004	ALLIS-CHALMERS	VALUELINE	MILD

EQUIPMENT QUALIFICATION SUMMARY INDEX

PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
1B37	A180-04-005	ALLIS-CHALMERS	VALUELINE	MILD
1B4	I202-06-001	ITE IMPERIAL	47844-B	MILD
1B42	A180-04-006	ALLIS-CHALMERS	VALUELINE	MILD
1B44	A180-03-002	ALLIS-CHALMERS	MARK 1	MILD
1B44A	A180-04-007	ALLIS-CHALMERS	VALUELINE	MILD
1B46	A180-03-003	ALLIS-CHALMERS	MARK 1	MILD
1B9	I202-07-001	ITE IMPERIAL	47855-A3	MILD
1B91	A180-04-008	ALLIS-CHALMERS	VALUELINE	MILD
1C-218A	C503-01-001	COMSIP	K-IV	MILD
1C-218B	C503-01-002	COMSIP	K-IV	MILD
1C77A	G080-99-030	GE		MILD
1C77B	G080-99-031	GE		MILD
1C77C	G080-99-032	GE		MILD
1C77D	G080-99-033	GE		MILD
1C77E	G080-99-034	GE		MILD
1C77F	G080-99-035	GE		MILD
1D1	G182-03-001	GOULD	FPS-13	MILD
1D10	D102-01-001	DELTA SWITCHBOARD	33431 TYPE CDP	MILD
1D11	D102-01-002	DELTA SWITCHBOARD	33431 TYPE CDP	MILD
1D12	P319-02-001	POWER CON-VERSION PRODUCTS	3M-130-75	MILD
1D120	P319-02-002	POWER CON-VERSION PRODUCTS	3M-130-75	MILD
1D13	D102-01-003	DELTA SWITCHBOARD	33431 TYPE CDP	MILD
1D14	I202-03-001	ITE	85-71170	MILD
1D2	G182-03-002	GOULD	FPS-13	MILD
1D20	D102-01-004	DELTA SWITCHBOARD	33431 TYPE CDP	MILD
1D21	D102-03-001	DELTA SWITCHBOARD	33431 TYPE NHDP	MILD
1D22	P319-02-003	POWER CON-VERSION PRODUCTS	3M-130-75	MILD
1D23	D102-03-002	DELTA SWITCHBOARD	33431 TYPE NHDP	MILD
1D4	G182-02-001	GOULD	FPS-A	MILD
1D40	D102-01-005	DELTA SWITCHBOARD	33431 TYPE CDP	MILD
1D41	I202-01-001	ITE	SERIES 9600	MILD
1D42	I202-03-002	ITE	85-71170	MILD
1D43	P319-03-001	POWER CON-VERSION PRODUCTS	3M-260-75	MILD
1D44	P319-04-001	POWER CON-VERSION PRODUCTS	3M-280-75	MILD
1D5	G182-01-001	GOULD	DPR11	MILD
1D50	D102-02-001	DELTA SWITCHBOARD	33431 TYPE NA1B	MILD
1D51	P319-01-001	POWER CON-VERSION PRODUCTS	S-24-25	MILD
1D52	P319-01-002	POWER CON-VERSION PRODUCTS	S-24-25	MILD
1D6	G182-03-003	GOULD	FPS-13	MILD
1D60	D102-02-002	DELTA SWITCHBOARD	33431 TYPE NA1B	MILD
1D61	P319-01-003	POWER CON-VERSION PRODUCTS	S-24-25	MILD
1D62	P319-01-004	POWER CON-VERSION PRODUCTS	S-24-25	MILD
1F-36A	R165-01-001	RELIANCE	P1461403	MILD
1F-36B	R165-01-002	RELIANCE	P1461403	MILD
1G-21	C470-02-001	COLT INDUSTRIES	50-44-24	MILD
1G-31	C470-02-002	COLT INDUSTRIES	50-44-24	MILD
1K-25A	S188-01-001	SIEMENS	2CH6 041-U	HARSH
1K-25B	S188-01-002	SIEMENS	2CH6 041-U	HARSH
1P-112A	G200-01-001	GOULD PUMPS, INC.	3196MT	MILD

EQUIPMENT QUALIFICATION SUMMARY INDEX

PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
1P-112B	G200-01-002	GOULD PUMPS, INC.	3196MT	MILD
1P-117A	L095-03-001	LAYNE & BOWLER PUMP COMPAN	M-10	MILD
1P-117B	L095-03-002	LAYNE & BOWLER PUMP COMPAN	M-10	MILD
1P-117C	L095-03-003	LAYNE & BOWLER PUMP COMPAN	M-10	MILD
1P-117D	L095-03-004	LAYNE & BOWLER PUMP COMPAN	M-10	MILD
1P-132A	C665-01-001	CRANE COMPANY	GA-1K-ISO	MILD
1P-132B	C665-01-002	CRANE COMPANY	GA-1K-ISO	MILD
1P-211A	G080-46-001	GE	5K6336XC229A	HARSH
1P-211B	G080-46-002	GE	5K6336XC229A	HARSH
1P-218	G080-32-001	GE	1T-1D	MILD
1P-219	G080-28-001	GE	L182AY	MILD
1P-22A	L095-02-001	LAYNE & BOWLER	D30841-A	MILD
1P-22B	L095-02-002	LAYNE & BOWLER	D30841-A	MILD
1P-22C	L095-02-003	LAYNE & BOWLER	D30841-A	MILD
1P-22D	L095-02-004	LAYNE & BOWLER	D30841-A	MILD
1P-229A	G080-45-001	GE	5K6336XC213A	HARSH
1P-229B	G080-45-002	GE	5K6336XC213A	HARSH
1P-229C	G080-45-003	GE	5K6336XC213A	HARSH
1P-229D	G080-45-004	GE	5K6336XC213A	HARSH
1P-233	G080-43-001	GE	5CD14D13 A900019	MILD
1P-28A	T240-01-001	TOKYO SHIBAURA	MB-301	MILD
1P-28B	T240-01-002	TOKYO SHIBAURA	MB-301	MILD
1P-29A	T240-02-001	TOKYO SHIBAURA	MB-302	MILD
1P-29B	T240-01-003	TOKYO SHIBAURA	MB-301	MILD
1P-44A	C665-02-001	CRANE CO.	GA-1K-150	MILD
1P-44B	C665-02-002	CRANE CO.	GA-1K-150	MILD
1P-99A	L095-01-001	LAYNE & BOWLER	D30839	MILD
1P-99B	L095-01-002	LAYNE & BOWLER	D30839	MILD
1S-122A	G080-42-001	GE	47C518675	HARSH
1S-122B	G080-42-002	GE	47C518675	HARSH
1S-122C	G080-42-003	GE	47C518675	HARSH
1S-122D	G080-42-004	GE	47C518675	HARSH
1S-201	T147-01-001	TERRY TURBINE	G.E. ORDER NO.$205AA872 T*	MILD
1S-85A	G080-44-001	GE	5K42F6	MILD
1S-85B	G080-44-002	GE	5K42F6	MILD
1T-6924A	G080-82-001	GE	9173028	MILD
1T-6924B	G080-83-001	GE	9173029	MILD
1V-AC-11	W120-05-001	WESTINGHOUSE	7302	HARSH
1V-AC-12	W120-05-002	WESTINGHOUSE	7302	HARSH
1V-AC-14A	W120-05-003	WESTINGHOUSE	7302	HARSH
1V-AC-14B	W120-05-004	WESTINGHOUSE	7302	HARSH
1V-AC-30A	P295-02-001	H.K. PORTER	F1R-(P270)-23.0	MILD
1V-AC-30B	P295-02-002	H.K. PORTER	F1R-(P270)-23.0	MILD
1V-AC-32	P295-01-001	H.K. PORTER	C1H-447APR	MILD
1V-CP-30A	G200-01-003	GOULD PUMPS, INC.	3196MT	MILD
1V-CP-30B	G200-01-004	GOULD PUMPS, INC.	3196MT	MILD
1V-EF-15A	L280-01-002	LOUIS-ALLIS COMPANY	C064B	HARSH
1V-EF-15B	L280-01-003	LOUIS-ALLIS COMPANY	C064B	HARSH
1V-EF-18A	J073-01-007	JOHNSON CONTROLS	N-6810	MILD

EQUIPMENT QUALIFICATION SUMMARY INDEX

PLANT ID	EQUIPMENT ID	MANUFACTURER	MODEL	ENVIRONMENT
1V-EF-18B	J073-01-008	JOHNSON CONTROLS	N-6810	MILD
1V-EF-30A	G080-27-001	GE	K32EG273	MILD
1V-EF-30B	G080-27-002	GE	K32EG273	MILD
1V-EF-30C	G080-27-003	GE	K32EG273	MILD
1V-EF-33	L280-01-001	LOUIS-ALLIS COMPANY	C064B	MILD
1V-RF-30A	P295-03-001	H.K. PORTER	N1R	MILD
1V-RF-30B	P295-03-002	H.K. PORTER	N1R	MILD
1V-SF-20	J127-04-001	JOY	SF-31060, SERIES 1000	MILD
1V-SF-21	J127-05-001	JOY	SF-3160-1, SERIES 1000	MILD
1V-SF-30A	A180-01-001	ALLIS-CHALMERS	COC64B	MILD
1V-SF-30B	A180-01-002	ALLIS-CHALMERS	COC64B	MILD
1V-SF-50	J127-02-001	JOY	SF-302060, SERIES 1000	MILD
1V-SF-51	J127-03-001	JOY	SF-302061, SERIES 1000	MILD
1V-SF-56A	J127-01-001	JOY	SF-29448, SERIES 1000	MILD
1V-SF-56B	J127-01-002	JOY	SF-29448, SERIES 1000	MILD
1V-UH-52A	C332-01-001	CHROMALOX	LUH12-18	MILD
1V-UH-52B	C332-01-002	CHROMALOX	LUH12-18	MILD
1V-UH-52C	C332-01-003	CHROMALOX	LUH12-18	MILD
1V-UH-52D	C332-01-004	CHROMALOX	LUH12-18	MILD
1V-UH-52E	C332-01-005	CHROMALOX	LUH12-18	MILD
1V-UH-52F	C332-01-006	CHROMALOX	LUH12-18	MILD
1V-UH-52G	C332-01-007	CHROMALOX	LUH12-18	MILD
1V-UH-52H	C332-01-008	CHROMALOX	LUH12-18	MILD
1X20	I202-02-001	ITE	47855	MILD
1X31	I202-04-001	ITE IMPERIAL	46787	MILD
1X41	I202-04-002	ITE IMPERIAL	46787	MILD
1X91	I202-02-002	ITE	47855	MILD
1Y-30	G080-25-001	GE C	CR105P002	MILD
5KV CABLE	K080-01-001	KERITE	HT KERITE WITH$NS JACKET	HARSH
600V CABLE	0004-01-001	OKONITE	NA	HARSH

EQUIPMENT QUALIFICATION

SUMMARY SHEETS

A000-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

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EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: TERMINAL BLOCKS Manufacturer: AMERACE CORP Model Number: NQB	Operating Time	30 DAYS		SEE NOTE (1)	001		REF A,B	TYPE TEST/ ANAL	NONE
	Temperature (°F)	SEE GEN NOTE 6		346	001		REF A,B	TYPE TEST	NONE
	Pressure (PSIG)	SEE GEN NOTE 6		113	001		REF A,B	TYPE TEST	NONE
	Relative Humidity (%)	100		100	001		REF A,B	TYPE TEST	NONE
	Chemical Spray	DEMIN WATER		SEE NOTE (1)	001		REF A,B	TYPE TEST	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	4.3 E07		2.0 E08	001		REF A,B	TYPE TEST	NONE
	Aging	LATER		---	---		---	---	SEE NOTE (2)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A . QUALIFICATION TESTS OF TERMINAL AND FUSE BLOCKS DATED JULY 17, 1980 FOR CONTROL PRODUCTS DIV., AMERACE CORP. BY FRANKLIN RESEARCH CENTER(FRC). FRC REPORT F-C5143; CONTROL PRODUCTS REPORT CTP-NQ-51171. B . IELP PO 47134 PURCHASES TERMINAL BLOCKS TESTED IN REPORT F-C5143 ABOVE.	1. REPORT F-C5143 DOCUMENTS A SEVEN DAY SUCCESSFUL LOCA TEST CYCLE., THE REQUIRED PERFORMANCE DURATION IS 30 DAYS. A COMBINATION OF ANALYSIS AND TEST RESULTS ALLOWS QUALIFICATION, BECAUSE THE FOLLOWING TESTS WERE MORE SEVERE THAN REQUIRED. TEST BLOCKS WERE THERMALLY AGED AT 329F FOR 39.6 DAYS. RADIATION AGING WAS 2.0 E08 RADS. SPRAY

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EQUIPMENT QUALIFICATION REPORT

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DOCUMENTATION REFERENCES:	NOTES:
	CHEMISTRY WAS 3000 PPM BORIC ACID AND BUFFERS. LOCA PROFILE WAS CONSERVATIVELY FOLLOWED FROM TIME 0 TO 7 DAYS. 2. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

A000-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: A000-02-001

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: ANCILLARY COMPONENTS	Operating Time	30 DAYS	
Plant I.D. Number: TERMINAL BLOCKS	Temperature (°F)	SEE GENERAL NOTE 6	
Component: TERMINAL BLOCKS	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: AMERACE CORP	Relative Humidity (%)	100	
Model Number: NQB	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-1010	Seismic	LATER	
Function/Service: SUPPORT/CABLE TERMINATIONS	Radiation (Rad)	4.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: VARIOUS	Submergence	NOT APPLICABLE	
Floor Elevation: VARIOUS			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 32 P&ID:
Loc Dwg: Elec Scheme: VDR ID:
Remarks:

Equip ID:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System:	Operating Time		
Plant I.D. Number:	Temperature (°F)		
Component:	Pressure (PSIG)		
Manufacturer:	Relative Humidity (%)		
Model Number:	Chemical Spray		
Purchase Order Number:	Seismic		
Function/Service:	Radiation (Rad)		
Accuracy: Spec: Demo:	Aging		
Location:	Submergence		
Floor Elevation:			
Flood Level Elevation: Above Flood Level: Yes: No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM

Walkdown: Environment: System: P&ID:
Loc Dwg: Elec Scheme: VDR ID:
Remarks:

A001-10
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
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EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: TEMPERATURE ELEMENT Manufacturer: LATER L Model Number: LATER	Operating Time	30 DAYS		NONE	001		---		GEN NOTE 1
	Temperature (°F)	SEE GEN NOTE 6		NONE	001		---		GEN NOTE 1
	Pressure (PSIG)	SEE GEN NOTE 6		NONE	001		---		GEN NOTE 1
	Relative Humidity (%)	100		NONE	001		---		GEN NOTE 1
	Chemical Spray	DEMIN WATER		NONE	001		---	---	SEE GEN NOTE 1
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	4.3 E07		NONE	001		---		GEN NOTE 1
	Aging	LATER		---	---		---	---	SEE NOTE (1)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
	1. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
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EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: TE-3724	Temperature (°F)	SEE GEN NOTE 6	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	SEE GEN NOTE 6	
Manufacturer: LATER L	Relative Humidity (%)	100	
Model Number: LATER	Chemical Spray	DEMIN WATER	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: LATER	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 742'9"			
Flood Level Elevation: 744'0" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M137/B4

Loc Dwg: E331/E5 Elec Scheme: E125/5 VDR ID: G11-N010
Remarks:

Equip ID:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System:	Operating Time		
Plant I.D. Number:	Temperature (°F)		
Component:	Pressure (PSIG)		
Manufacturer:	Relative Humidity (%)		
Model Number:	Chemical Spray		
Purchase Order Number:	Seismic		
Function/Service:	Radiation (Rad)		
Accuracy: Spec: Demo:	Aging		
Location:	Submergence		
Floor Elevation:			
Flood Level Elevation: Above Flood Level: Yes: No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM

Walkdown: Environment: System: P&ID:

Loc Dwg: Elec Scheme: VDR ID:
Remarks:

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
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EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: SOLENOID VALVE Manufacturer: ASCO Model Number: AT831665	Operating Time	30 DAYS		SEE GEN NOTE 4	001		---	---	NONE
	Temperature (°F)	150		SEE GEN NOTE 7	013		---	---	NONE
	Pressure (PSIG)	0		SEE GEN NOTE 7	001		---	---	NONE
	Relative Humidity (%)	100		SEE GEN NOTE 7	001		---	---	NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	1.6 E08		NONE	001		---	---	SEE NOTE (1)
	Aging	LATER		---	---		---	---	SEE NOTE (2)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
	1. SEE ACTION ITEM NO 30 2. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30 1982

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
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EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: STANDBY GAS TREATMENT SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: SV-5815A	Temperature (°F)	104	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: AT831665	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number:	Seismic	LATER	
Function/Service:	Radiation (Rad)	1.6 E08	
Accuracy: Spec: Demo:	Aging	LATER	
Location: SGT ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 10 P&ID: M158/G3

Loc Dwg: E315/G4 Elec Scheme: E113/11 VDR ID:
Remarks:

Equip ID: A499-01-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: STANDBY GAS TREATMENT SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: SV-5815B	Temperature (°F)	104	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: AT831665	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number:	Seismic	LATER	
Function/Service:	Radiation (Rad)	1.6 E08	
Accuracy: Spec: Demo:	Aging	LATER	
Location: SGT ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 10 P&ID: M158/C3

Loc Dwg: E315/F4 Elec Scheme: E113/11 VDR ID:
Remarks:

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EQUIPMENT QUALIFICATION REPORT
DATA SHEET

Equip ID: A499-01-005

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: STANDBY GAS TREATMENT SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: SV-5825A	Temperature (°F)	104	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: AT831665	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number:	Seismic	LATER	
Function/Service:	Radiation (Rad)	1.6 E08	
Accuracy: Spec: Demo:	Aging	LATER	
Location: SGT ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 10 P&ID: M158/E6

Loc Dwg: E315/G6 Elec Scheme: E113/11 VDR ID:
Remarks:

Equip ID: A499-01-006

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: STANDBY GAS TREATMENT SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: SV-5825B	Temperature (°F)	104	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: AT831665	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number:	Seismic	LATER	
Function/Service:	Radiation (Rad)	1.6 E08	
Accuracy: Spec: Demo:	Aging	LATER	
Location: SGT ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 10 P&ID: M158/D6

Loc Dwg: E315/F6 Elec Scheme: E113/11 VDR ID:
Remarks:

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Facility: DUANE ARNOLD
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EQUIPMENT QUALIFICATION REPORT
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EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: STANDBY GAS TREATMENT SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: SV-5801A	Temperature (°F)	104	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: AT831665	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number:	Seismic	LATER	
Function/Service:	Radiation (Rad)	1.6 E08	
Accuracy: Spec: Demo:	Aging	LATER	
Location: SGT ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 10 P&ID: M158/G7

Loc Dwg: E315/G6 Elec Scheme: E113/11 VDR ID:
Remarks:

Equip ID: A499-01-008

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: STANDBY GAS TREATMENT SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: SV-5801B	Temperature (°F)	104	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: AT831665	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number:	Seismic	LATER	
Function/Service:	Radiation (Rad)	1.6 E08	
Accuracy: Spec: Demo:	Aging	LATER	
Location: SGT ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 10 P&ID: M158/C7

Loc Dwg: E315/F6 Elec Scheme: E113/11 VDR ID:
Remarks:

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: STANDBY GAS TREATMENT SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: SV-7602A	Temperature (°F)	104	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: AT831665	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number:	Seismic	LATER	
Function/Service:	Radiation (Rad)	1.6 E08	
Accuracy: Spec: Demo:	Aging	LATER	
Location: SGT ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 10 P&ID: M176/A4

Loc Dwg: E315/G3 Elec Scheme: E113/54 VDR ID:
Remarks:

Equip ID: A499-01-012

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: STANDBY GAS TREATMENT SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: SV-7602B	Temperature (°F)	104	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: AT831665	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number:	Seismic	LATER	
Function/Service:	Radiation (Rad)	1.6 E08	
Accuracy: Spec: Demo:	Aging	LATER	
Location: SGT ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 10 P&ID: M176/A4

Loc Dwg: E315/G3 Elec Scheme: E113/54 VDR ID:
Remarks:

A499-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: A499-01-014

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EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-4303	Temperature (°F)	150	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: AT831665	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-144D	Seismic	LATER	
Function/Service:	Radiation (Rad)	2.9 E05	
Accuracy: Spec: Demo:	Aging	LATER	
Location: H&V CONTROL VALVE RM	Submergence	NOT APPLICABLE	
Floor Elevation: 812'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M143/D7

Loc Dwg: E322/D4 Elec Scheme: E122/13 VDR ID:
Remarks:

Equip ID: A499-01-015

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	1 HOUR	SEE GENERAL NOTE 8
Plant I.D. Number: SV-4306	Temperature (°F)	90	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: AT831665	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-144D	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /CONTAINMENT PURGE INLET ISOLATION	Radiation (Rad)	1.5 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RHR VALVE ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M143/F1

Loc Dwg: E318/E6 Elec Scheme: E122/13 VDR ID:
Remarks:

A499-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: A499-01-016

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	1 HOUR	SEE GENERAL NOTE 8
Plant I.D. Number: SV-4307	Temperature (°F)	90	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: AT831665	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-144D	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /CONTAINMENT PURGE INLET ISOLATION	Radiation (Rad)	1.5 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RHR VALVE ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M143/F2

Loc Dwg: E318/D6 Elec Scheme: E122/12 VDR ID:
Remarks:

Equip ID: A499-01-017

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	1 HOUR	SEE GENERAL NOTE 8
Plant I.D. Number: SV-4308	Temperature (°F)	90	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: AT831665	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-144D	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /SUPPRESSION POOL PURGE INLET ISOLATION	Radiation (Rad)	1.5 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RHR VALVE ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M143/E3

Loc Dwg: E318/D6 Elec Scheme: E122/12 VDR ID:
Remarks:

A499-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: A499-01-018

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	1 HOUR	SEE GENERAL NOTE 8
Plant I.D. Number: SV-4311	Temperature (°F)	90	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: AT831665	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137B	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAKEUP NITROGEN GAS SUPPLY INLET ISOLATION	Radiation (Rad)	1.5 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RHR VALVE ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M143/F3

Loc Dwg: E318/D6 Elec Scheme: E122/13 VDR ID:
Remarks:

Equip ID: A499-01-019

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	1 HOUR	SEE GENERAL NOTE 8
Plant I.D. Number: SV-4312	Temperature (°F)	90	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: AT831665	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137B	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /CONTAINMENT NITROG* SUPPLY ISOLATION	Radiation (Rad)	1.5 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RHR VALVE ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M143/F3

Loc Dwg: E318/D6 Elec Scheme: E122/12 VDR ID:
Remarks:

A499-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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Equip ID: A499-01-020

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	1 HOUR	SEE GENERAL NOTE 8
Plant I.D. Number: SV-4313	Temperature (°F)	90	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: AT831665	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137B	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION SUPPRESSION POOL NITROGEN SUPPLY ISOLATION	Radiation (Rad)	1.5 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RHR VALVE ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M143/F3

Loc Dwg: E318/D6 Elec Scheme: E122/12 VDR ID:
Remarks:

Equip ID:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System:	Operating Time		
Plant I.D. Number:	Temperature (°F)		
Component:	Pressure (PSIG)		
Manufacturer:	Relative Humidity (%)		
Model Number:	Chemical Spray		
Purchase Order Number:	Seismic		
Function/Service:	Radiation (Rad)		
Accuracy: Spec: Demo:	Aging		
Location:	Submergence		
Floor Elevation:			
Flood Level Elevation: Above Flood Level: Yes: No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM

Walkdown: Environment: System: P&ID:

Loc Dwg: Elec Scheme: VDR ID:
Remarks:

A499-03
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

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EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: SOLENOID VALVE Manufacturer: ASCO Model Number: NP8320A173E	Operating Time	30 DAYS		30 DAYS	001		REF. (A)	TYPE TEST	NONE
	Temperature (°F)	277		346	001		REF. (A)	TYPE TEST	NONE
	Pressure (PSIG)	1.2		110	001		REF. (A)	TYPE TEST	NONE
	Relative Humidity (%)	100		100	001		REF. (A)	TYPE TEST	NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	1.3 E07		2.0 E08	001		REF. (A)	TYPE TEST	NONE
	Aging	LATER		---	---		---	---	SEE NOTE (1)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. ASCO TEST REPORT AQS21678T/R REV. A NUMBERED BOOKLET 110 DATED OCT.1, 1979 WAS FORWARDED TO IOWA ELECTRIC LIGHT & POWER'S MR. PHILIP D WARD DAEC PROJECT ENGINEER	1. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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Equip ID: A499-03-001

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: SV-1964	Temperature (°F)	277	
Component: SOLENOID VALVE	Pressure (PSIG)	1.2	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP8320A173E	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-147	Seismic	LATER	
Function/Service: CORE COOLING/ ISOLATION OF HPCI STEAM FLOW TO THE RHR HEAT EXCHANGER	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M119/D2

Loc Dwg: M277/C5 Elec Scheme: E121/58 VDR ID:
Remarks:

Equip ID: A499-03-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: SV-2034	Temperature (°F)	277	
Component: SOLENOID VALVE	Pressure (PSIG)	1.2	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP8320A173E	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-147	Seismic	LATER	
Function/Service: CORE COOLING/ ISOLATION OF HPCI STEAM FLOW TO THE RHR HEAT EXCHANGER	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 746'3"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M120/D7

Loc Dwg: M405/C6 Elec Scheme: E121/58 VDR ID:
Remarks:

A499-04
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

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EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: SOLENOID VALVE Manufacturer: ASCO 8 Model Number: 8302625	Operating Time	30 DAYS		SEE GEN NOTE 4	001		---	---	NONE
	Temperature (°F)	104		SEE GEN NOTE 7	001		---	---	NONE
	Pressure (PSIG)	0		SEE GEN NOTE 7	001		---	---	NONE
	Relative Humidity (%)	100		SEE GEN NOTE 7	001		---	---	NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	1.1 E06		4.0 E05	002		REF. (A)	ANALYSIS	SEE NOTE (1)
	Aging	LATER		---	---		---	---	SEE NOTE (2)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. AUTOMATIC SWITCH COMPANY LETTER DATED AUGUST 15,1980 FROM W.M. BROWN TO J.L. HURLEY OF BECHTEL	1. SEE ACTION ITEM NO.24 FOR VALVE SU-4640 AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982 2.

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: A499-04-001

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-4309	Temperature (°F)	104	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ASCO 8	Relative Humidity (%)	100	
Model Number: 8302625	Chemical Spray	NOT APPLICABLE	
Purchase Order Number: M-141	Seismic	LATER	
Function/Service: SUPPR POOL PURGE OUTLET BYPASS	Radiation (Rad)	2.9 E05	
Accuracy: Spec: Demo:	Aging	LATER	
Location: NE CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M143/C7

Loc Dwg: E316/E2 Elec Scheme: E122/12 VDR ID:
Remarks: HB8302DC25R

Equip ID: A499-04-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISO&NSS SHUTOFF SYS	Operating Time	1 HOUR	
Plant I.D. Number: SV-4640	Temperature (°F)	104	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ASCO 8	Relative Humidity (%)	100	
Model Number: 8302625	Chemical Spray	NOT APPLICAB	
Purchase Order Number: M-123	Seismic	LATER	
Function/Service: RECIRC WTR SAMPLE	Radiation (Rad)	1.1 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: RWCU HEAT EXCH ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: 786'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 3 P&ID: M116/F6

Loc Dwg: E321/E5 Elec Scheme: E122/10 VDR ID:
Remarks: 8302C25RU

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
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EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: SOLENOID VALVE Manufacturer: ASCO Model Number: NP831665E	Operating Time	30 DAYS		30 DAYS	006		REF. (A)	TYPE TEST	NONE
	Temperature (°F)	SEE GEN NOTE 6		346	005		REF. (A)	TYPE TEST	NONE
	Pressure (PSIG)	SEE GEN NOTE 6		110	005		REF. (A)	TYPE TEST	NONE
	Relative Humidity (%)	100		100	001		REF. (B)	TYPE TEST	NONE
	Chemical Spray	DEMIN WATER		SEE NOTE (1)	005		REF. (A)	TYPE TEST	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	2.1 E07		2.0 E08	005		REF. (A)	TYPE TEST	NONE
	Aging	LATER		---	---		---	---	SEE NOTE (2)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. ASCO TEST REPORT AQS21678T/R REV A,BOOK NO.1100CT 1,1979, 1979, AND ASCO LETTERS OF AUGUST 21, 1979 & SEPTEMBER 26, 1980 TO IELP. B. ASCO TEST REPORT AQS21678T/R REV. A, BOOKLET NO.110,OCT 1, 1979	1. ACTUAL SPRAY TEST USED A BORIC ACID SOLUTION WHICH IS MORE SEVERE THAN A DEMINERALIZED WATER SPRAY 2. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

A499-12
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-3704	Temperature (°F)	140	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP831665E	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /DRYWELL FLOOR DRAIN SUMP ISOLATION	Radiation (Rad)	2.7 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 746'3"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 03 P&ID: M137/G7

Loc Dwg: E317/F3 Elec Scheme: E122/9 VDR ID:
Remarks:

Equip ID: A499-12-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-3705	Temperature (°F)	140	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP831665E	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /DRYWELL FLOOR DRAIN SUMP ISOLATION	Radiation (Rad)	2.7 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 746'3"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 03 P&ID: M137/G7

Loc Dwg: E317/F3 Elec Scheme: E122/9 VDR ID:
Remarks:

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-3728 Component: SOLENOID VALVE	Temperature (°F)	140	
Manufacturer: ASCO	Pressure (PSIG)	0	
Model Number: NP831665E	Relative Humidity (%)	100	
Purchase Order Number: M-137	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Function/Service: CONTAINMENT ISOLATION /DRYWELL EQUIPMENT DRAIN SUMP ISOLATION	Seismic	LATER	
Accuracy: Spec: NA Demo: NA	Radiation (Rad)	2.7 E06	
Location: TORUS ROOM NORTH	Aging	LATER	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 03 P&ID: M137/D6

Loc Dwg: E316/D7 Elec Scheme: E122/9 VDR ID:
Remarks:

Equip ID: A499-12-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-3729 Component: SOLENOID VALVE	Temperature (°F)	140	
Manufacturer: ASCO	Pressure (PSIG)	0	
Model Number: NP831665E	Relative Humidity (%)	100	
Purchase Order Number: M-137	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Function/Service: CONTAINMENT ISOLATION /DRYWELL EQUIPMENT DRAIN SUMP ISOLATION	Seismic	LATER	
Accuracy: Spec: NA Demo: NA	Radiation (Rad)	2.7 E06	
Location: TORUS ROOM NORTH	Aging	LATER	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 03 P&ID: M137/D6

Loc Dwg: E316/D7 Elec Scheme: E122/9 VDR ID:
Remarks:

A499-12
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331

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Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: A499-12-005

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-4371B	Temperature (°F)	SEE GENERAL NOTE 6	
Component: SOLENOID VALVE	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP831665E	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-892	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION	Radiation (Rad)	2.1 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 03 P&ID: M143/F5

Loc Dwg: E329/B3 Elec Scheme: E122/24 VDR ID:
Remarks:

Equip ID: A499-12-006

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: STANDBY GAS TREATMENT SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: SV-7605A	Temperature (°F)	300	
Component: SOLENOID VALVE	Pressure (PSIG)	1.5	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP831665E	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-144E	Seismic	LATER	
Function/Service: PREVENT RELEASE OF RADIOACTIVE MATERIAL/ REACTOR BUILDING VENT ISOLATION	Radiation (Rad)	8.1 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: HPCI ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 731'9"			
Flood Level Elevation: 717'9" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 10 P&ID: M176/A5

Loc Dwg: E317/B4 Elec Scheme: E113/64 VDR ID:
Remarks:

A499-12
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331

Sheet No. 23
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: A499-12-007

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: STANDBY GAS TREATMENT SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: SV-7605B	Temperature (°F)	300	
Component: SOLENOID VALVE	Pressure (PSIG)	1.5	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP831665E	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-144E	Seismic	LATER	
Function/Service: PREVENT RELEASE OF RADIOACTIVE MATERIAL/ REACTOR BUILDING VENT ISOLATION	Radiation (Rad)	8.1 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: HPCI ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 731'9"			
Flood Level Elevation: 717'9" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 10 P&ID: M176/A5

Loc Dwg: E317/B4 Elec Scheme: E113/64 VDR ID:
Remarks:

Equip ID: A499-12-008

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: SV-4300X	Temperature (°F)	104	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP831665E	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR-918	Seismic	LATER	
Function/Service:	Radiation (Rad)	2.9 E05	
Accuracy: Spec: Demo:	Aging	LATER	
Location: NE CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 735'7"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 35 P&ID: M143/D7

Loc Dwg: E316/E2 Elec Scheme: E122/12 VDR ID:
Remarks:

A499-12
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: A499-12-009

Sheet No. 24
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: SV-4302X	Temperature (°F)	150	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP831665E	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR-918	Seismic	LATER	
Function/Service:	Radiation (Rad)	2.9 E05	
Accuracy: Spec: Demo:	Aging	LATER	
Location: H&V CONTROL VALVE RM	Submergence	NOT APPLICABLE	
Floor Elevation: 812'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 35 P&ID: M143/D7

Loc Dwg: E322/D4 Elec Scheme: E122/12 VDR ID:
Remarks:

Equip ID: A499-12-010

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-4310	Temperature (°F)	150	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP831665E	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR 986	Seismic	LATER	
Function/Service: PREVENT RELEASE OF RADIOACTIVE MATERIAL /CONTAINMENT VENT PURGE EXHAUST BYPASS	Radiation (Rad)	2.9 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: H&V CONTROL VALVE RM	Submergence	NOT APPLICABLE	
Floor Elevation: 812'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M143/D7

Loc Dwg: E322/D4 Elec Scheme: E122/12 VDR ID:
Remarks:

A499-15
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

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Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: SOLENOID VALVE Manufacturer: ASCO Model Number: NP8320A183E	Operating Time	1 HOUR		30 DAYS	003		REF. (A)	TYPE TEST	NONE
	Temperature (°F)	SEE GEN NOTE 6		346	003			TYPE TEST	NONE
	Pressure (PSIG)	SEE GEN NOTE 6		110	003		REF. (A)	TYPE TEST	NONE
	Relative Humidity (%)	100		100	003		REF. (A)	TYPE TEST	NONE
	Chemical Spray	DEMIN WATER		SEE NOTE (1)	003		REF. (A)	TYPE TEST/ ANAL	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	2.1 E07		2.0 E08	003		REF. (A)	TYPE TEST	NONE
	Aging	LATER		---	---		---	---	SEE NOTE (2)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. ASCO TEST REPORT AQS21678T/R REV. A, NUMBERED BOOKLET 110, DATED OCT. 1, 1979 WAS FORWARDED TO IOWA ELECTRIC LIGHT & POWER'S MR. PHILIP D. WARD, DAEC PROJECT ENGINEER.	1. SUBJECTED TO H3BO4 (+ BUFFER) SPRAY WHICH IS MORE SEVERE THAN DEMINERALIZED WATER SPRAY. 2. AN AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982.

A499-15
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: A499-15-003

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-4412A	Temperature (°F)	SEE GENERAL NOTE 6	
Component: SOLENOID VALVE	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP8320A183E	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-892	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM LINE "A" INBOARD VALVE ISOLATION	Radiation (Rad)	2.1 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 03 P&ID: M114/F5

Loc Dwg: E329/D3 Elec Scheme: E121/11 VDR ID:
Remarks:

Equip ID: A499-15-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-4413A	Temperature (°F)	300	
Component: SOLENOID VALVE	Pressure (PSIG)	1.8	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP8320A183E	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR-892	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM LINE "A" OUTBOARD VALVE ISOLATION	Radiation (Rad)	3.2 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 03 P&ID: M114/F2

Loc Dwg: E328/D4 Elec Scheme: E121/11 VDR ID:
Remarks:

A499-15
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: A499-15-005

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Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: A499-15-006

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-4415A	Temperature (°F)	SEE GENERAL NOTE 6	
Component: SOLENOID VALVE	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP8320A183E	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-892	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM LINE 'B' INBOARD VALVE ISOLATION	Radiation (Rad)	2.1 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 03 P&ID: M114/C7

Loc Dwg: E329/C3 Elec Scheme: E121/11 VDR ID:
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-4416A	Temperature (°F)	300	
Component: SOLENOID VALVE	Pressure (PSIG)	1.8	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP8320A183E	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR-892	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM LINE "B" OUTBOARD VALVE ISOLATION	Radiation (Rad)	3.2 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 03 P&ID: M114/C8

Loc Dwg: E328/D4 Elec Scheme: E122/11 VDR ID:
Remarks:

A499-15
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: A499-15-007

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Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-4418A	Temperature (°F)	SEE GENERAL NOTE 6	
Component: SOLENOID VALVE	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP8320A183E	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-892	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM LINE "C" INBOARD VALVE ISOLATION	Radiation (Rad)	2.1 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 03 P&ID: M114/C3

Loc Dwg: E329/F3 Elec Scheme: E121/11 VDR ID:
Remarks:

Equip ID: A499-15-008

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-4419A	Temperature (°F)	300	
Component: SOLENOID VALVE	Pressure (PSIG)	1.8	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP8320A183E	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR-892	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM LINE "C" OUTBOARD VALVE ISOLATION	Radiation (Rad)	3.2 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 03 P&ID: M114/C2

Loc Dwg: E328/E4 Elec Scheme: E122/11 VDR ID:
Remarks:

A499-15
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: A499-15-009

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EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-4420A	Temperature (°F)	SEE GENERAL NOTE 6	
Component: SOLENOID VALVE	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP8320A183E	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-892	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM LINE "D" INBOARD VALVE ISOLATION	Radiation (Rad)	2.1 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 03 P&ID: M114/E7

Loc Dwg: E329/E3 Elec Scheme: E122/11 VDR ID:
Remarks:

Equip ID: A499-15-010

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-4421A	Temperature (°F)	300	
Component: SOLENOID VALVE	Pressure (PSIG)	1.8	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP8320A183E	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR-892	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM LINE "D" OUTBOARD VALVE ISOLATION	Radiation (Rad)	3.2 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 03 P&ID: M114/E8

Loc Dwg: E328/E4 Elec Scheme: E122/11 VDR ID:
Remarks:

A499-16
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 30
Revision 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: SOLENOID VALVE Manufacturer: ASCO Model Number: NP8321A5E	Operating Time	30 DAYS		30 DAYS	001		REF. (A)	TYPE TEST	NONE
	Temperature (°F)	277		346	001		REF. (A)	TYPE TEST	NONE
	Pressure (PSIG)	1.2		110	001		REF. (A)	TYPE TEST	NONE
	Relative Humidity (%)	100		100	001		REF. (A)	TYPE TEST	NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	1.3 E07		2.0 E08	001		REF. (A)	TYPE TEST	NONE
	Aging	LATER		---	---		---	---	SEE NOTE (1)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. ASCO TEST REPORT AQS21678T/R REV. A, NUMBERED BOOKLET 110, DATED OCT. 1, 1979 WAS FORWARDED TO IOWA ELECTRIC LIGHT & POWER'S MR. PHILIP D. WARD, DAEC PROJECT ENGINEER	1. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982.

A499-16
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: A499-16-001

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: SV-8773A	Temperature (°F)	277	
Component: SOLENOID VALVE	Pressure (PSIG)	1.2	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP8321A5E	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR-932A	Seismic	LATER	
Function/Service:	Radiation (Rad)	1.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 35 P&ID: M187/C3

Loc Dwg: E316/F6 Elec Scheme: E113/64 VDR ID:
Remarks:

Equip ID: A499-16-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: SV-8773B	Temperature (°F)	277	
Component: SOLENOID VALVE	Pressure (PSIG)	1.2	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP8321A5E	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR-932A	Seismic	LATER	
Function/Service:	Radiation (Rad)	1.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 35 P&ID: M187/C2

Loc Dwg: E316/F6 Elec Scheme: E113/64 VDR ID:
Remarks:

A499-18
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

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EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: SOLENOID VALVE Manufacturer: ASCO Model Number: NP8323A36V	Operating Time	1 HOUR		30 DAYS	001		REF. (A)	TYPE TEST	NONE
	Temperature (°F)	SEE GEN NOTE 6		346	001		REF. (A)	TYPE TEST	NONE
	Pressure (PSIG)	SEE GEN NOTE 6		110	001		REF. (A)	TYPE TEST	NONE
	Relative Humidity (%)	100		100	001		REF. (A)	TYPE TEST	NONE
	Chemical Spray	DEMIN WATER		SEE NOTE (1)	001		REF. (A)	TYPE TEST/ ANAL	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	2.1 E07		2.0 E08	001		REF. (A)	TYPE TEST	NONE
	Aging	LATER		---	---		---	---	SEE NOTE (2)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. ASCO TEST REPORT AQS21678T/R REV. A, NUMBERED BOOKLET 110, DATED OCT. 1, 1979 WAS FORWARDED TO IOWA ELECTRIC LIGHT & POWER'S MR. PHILIP D. WARD, DAEC PROJECT ENGINEER.	1. SPRAYED WITH H3BO4 (+BUFFER) WHICH IS MORE HARSH THAN BEING SPRAYED WITH DEMINERALIZED WATER 2. AN AGING PROGRAM IS TO BE ESTABLISHED BY JUNE 30, 1982.

A499-18
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331

Sheet No. 33
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: A499-18-001

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-4412C	Temperature (°F)	SEE GENERAL NOTE 6	
Component: SOLENOID VALVE	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP8323A36V	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-892	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM LINE "A" INBOARD VALVE ISOLATION	Radiation (Rad)	2.1 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 03 P&ID: M114/G5

Loc Dwg: E329/D3 Elec Scheme: E122/11 VDR ID:
Remarks:

Equip ID: A499-18-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-4413C	Temperature (°F)	300	
Component: SOLENOID VALVE	Pressure (PSIG)	1.8	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP8323A36V	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR-892	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM LINE "A" OUTBOARD VALVE ISOLATION	Radiation (Rad)	3.2 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 03 P&ID: M114/F2

Loc Dwg: E328/D4 Elec Scheme: E122/11 VDR ID:
Remarks:

A499-18
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: A499-18-003

Sheet No. 34
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-4415C	Temperature (°F)	SEE GENERAL NOTE 6	
Component: SOLENOID VALVE	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP8323A36V	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-892	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM LINE "B" INBOARD VALVE ISOLATION	Radiation (Rad)	2.1 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 03 P&ID: M114/C7

Loc Dwg: E329/C3 Elec Scheme: E122/11 VDR ID:
Remarks:

Equip ID: A499-18-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-4416C	Temperature (°F)	300	
Component: SOLENOID VALVE	Pressure (PSIG)	1.8	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP8323A36V	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR-892	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM LINE "B" OUTBOARD VALVE ISOLATION	Radiation (Rad)	3.2 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 03 P&ID: M114/C8

Loc Dwg: E328/D4 Elec Scheme: E122/11 VDR ID:
Remarks:

A499-18
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: A499-18-005

Sheet No. 35
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-4418C	Temperature (°F)	SEE GENERAL NOTE 6	
Component: SOLENOID VALVE	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP8323A36V	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-892	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM LINE "C" INBOARD VALVE ISOLATION	Radiation (Rad)	2.1 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 03 P&ID: M114/C3

Loc Dwg: E329/F3 Elec Scheme: E122/11 VDR ID:
Remarks:

Equip ID: A499-18-006

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-4419C	Temperature (°F)	300	
Component: SOLENOID VALVE	Pressure (PSIG)	1.8	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP8323A36V	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR-892	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM LINE 'C' OUTBOARD VALVE ISOLATION	Radiation (Rad)	3.2 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 03 P&ID: M114/C2

Loc Dwg: E328/E4 Elec Scheme: E122/11 VDR ID:
Remarks:

A499-18
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: A499-18-007

Sheet No. 36
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-4420C	Temperature (°F)	SEE GENERAL NOTE 6	
Component: SOLENOID VALVE	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP8323A36V	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-892	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM LINE "D" INBOARD VALVE ISOLATION	Radiation (Rad)	2.1 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 03 P&ID: M114/E7

Loc Dwg: E329/E3 Elec Scheme: E122/11 VDR ID:
Remarks:

Equip ID: A499-18-008

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-4421C	Temperature (°F)	300	
Component: SOLENOID VALVE	Pressure (PSIG)	1.8	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP8323A36V	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR-892	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM LINE "D" OUTBOARD VALVE ISOLATION	Radiation (Rad)	3.2 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 03 P&ID: M114/E8

Loc Dwg: E328/E4 Elec Scheme: E122/11 VDR ID:
Remarks:

A499-18
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331

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Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: A499-18-009

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-4412B	Temperature (°F)	SEE GENERAL NOTE 6	
Component: SOLENOID VALVE	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP8323A36V	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-892	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM LINE 'A' INBOARD VALVE ISOLATION	Radiation (Rad)	2.1 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 03 P&ID: M114/F5

Loc Dwg: E329/D3 Elec Scheme: E122/11 VDR ID:
Remarks:

Equip ID: A499-18-010

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-4413B	Temperature (°F)	300	
Component: SOLENOID VALVE	Pressure (PSIG)	1.8	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP8323A36V	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR-892	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM LINE "A" OUTBOARD VALVE ISOLATION	Radiation (Rad)	3.2 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 03 P&ID: M114/F2

Loc Dwg: E328/D4 Elec Scheme: E122/11 VDR ID:
Remarks:

A499-18
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: A499-18-011

Sheet No. 38
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-4415B	Temperature (°F)	SEE GENERAL NOTE 6	
Component: SOLENOID VALVE	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP8323A36V	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-892	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM LINE 'B' INBOARD VALVE ISOLATION	Radiation (Rad)	2.1 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 03 P&ID: M114/C7

Loc Dwg: E329/C3 Elec Scheme: E122/11 VDR ID:

Remarks:

Equip ID: A499-18-012

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-4416B	Temperature (°F)	300	
Component: SOLENOID VALVE	Pressure (PSIG)	1.8	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP8323A36V	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR-892	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM LINE "B" OUTBOARD VALVE ISOLATION	Radiation (Rad)	3.2 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 03 P&ID: M114/C8

Loc Dwg: E328/D4 Elec Scheme: E122/11 VDR ID:

Remarks:

A499-18
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: A499-18-013

Sheet No. 39
Revision: 0
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EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-4418B	Temperature (°F)	SEE GENERAL NOTE 6	
Component: SOLENOID VALVE	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP8323A36V	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-892	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM LINE 'C' INBOARD VALVE ISOLATION	Radiation (Rad)	2.1 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 03 P&ID: M114/C3

Loc Dwg: E329/F3 Elec Scheme: E122/11 VDR ID:
Remarks:

Equip ID: A499-18-014

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-4419B	Temperature (°F)	300	
Component: SOLENOID VALVE	Pressure (PSIG)	1.8	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: NP8323A36V	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR-892	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM LINE "C" OUTBOARD VALVE ISOLATION	Radiation (Rad)	3.2 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 03 P&ID: M114/C2

Loc Dwg: E328/E4 Elec Scheme: E122/11 VDR ID:
Remarks:

A499-18
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: A499-18-015

Sheet No. 40
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION

System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM

Plant I.D. Number: SV-4420B

Component: SOLENOID VALVE

Manufacturer: ASCO

Model Number: NP8323A36V

Purchase Order Number: DCR-892

Function/Service: CONTAINMENT ISOLATION /MAIN STEAM LINE "D" INBOARD VALVE ISOLATION

Accuracy: Spec: NA Demo: NA

Location: DRYWELL

Floor Elevation: 757'4"

Flood Level Elevation: 744'
Above Flood Level: Yes: X No:

ENVIRONMENT

Parameter	Required	Remarks
Operating Time	1 HOUR	
Temperature (°F)	SEE GENERAL NOTE 6	
Pressure (PSIG)	SEE GENERAL NOTE 6	
Relative Humidity (%)	100	
Chemical Spray	DEMIN WATER SPRAY	
Seismic	LATER	
Radiation (Rad)	2.1 E07	
Aging	LATER	
Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 03 P&ID: M114/E7

Loc Dwg: E329/E3 Elec Scheme: E122/11 VDR ID:
Remarks:

Equip ID: A499-18-016

EQUIPMENT DESCRIPTION

System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM

Plant I.D. Number: SV-4421B

Component: SOLENOID VALVE

Manufacturer: ASCO

Model Number: NP8323A36V

Purchase Order Number: DCR-892

Function/Service: CONTAINMENT ISOLATION /MAIN STEAM LINE "D" OUTBOARD VALVE ISOLATION

Accuracy: Spec: NA Demo: NA

Location: STEAM TUNNEL

Floor Elevation: 757'6"

Flood Level Elevation: 757'7"
Above Flood Level: Yes: X No:

ENVIRONMENT

Parameter	Required	Remarks
Operating Time	1 HOUR	
Temperature (°F)	300	
Pressure (PSIG)	1.8	
Relative Humidity (%)	100	
Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Seismic	LATER	
Radiation (Rad)	3.2 E06	
Aging	LATER	
Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 03 P&ID: M114/E8

Loc Dwg: E328/E4 Elec Scheme: E122/11 VDR ID:
Remarks:

A499-22
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 41
Revision 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: SOLENOID VALVE Manufacturer: ASCO Model Number: 206	Operating Time	1 HOUR		30 DAYS	006		REF. (A)	TYPE TEST	NONE
	Temperature (°F)	SEE GENERAL NOTE 6		346	006		REF. (A)	TYPE TEST	NONE
	Pressure (PSIG)	SEE GENERAL NOTE 6		110	006		REF. (A)	TYPE TEST	NONE
	Relative Humidity (%)	100		100	006		REF. (B)	TYPE TEST	NONE
	Chemical Spray	DEMIN WATER		SEE NOTE (1)	006		REF. (A)	TYPE TEST	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	2.1 E07		2.0 E08	006		REF. (A)	TYPE TEST	NONE
	Aging	LATER		---	---		---	---	SEE NOTE (2)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. ASCO TEST REPORT AQS21678T/R REV A BOOKLET NO 110 OF OCT 1, 1979, AND ASCO LETTERS OF AUGUST 21, 1979 & SEPTEMBER 26, 1980 TO IELP. B. ASCO TEST REPORT AQS21678T/R REV A BOOKLET NO. 110 OF OCTOBER 1, 1979 TO IELP.	1. ACTUAL SPRAY TEST USED A BORIC ACID SOLUTION WHICH IS MORE SEVERE THAN A DEMINERALIZED WATER SPRAY 2. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30,1982.

A499-22
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: A499-22-006

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Revision: 0
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EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-4639	Temperature (°F)	SEE GENERAL NOTE 6	
Component: SOLENOID VALVE	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: 206	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: M-123	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /RECIRC. WATER SAMP* LINE ISOLATION	Radiation (Rad)	2.1 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 790' 0"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 03 P&ID: M116/F6

Loc Dwg: E330/B5 Elec Scheme: E122/10 VDR ID:
Remarks:

Equip ID: A499-22-007

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-5703A	Temperature (°F)	140	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: 206	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137B	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /DRYWELL COOLING WATER SYSTEM BACKWASH INLET ISOLATION	Radiation (Rad)	2.6 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 746'3"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 03 P&ID: M157/G7

Loc Dwg: E317/G7 Elec Scheme: E113/94 VDR ID:
Remarks:

A499-22
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: A499-22-008

Sheet No. 43
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-5703B	Temperature (°F)	140	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: 206	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137B	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /DRYWELL COOLING WATER SYSTEM BACKWASH INLET ISOLATION	Radiation (Rad)	2.6 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 746'3"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 03 P&ID: M157/G7

Loc Dwg: E317/H7 Elec Scheme: VDR ID:
Remarks:

Equip ID: A499-22-009

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-5704A	Temperature (°F)	140	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: 206	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-73	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /DRYWELL COOLING WATER OUTLET ISOLATION	Radiation (Rad)	2.6 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 746'3"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 03 P&ID: M157/G6

Loc Dwg: E317/E5 Elec Scheme: E113/94 VDR ID:
Remarks:

A499-22
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: A499-22-010

Sheet No. 44
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-5704B	Temperature (°F)	140	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: 206	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-73	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /DRYWELL COOLING WATER OUTLET ISOLATION	Radiation (Rad)	2.6 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 03 P&ID: M157/G6

Loc Dwg: E317/G7 Elec Scheme: E113/94 VDR ID:
Remarks:

Equip ID: A499-22-011

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-5718A	Temperature (°F)	140	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: 206	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-73	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /DRYWELL COOLING WATER INLET ISOLATION	Radiation (Rad)	2.6 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 03 P&ID: M157/E8

Loc Dwg: E317/E5 Elec Scheme: E113/94 VDR ID:
Remarks:

A499-22
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: A499-22-012

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Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISO&NSS SHUTOFF SYS	Operating Time	1 HOUR	
Plant I.D. Number: SV-5718B	Temperature (°F)	277	
Component: SOLENOID VALVE	Pressure (PSIG)	1.2	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: 206	Chemical Spray	NOT APPLICABLE	
Purchase Order Number: M-73	Seismic	LATER	
Function/Service: RB/D LOOP B CLG WTR INTAKE	Radiation (Rad)	2.7 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 746'3"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X					

Walkdown: Environment: HARSH System: 3 P&ID: M157/D8

Loc Dwg: E316/C7 Elec Scheme: E113/94 VDR ID:
Remarks:

Equip ID: A499-22-013

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-5719A	Temperature (°F)	140	
Component: SOLENOID-VALVE	Pressure (PSIG)	0	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: 206	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137B	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /DRYWELL COOLING WATER SYSTEM BACKWASH OUTLET ISOLATION	Radiation (Rad)	2.6 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 03 P&ID: M157/B7

Loc Dwg: E317/E5 Elec Scheme: E113/94 VDR ID:
Remarks:

A499-22
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: A499-22-014

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Revision: 0
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-5719B	Temperature (°F)	140	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: 206	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137B	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /DRYWELL COOLING WATER SYSTEM BACKWASH OUTLET ISOLATION	Radiation (Rad)	2.6 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 746'3"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 03 P&ID: M157/A7

Loc Dwg: E316/C7 Elec Scheme: E113/94 VDR ID:
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System:	Operating Time		
Plant I.D. Number:	Temperature (°F)		
Component:	Pressure (PSIG)		
Manufacturer:	Relative Humidity (%)		
Model Number:	Chemical Spray		
Purchase Order Number:	Seismic		
Function/Service:	Radiation (Rad)		
Accuracy: Spec: Demo:	Aging		
Location:	Submergence		
Floor Elevation:			
Flood Level Elevation: Above Flood Level: Yes: No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM

Walkdown: Environment: System: P&ID:

Loc Dwg: Elec Scheme: VDR ID:
Remarks:

A499-34
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 47
Revision 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: SOLENOID VALVE Manufacturer: ASCO Model Number: 8320A6	Operating Time	1 HOUR		SEE GEN NOTE 4	006		---	---	NONE
	Temperature (°F)	140		SEE GEN NOTE 7	008		---	---	NONE
	Pressure (PSIG)	0		SEE GEN NOTE 7	006		---	---	NONE
	Relative Humidity (%)	100		SEE GEN NOTE 7	006		---	---	NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	9.6 E05		NONE	006		---	---	SEE NOTE (1)
	Aging	LATER		---	---		---	---	SEE NOTE (2)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
	1. SEE ACTION ITEM 30 2. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

A499-34
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: A499-34-006

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Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-1963	Temperature (°F)	104	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: 8320A6	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-147	Seismic	LATER	
Function/Service: CORE COOLING/ ISOLATION OF HPCI STEAM FLOW TO THE RHR HEAT EXCHANGER	Radiation (Rad)	9.6 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: NW CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 732'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M119/D3

Loc Dwg: M246/E8 Elec Scheme: E121/58 VDR ID:
Remarks:

Equip ID: A499-34-007

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-1966	Temperature (°F)	104	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: 8320A6	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-147	Seismic	LATER	
Function/Service: CORE COOLING/RHR TRAIN B CONDENSATE RETURN TO RCIC OR RHR TEST ISOLATION	Radiation (Rad)	9.6 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: NW CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 732'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M119/E3

Loc Dwg: M246/E7 Elec Scheme: E121/58 VDR ID:
Remarks:

A499-34
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: A499-34-008

Sheet No. 49
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-2033	Temperature (°F)	140	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: 8320A6	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-147	Seismic	LATER	
Function/Service: CORE COOLING/ ISOLATION OF HPCI STEAM FLOW TO THE RHR HEAT EXCHANGER	Radiation (Rad)	9.6 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: SE CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 736'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M120/D7

Loc Dwg: E317/D3 Elec Scheme: E121/58 VDR ID:
Remarks:

Equip ID: A499-34-009

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-2037	Temperature (°F)	140	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ASCO	Relative Humidity (%)	100	
Model Number: 8320A6	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-147	Seismic	LATER	
Function/Service: CORE COOLING/RHR TRAIN A CONDENSATE RETURN TO RCIC OR RHR TEST ISOLATION	Radiation (Rad)	9.6 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: SE CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 731'4"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M120/E7

Loc Dwg: E317/E3 Elec Scheme: E121/58 VDR ID:
Remarks:

A535-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 50
Revision 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: SOLENOID VALVE Manufacturer: ATKOMATIC Model Number: 31840	Operating Time	30 DAYS		SEE GEN NOTE 4	001		---	---	NONE
	Temperature (°F)	90		SEE GEN NOTE 7	001		---	---	NONE
	Pressure (PSIG)	0		SEE GEN NOTE 7	001		---	---	NONE
	Relative Humidity (%)	100		SEE GEN NOTE 7	001		---	---	NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	4.7 E05		4.0 E06	001		REF. (A)	TYPE TEST ANAYL	NONE
	Aging	LATER		---	---		---	---	SEE NOTE (1)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. ATKOMATIC VALVE CO.,INC LETTER FROM GARYSPEAR TO JIM HURLEY OF BECHTEL DATED 28-MAY-80 AND REPORT NO.21 BY RADIATION EFFECT INFORMATION CENTER OF BATTELLE MEMORIAL INSTITUTE	1. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30,1982

A535-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: A535-01-001

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-8114A	Temperature (°F)	90	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ATKOMATIC	Relative Humidity (%)	100	
Model Number: 31840	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: FIELD	Seismic	LATER	
Function/Service: PREVENT RELEASE OF RADIOACTUVE MATERIAL/ DRYWELL SAMPLE LINE ISOLATION.	Radiation (Rad)	4.7 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RB-S	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M181/G6

Loc Dwg: E319/E6 Elec Scheme: E122/26 VDR ID:
Remarks:

Equip ID: A535-01-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-8114B	Temperature (°F)	90	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ATKOMATIC	Relative Humidity (%)	100	
Model Number: 31840	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: FIELD	Seismic	LATER	
Function/Service: PREVENT RELEASE OF RADIOACTIVE MATERIAL/ DRYWELL SAMPLE LINE ISOLATION	Radiation (Rad)	4.7 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RB-N	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M181/G3

Loc Dwg: E318/F6 Elec Scheme: E122/26 VDR ID:
Remarks:

A535-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: A535-01-003

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Revision: 0
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: A535-01-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-8115A	Temperature (°F)	90	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ATKOMATIC	Relative Humidity (%)	100	
Model Number: 31840	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: FIELD	Seismic	LATER	
Function/Service: PREVENT RELEASE OF RADIOACTIVE MATERIAL/ DRYWELL SAMPLE LINE ISOLATION	Radiation (Rad)	4.7 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RB-S	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M181/F6

Loc Dwg: E319/E6 Elec Scheme: E122/26 VDR ID:
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-8115B	Temperature (°F)	90	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ATKOMATIC	Relative Humidity (%)	100	
Model Number: 31840	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: FIELD	Seismic	LATER	
Function/Service: PREVENT RELEASE OF RADIOACTIVE MATERIAL/ DRYWELL SAMPLE LINE ISOLATION	Radiation (Rad)	4.7 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RB-N	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M181/F3

Loc Dwg: E318/F6 Elec Scheme: E122/26 VDR ID:
Remarks:

A535-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: A535-01-005

Sheet No. 53
Revision: 0
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EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-8116A	Temperature (°F)	90	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ATKOMATIC	Relative Humidity (%)	100	
Model Number: 31840	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: FIELD	Seismic	LATER	
Function/Service: PREVENT RELEASE OF RADIOACTIVE MATERIAL/ TORUS SAMPLE LINE ISOLATION	Radiation (Rad)	4.7 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RB-S	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M181/E6

Loc Dwg: E319/E6 Elec Scheme: E122/26 VDR ID:
Remarks:

Equip ID: A535-01-006

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-8116B	Temperature (°F)	90	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ATKOMATIC	Relative Humidity (%)	100	
Model Number: 31840	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: FIELD	Seismic	LATER	
Function/Service: PREVENT RELEASE OF RADIOACTIVE MATERIAL/ TORUS SAMPLE LINE ISOLATION	Radiation (Rad)	4.7 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RB-N	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M181/E3

Loc Dwg: E318/F6 Elec Scheme: E122/26 VDR ID:
Remarks:

A535-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: A535-01-007

Sheet No. 54
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EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-8117A	Temperature (°F)	90	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ATKOMATIC	Relative Humidity (%)	100	
Model Number: 31840	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: FIELD	Seismic	LATER	
Function/Service: PREVENT RELEASE OF RADIOACTIVE MATERIAL/ SAMPLE LINE RETURN ISOLATION	Radiation (Rad)	4.7 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RB-S	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M181/C7

Loc Dwg: M405/C6 Elec Scheme: E122/26 VDR ID:
Remarks:

Equip ID: A535-01-008

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-8117B	Temperature (°F)	90	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ATKOMATIC	Relative Humidity (%)	100	
Model Number: 31840	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: FIELD	Seismic	LATER	
Function/Service: PREVENT RELEASE OF RADIOACTIVE MATERIAL/ SAMPLE LINE RETURN ISOLATION	Radiation (Rad)	4.7 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RB-N	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M181/C2

Loc Dwg: M405/F6 Elec Scheme: E122/26 VDR ID:
Remarks:

A535-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: A535-01-009

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Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
DATA SHEET

Equip ID: A535-01-010

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-8117C	Temperature (°F)	90	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ATKOMATIC	Relative Humidity (%)	100	
Model Number: 31840	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: FIELD	Seismic	LATER	
Function/Service: PREVENT RELEASE OF RADIOACTIVE MATERIAL/ SAMPLE LINE RETURN ISOLATION	Radiation (Rad)	4.7 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RB-S	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M181/D6

Loc Dwg: M405-2/* Elec Scheme: E122/26 VDR ID:
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-8117D	Temperature (°F)	90	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: ATKOMATIC	Relative Humidity (%)	100	
Model Number: 31840	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: FIELD	Seismic	LATER	
Function/Service: PREVENT RELEASE OF RADIOACTIVE MATERIAL/ SAMPLE LINE RETURN ISOLATION	Radiation (Rad)	4.7 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RB-N	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M181/D3

Loc Dwg: M405/F6 Elec Scheme: E122/26 VDR ID:
Remarks:

A613-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 56
Revision 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: SOLENOID VALVE Manufacturer: AUTOMATIC VALVE CO. Model Number: C5450-5	Operating Time	30 DAYS		SEE NOTE (1)	001		REF. (A)	TYPE TEST/ ANALYSIS	NONE
	Temperature (°F)	SEE GEN NOTE 6		340	001		REF. (A)	TYPE TEST	NONE
	Pressure (PSIG)	SEE GEN NOTE 6		65	001		REF. (A)	TYPE TEST	NONE
	Relative Humidity (%)	100		100	001		REF. (A)	TYPE TEST	NONE
	Chemical Spray	DEMIN WATER		NONE	001		---	---	SEE NOTE (2)
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	4.3 E07		3.0 E07	001		REF. (A)	TYPE TEST	SEE NOTE (3)
	Aging	LATER		---	---		---	---	SEE NOTE (4)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. PLANT EQUIPMENT DESIGN ENGINEERING MEMO NO. 126-62, TEST NO. 4	1. ALTHOUGH TESTED FOR 7 DAYS, THIS EQUIPMENT IS QUALIFIED FOR 30 DAYS BY EXTRAPOLATION ANALYSIS. RADIATION IS THE ONLY QUALIFICATION PARAMETER OF CONCERN IN THE LONG TERM AND THIS EQUIPMENT IS QUALIFIED FOR THE 30 DAY RADIATION DOSE BY TEST. 2. SEE ACTION ITEM 21

A613-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket: 50-331

EQUIPMENT QUALIFICATION REPORT

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DOCUMENTATION REFERENCES:	NOTES:
	3. SEE ACTION ITEM 2. 4. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

A613-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: A613-01-001

Sheet No. 58
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: A613-01-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: AUTOMATIC DEPRESSURIZATION SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: SV-4400	Temperature (°F)	SEE GENERAL NOTE 6	
Component: SOLENOID VALVE	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: AUTOMATIC VALVE CO.	Relative Humidity (%)	100	
Model Number: C5450-5	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CORE COOLING/ NUCLEAR SYSTEM PRESSURE RELIEF	Radiation (Rad)	4.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 775'10"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 07 P&ID: M114/F5

Loc Dwg: E330/C4 Elec Scheme: E121/2 VDR ID:
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: AUTOMATIC DEPRESSURIZATION SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: SV-4402	Temperature (°F)	SEE GENERAL NOTE 6	
Component: SOLENOID VALVE	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: AUTOMATIC VALVE CO.	Relative Humidity (%)	100	
Model Number: C5450-5	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CORE COOLING/ NUCLEAR SYSTEM PRESSURE RELIEF	Radiation (Rad)	4.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 775'10"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 07 P&ID: M114/D6

Loc Dwg: E330/B4 Elec Scheme: E121/2 VDR ID:
Remarks:

A613-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: A613-01-003

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Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: AUTOMATIC DEPRESSURIZATION SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: SV-4405	Temperature (°F)	SEE GENERAL NOTE 6	
Component: SOLENOID VALVE	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: AUTOMATIC VALVE CO.	Relative Humidity (%)	100	
Model Number: C5450-5	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CORE COOLING/ NUCLEAR SYSTEM PRESSURE RELIEF	Radiation (Rad)	4.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 775'10"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 07 P&ID: M114/D4

Loc Dwg: E330/F4 Elec Scheme: E121/2 VDR ID:
Remarks:

Equip ID: A613-01-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: AUTOMATIC DEPRESSURIZATION SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: SV-4406	Temperature (°F)	SEE GENERAL NOTE 6	
Component: SOLENOID VALVE	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: AUTOMATIC VALVE CO.	Relative Humidity (%)	100	
Model Number: C5450-5	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CORE COOLING/ NUCLEAR SYSTEM PRESSURE RELIEF	Radiation (Rad)	4.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 775'10"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 07 P&ID: M114/F5

Loc Dwg: E330/F4 Elec Scheme: E121/2 VDR ID:
Remarks:

B069-09
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

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Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: PRESSURE SWITCH Manufacturer: BARKSDALE Model Number: P1H-M85SS-V	Operating Time	30 DAYS		SEE GEN NOTE 4	001		---	---	NONE
	Temperature (°F)	90		SEE GEN NOTE 7	001		---	---	NONE
	Pressure (PSIG)	0		SEE GEN NOTE 7	001		---	---	NONE
	Relative Humidity (%)	100		SEE GEN NOTE 7	001		---	---	NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	1.1 E07		1.1 E07	001		REF. (A)	---	NONE
	Aging	LATER		---	---		---	---	SEE NOTE (1)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. IOWA ELECTRIC PURCHASE ORDER NO. 54013 WITH EDS NUCLEAR DATED 12-4-81	1. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

B069-09
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: B069-09-001

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EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: MAIN STEAM LINE ISOL VALVE LEAKAGE CONT.	Operating Time	30 DAYS	
Plant I.D. Number: PS-8404A	Temperature (°F)	90	
Component: PRESSURE SWITCH	Pressure (PSIG)	0	
Manufacturer: BARKSDALE	Relative Humidity (%)	100	
Model Number: P1H-M85SS-V	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service:	Radiation (Rad)	1.1 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: A CRD RR/1C-145	Submergence	NOT APPLICABLE	
Floor Elevation: 771'10"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 05 P&ID: M184/G3

Loc Dwg: M2/A5 Elec Scheme: E122/37 VDR ID: B21-N913A
Remarks:

Equip ID: B069-09-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: MAIN STEAM LINE ISOL VALVE LEAKAGE CONT.	Operating Time	30 DAYS	
Plant I.D. Number: PS-8404B	Temperature (°F)	90	
Component: PRESSURE SWITCH	Pressure (PSIG)	0	
Manufacturer: BARKSDALE	Relative Humidity (%)	100	
Model Number: P1H-M85SS-V	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service:	Radiation (Rad)	1.1 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: A CRD RR/1C-145	Submergence	NOT APPLICABLE	
Floor Elevation: 771'10"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 05 P&ID: M184/C8

Loc Dwg: M2/A5 Elec Scheme: E122/37 VDR ID: B21-N913B
Remarks:

B069-09
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: B069-09-003

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Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION

System: MAIN STEAM LINE ISOL VALVE LEAKAGE CONT.
Plant I.D. Number: PS-8404C
Component: PRESSURE SWITCH
Manufacturer: BARKSDALE
Model Number: P1H-M85SS-V
Purchase Order Number: APED
Function/Service:
Accuracy: Spec: Demo:
Location: A CRD RR/1C-145
Floor Elevation: 771'10"
Flood Level Elevation: NOT APP
Above Flood Level: Yes: X No:

ENVIRONMENT

Parameter	Required	Remarks
Operating Time	30 DAYS	
Temperature (°F)	90	
Pressure (PSIG)	0	
Relative Humidity (%)	100	
Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Seismic	LATER	
Radiation (Rad)	1.1 E07	
Aging	LATER	
Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 05 P&ID: M184/F3
Loc Dwg: M2/A5 Elec Scheme: E122/37 VDR ID: B21-N913C
Remarks:

Equip ID: B069-09-004

EQUIPMENT DESCRIPTION

System: MAIN STEAM LINE ISOL VALVE LEAKAGE CONT.
Plant I.D. Number: PS-8404D
Component: PRESSURE SWITCH
Manufacturer: BARKSDALE
Model Number: P1H-M85SS-V
Purchase Order Number: APED
Function/Service:
Accuracy: Spec: Demo:
Location: A CRD RR/1C-145
Floor Elevation: 771'10"
Flood Level Elevation: NOT APP
Above Flood Level: Yes: X No:

ENVIRONMENT

Parameter	Required	Remarks
Operating Time	30 DAYS	
Temperature (°F)	90	
Pressure (PSIG)	0	
Relative Humidity (%)	100	
Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Seismic	LATER	
Radiation (Rad)	1.1 E07	
Aging	LATER	
Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 05 P&ID: M184/F8
Loc Dwg: M2/A5 Elec Scheme: E122/37 VDR ID: B21-N913D
Remarks:

B081-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 63
Revision 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: DIFF,PRESS. IND. SWIT Manufacturer: BARTON Model Number: 288	Operating Time	30 DAYS		SEE GEN NOTE 4	025		---	---	NONE
	Temperature (°F)	104		SEE GEN NOTE 7	025		---	---	NONE
	Pressure (PSIG)	0		SEE GEN NOTE 7	025		---	---	NONE
	Relative Humidity (%)	100		SEE GEN NOTE 7	025		---	---	NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	2.9 E05		3.0 E06	025		REF. (A)	TYPE TEST	NONE
	Aging	LATER		---	---		---	---	SEE NOTE (1)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. ITT BARTON DOCUMENT NO. R3-288A-1	1. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30,1982

B081-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: B081-02-025

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Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: B081-02-026

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: PDIS-4625A	Temperature (°F)	104	
Component: DIFF,PRESS. IND. SWIT	Pressure (PSIG)	0	
Manufacturer: BARTON	Relative Humidity (%)	100	
Model Number: 288	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service:	Radiation (Rad)	2.9 E05	
Accuracy: Spec: Demo:	Aging	LATER	
Location: NE CRNR RM/1C-57	Submergence	NOT APPLICABLE	
Floor Elevation: 735'7"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M116/A3

Loc Dwg: E316/E2 Elec Scheme: E121/56 VDR ID: B31-N019A
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: PDIS-4625B	Temperature (°F)	104	
Component: DIFF,PRESS. IND. SWIT	Pressure (PSIG)	0	
Manufacturer: BARTON	Relative Humidity (%)	100	
Model Number: 288	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service:	Radiation (Rad)	2.9 E05	
Accuracy: Spec: Demo:	Aging	LATER	
Location: NE CRNR RM/1C-57	Submergence	NOT APPLICABLE	
Floor Elevation: 735'7"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M116/A3

Loc Dwg: E316/E2 Elec Scheme: E121/56 VDR ID: B31-N020A
Remarks:

B081-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: B081-02-027

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Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: PDIS-4625C	Temperature (°F)	104	
Component: DIFF,PRESS. IND. SWIT	Pressure (PSIG)	0	
Manufacturer: BARTON	Relative Humidity (%)	100	
Model Number: 288	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service:	Radiation (Rad)	2.9 E05	
Accuracy: Spec: Demo:	Aging	LATER	
Location: NE CRNR RM/1C-57	Submergence	NOT APPLICABLE	
Floor Elevation: 735'7"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M116/A3

Loc Dwg: E316/E2 Elec Scheme: E121/56 VDR ID: B31-N021A
Remarks:

Equip ID: B081-02-028

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: PDIS-4625D	Temperature (°F)	104	
Component: DIFF,PRESS. IND. SWIT	Pressure (PSIG)	0	
Manufacturer: BARTON	Relative Humidity (%)	100	
Model Number: 288	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service:	Radiation (Rad)	2.9 E05	
Accuracy: Spec: Demo:	Aging	LATER	
Location: NE CRNR RM/1C-57	Submergence	NOT APPLICABLE	
Floor Elevation: 735'7"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M116/A2

Loc Dwg: E316/E2 Elec Scheme: E121/56 VDR ID: B31-N022A
Remarks:

B081-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: B081-02-037

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Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
DATA SHEET

Equip ID: B081-02-038

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: PDIS-4304	Temperature (°F)	104	
Component: DIFF.PRESS. IND. SWIT	Pressure (PSIG)	0	
Manufacturer: BARTON	Relative Humidity (%)	100	
Model Number: 288	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-167	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /VACUUM BREAKER HIGH DIFFERENTIAL PRESSURE	Radiation (Rad)	2.9 E05	
Accuracy: Spec: 1.5% Demo: NONE	Aging	LATER	
Location: NE CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 735'7"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M143/B7

Loc Dwg: M405-1/6 Elec Scheme: E122/23 VDR ID:
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: PDIS-4305	Temperature (°F)	104	
Component: DIFF.PRESS. IND. SWIT	Pressure (PSIG)	0	
Manufacturer: BARTON	Relative Humidity (%)	100	
Model Number: 288	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-167	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /VACUUM BREAKER HIGH DIFFERENTIAL PRESSURE	Radiation (Rad)	2.9 E05	
Accuracy: Spec: 1.5% Demo: NONE	Aging	LATER	
Location: NE CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 735'7"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M143/B8

Loc Dwg: M405-1/6 Elec Scheme: E122/23 VDR ID:
Remarks:

B081-03
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

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EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: PRESSURE SWITCH Manufacturer: BARTON Model Number: 289	Operating Time	30 DAYS		SEE GEN NOTE 4	001		---	---	NONE
	Temperature (°F)	140		212 GEN NOTE 7	001		REF. (A)	TYPE TEST	NONE
	Pressure (PSIG)	0		SEE GEN NOTE 7	001		---	---	NONE
	Relative Humidity (%)	100		100 GEN NOTE 7	001		REF. (A)	TYPE TEST	NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	5.9 E06		3.0 E06	001		REF. (B)	TYPE TEST	SEE NOTE (1)
	Aging	LATER		---	---		---	---	SEE NOTE (2)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. BWR EQUIPMENT QUALIFICATION SUMMARY REPORT NO. QSR-029-A-02 DATED 10-8-80 B. ITT BARTON REPORT NO. R3-288A-1 DATED MAY, 1980	1. FOR FIS-2131 AND FIS-2111 SEE ACTION ITEM NO 17 FOR PDIS-1971A AND PDIS-1971B SEE GENERAL NOTE 3 2. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: B081-03-001

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CORE SPRAY SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: FIS-2111	Temperature (°F)	140	
Component: PRESSURE SWITCH	Pressure (PSIG)	0	
Manufacturer: BARTON	Relative Humidity (%)	100	
Model Number: 289	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CORE COOLING/CORE SPRAY PUMP 1P-211A DISCHARGE LOW FLOW	Radiation (Rad)	5.9 E06	
Accuracy: Spec: 1.5% Demo: NONE	Aging	LATER	
Location: SE CRNR RM/1C-123	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 08 P&ID: M121/F5

Loc Dwg: E317/E3 Elec Scheme: E121/6 VDR ID: E21-N006A
Remarks:

Equip ID: B081-03-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CORE SPRAY SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: FIS-2131	Temperature (°F)	104	
Component: PRESSURE SWITCH	Pressure (PSIG)	0	
Manufacturer: BARTON	Relative Humidity (%)	100	
Model Number: 289	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CORE COOLING/CORE SPRAY PUMP 1P-211B DISCHARGE LOW FLOW	Radiation (Rad)	5.9 E06	
Accuracy: Spec: 1.5% Demo: NONE	Aging	LATER	
Location: NW CRNR RM/1C-124	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 08 P&ID: M121/G5

Loc Dwg: E316/E7 Elec Scheme: E121/6 VDR ID: E21-N006B
Remarks:

B081-03
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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Equip ID: B081-03-004

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: B081-03-005

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: PDIS-1971A	Temperature (°F)	140	
Component: PRESSURE SWITCH	Pressure (PSIG)	0	
Manufacturer: BARTON	Relative Humidity (%)	100	
Model Number: 289	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CORE COOLING/RHR HEAT EXCHANGER A LOW DISCHARGE FLOW BYPASS TO SUPPRESSION POOL	Radiation (Rad)	5.9 E06	
Accuracy: Spec: 1.5% Demo: NONE	Aging	LATER	
Location: SE CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M120/F7
Loc Dwg: E317/E3 Elec Scheme: E121/54 VDR ID: E11-N021A
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: PDIS-1971B	Temperature (°F)	104	
Component: PRESSURE SWITCH	Pressure (PSIG)	0	
Manufacturer: BARTON	Relative Humidity (%)	100	
Model Number: 289	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CORE COOLING/RHR HEAT EXCHANGER B LOW DISCHARGE FLOW BYPASS TO SUPPRESSION POOL	Radiation (Rad)	5.9 E06	
Accuracy: Spec: 1.5% Demo: NONE	Aging	LATER	
Location: NW CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M120/F7
Loc Dwg: M405-1/E Elec Scheme: E121/54 VDR ID: E11-N021B
Remarks:

B081-03
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: PS-4348	Temperature (°F)	90	
Component: PRESSURE SWITCH	Pressure (PSIG)	0	
Manufacturer: BARTON	Relative Humidity (%)	100	
Model Number: 289	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR-568	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /TORUS NITROGEN PUR* ISOLATION ON HIGH TORUS PRESSURE	Radiation (Rad)	4.7 E05	
Accuracy: Spec: 1.5% Demo: NONE	Aging	LATER	
Location: RB-N			
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M143/C4

Loc Dwg: E318/A5 Elec Scheme: E122/12 VDR ID:
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System:	Operating Time		
Plant I.D. Number:	Temperature (°F)		
Component:	Pressure (PSIG)		
Manufacturer:	Relative Humidity (%)		
Model Number:	Chemical Spray		
Purchase Order Number:	Seismic		
Function/Service:	Radiation (Rad)		
Accuracy: Spec: Demo:	Aging		
Location:			
Floor Elevation:			
Flood Level Elevation: Above Flood Level: Yes: No:	Submergence		

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM

Walkdown: Environment: System: P&ID:

Loc Dwg: Elec Scheme: VDR ID:
Remarks:

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
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EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: DIFFERENTIAL PRESSURE Manufacturer: BARTON Model Number: 368	Operating Time	30 DAYS			001				SEE NOTE (1)
	Temperature (°F)	104		SEE NOTE (2)	003				NONE
	Pressure (PSIG)	0		SEE NOTE (2)	001				NONE
	Relative Humidity (%)	100		SEE NOTE (2)	001				NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	4.7 E05		SEE NOTE (3)	001				SEE NOTE (1)
	Aging	LATER		---	---		---	---	SEE NOTE (4)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
	1. SEE GENERAL NOTE NO. 1 2. QUALIFICATION OF PRESSURE, TEMPERATURE, AND HUMIDITY IS NOT APPLICABLE FOR THIS EQUIPMENT DUE TO THE FACT THAT THEY ARE NORMAL OPERATING CONDITIONS AND NOT EXPOSED TO HIGH ENERGY LINE BREAK. 3. AT RADIATION LEVEL IN EXCESS OF 1.0 E04 THE ELECTRONICS OF

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
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DOCUMENTATION REFERENCES:	NOTES:
	THIS DIFFERENTIAL PRESSURE TRANSMITTER WILL BE DAMAGED. 4. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: PDT-4623	Temperature (°F)	104	
Component: DIFFERENTIAL PRESSURE	Pressure (PSIG)	0	
Manufacturer: BARTON	Relative Humidity (%)	100	
Model Number: 368	Chemical Spray	NOT APPLICABLE	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: RECIRC. PMP 1P201A DIFF PRESS	Radiation (Rad)	2.9 E05	
Accuracy: Spec: Demo:	Aging	LATER	
Location: NE CRNR RM/1C-57	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 36 P&ID: M116/A3

Loc Dwg: E316/E2 Elec Scheme: E124/2 VDR ID: B31-N015A
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System:	Operating Time		
Plant I.D. Number:	Temperature (°F)		
Component:	Pressure (PSIG)		
Manufacturer:	Relative Humidity (%)		
Model Number:	Chemical Spray		
Purchase Order Number:	Seismic		
Function/Service:	Radiation (Rad)		
Accuracy: Spec: Demo:	Aging		
Location:	Submergence		
Floor Elevation:			
Flood Level Elevation: Above Flood Level: Yes: No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM

Walkdown: Environment: System: P&ID:

Loc Dwg: Elec Scheme: VDR ID:
Remarks:

D093-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

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EQUIPMENT QUALIFICATION REPORT
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EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: LEVEL SWITCH Manufacturer: DELAVAL GEMS SENSORS Model Number: XM-33353-1	Operating Time	30 DAYS		NONE	001		---	---	GEN NOTE 1
	Temperature (°F)	SEE GEN NOTE 6		NONE	001		---	---	GEN NOTE 1
	Pressure (PSIG)	SEE GEN NOTE 6		NONE	001		---	---	GEN NOTE 1
	Relative Humidity (%)	100		NONE	001		---	---	GEN NOTE 1
	Chemical Spray	DEMIN WATER		NONE	001		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	4.3 E07		NONE	001		---	---	GEN NOTE 1
	Aging	LATER		---	---		---	---	SEE NOTE (1)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
	1. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

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Facility: DUANE ARNOLD
Unit: 1
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EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: LE-3701	Temperature (°F)	SEE GENERAL NOTE 6	
Component: LEVEL SWITCH	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: DELAVAL GEMS SENSORS	Relative Humidity (%)	100	
Model Number: XM-33353-1	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: APED	Seismic	LATER	
Function/Service:	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 742'-9"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M137/F8

Loc Dwg: E331/D4 Elec Scheme: E125/2 VDR ID: G11-N002

Remarks:

Equip ID: D093-01-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: LE-3721	Temperature (°F)	SEE GENERAL NOTE 6	
Component: LEVEL SWITCH	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: DELAVAL GEMS SENSORS	Relative Humidity (%)	100	
Model Number: XM-33353-1	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: APED	Seismic	LATER	
Function/Service:	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 742'-9"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M137/B7

Loc Dwg: E331/E5 Elec Scheme: E125/2 VDR ID: G11-N009

Remarks:

D093-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: D093-01-003

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: LS-3701	Temperature (°F)	140	
Component: LEVEL SWITCH	Pressure (PSIG)	0	
Manufacturer: DELAVAL GEMS SENSORS	Relative Humidity (%)	100	
Model Number: XM-33353-1	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service:	Radiation (Rad)	4.7 E05	
Accuracy: Spec: Demo:	Aging	LATER	
Location: RB-N	Submergence	NOT APPLICABLE	
Floor Elevation: 757'-6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M137/F8

Loc Dwg: E318/E5 Elec Scheme: E125/2 VDR ID: G11-N001

Remarks:

Equip ID: D093-01-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: LS-3721	Temperature (°F)	140	
Component: LEVEL SWITCH	Pressure (PSIG)	0	
Manufacturer: DELAVAL GEMS SENSORS	Relative Humidity (%)	100	
Model Number: XM-33353-1	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service:	Radiation (Rad)	4.7 E05	
Accuracy: Spec: Demo:	Aging	LATER	
Location: RB-N	Submergence	NOT APPLICABLE	
Floor Elevation: 757'-6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M137/B7

Loc Dwg: E318/E5 Elec Scheme: E125/2 VDR ID: G11-N008

Remarks:

E153-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
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EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: MOTOR OPERATED VALVE Manufacturer: ELECTRODYNE Model Number: TN-24-400	Operating Time	30 DAYS		NONE	001		---	---	SEE NOTE (1)
	Temperature (°F)	277		NONE	001		---	---	SEE NOTE (1)
	Pressure (PSIG)	1.2		NONE	001		---	---	SEE NOTE (1)
	Relative Humidity (%)	100		NONE	001		---	---	SEE NOTE (1)
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	5.6 E06		NONE	001		---	---	SEE NOTE (1)
	Aging	LATER		---	---		---	---	SEE NOTE (2)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
	1. SEE ACTION ITEM NO 23 2. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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Equip ID: E153-01-001

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-1904	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.2	
Manufacturer: ELECTRODYNE	Relative Humidity (%)	100	
Model Number: TN-24-400	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-133	Seismic	LATER	
Function/Service:	Radiation (Rad)	5.6 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: RHR VALVE ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M119/E6

Loc Dwg: M268/G7 Elec Scheme: E121/53 VDR ID: E11-F017B

Remarks:

Equip ID: E153-01-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-2004	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.2	
Manufacturer: ELECTRODYNE	Relative Humidity (%)	100	
Model Number: TN-24-400	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-133	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /RHR RECIRC SYSTEM INJECTION ISOLATION	Radiation (Rad)	5.6 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RHR VALVE ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M120/F4

Loc Dwg: M248/E7 Elec Scheme: E121/53 VDR ID: E11-F017A

Remarks:

F081-02
Owner: IOWA ELECTRIC
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EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: CONTROL UNIT Manufacturer: FENWAL Model Number: 35003-0	Operating Time	30 DAYS		SEE GEN NOTE 4	001		---	---	NONE
	Temperature (°F)	104		SEE GEN NOTE 7	001		---	---	NONE
	Pressure (PSIG)	0		SEE GEN NOTE 7	001		---	---	NONE
	Relative Humidity (%)	100		SEE GEN NOTE 7	001		---	---	NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	1.6 E08		NONE	001		---	---	SEE NOTE (1)
	Aging	LATER		---	---		---	---	SEE NOTE (2)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
	1. SEE ACTION ITEM NO 22 2. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

F081-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: STANDBY GAS TREATMENT SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: CU-5835A1	Temperature (°F)	104	
Component: CONTROL UNIT	Pressure (PSIG)	0	
Manufacturer: FENWAL	Relative Humidity (%)	100	
Model Number: 35003-0	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-81	Seismic	LATER	
Function/Service:	Radiation (Rad)	1.6 E08	
Accuracy: Spec: Demo:	Aging	LATER	
Location: SGT ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 10 P&ID: M158/F4
Loc Dwg: M647/G6 Elec Scheme: E113/97 VDR ID:
Remarks:

Equip ID: F081-02-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: STANDBY GAS TREATMENT SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: CU-5835A2	Temperature (°F)	104	
Component: CONTROL UNIT	Pressure (PSIG)	0	
Manufacturer: FENWAL	Relative Humidity (%)	100	
Model Number: 35003-0	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-81	Seismic	LATER	
Function/Service:	Radiation (Rad)	1.6 E08	
Accuracy: Spec: Demo:	Aging	LATER	
Location: SGT ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 10 P&ID: M158/F4
Loc Dwg: M647/G6 Elec Scheme: E113/97 VDR ID:
Remarks:

F081-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: F081-02-003

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: STANDBY GAS TREATMENT SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: CU-5835B1	Temperature (°F)	104	
Component: CONTROL UNIT	Pressure (PSIG)	0	
Manufacturer: FENWAL	Relative Humidity (%)	100	
Model Number: 35003-0	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-81	Seismic	LATER	
Function/Service:	Radiation (Rad)	1.6 E08	
Accuracy: Spec: Demo:	Aging	LATER	
Location: SGT ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 10 P&ID: M158/B4

Loc Dwg: M647/F6 Elec Scheme: E113/97 VDR ID:
Remarks:

Equip ID: F081-02-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: STANDBY GAS TREATMENT SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: CU-5835B2	Temperature (°F)	104	
Component: CONTROL UNIT	Pressure (PSIG)	0	
Manufacturer: FENWAL	Relative Humidity (%)	100	
Model Number: 35003-0	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-81	Seismic	LATER	
Function/Service:	Radiation (Rad)	1.6 E08	
Accuracy: Spec: Demo:	Aging	LATER	
Location: SGT ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 10 P&ID: M158/B4

Loc Dwg: M647/F6 Elec Scheme: E113/97 VDR ID:
Remarks:

F081-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: F081-02-005

Sheet No. 82
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Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: STANDBY GAS TREATMENT SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: CU-5837A1	Temperature (°F)	104	
Component: CONTROL UNIT	Pressure (PSIG)	0	
Manufacturer: FENWAL	Relative Humidity (%)	100	
Model Number: 35003-0	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-81	Seismic	LATER	
Function/Service:	Radiation (Rad)	1.6 E08	
Accuracy: Spec: Demo:	Aging	LATER	
Location: SGT ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 10 P&ID: M158/F4

Loc Dwg: M674/G6 Elec Scheme: E113/97 VDR ID:
Remarks:

Equip ID: F081-02-006

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: STANDBY GAS TREATMENT SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: CU-5837A2	Temperature (°F)	104	
Component: CONTROL UNIT	Pressure (PSIG)	0	
Manufacturer: FENWAL	Relative Humidity (%)	100	
Model Number: 35003-0	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-81	Seismic	LATER	
Function/Service:	Radiation (Rad)	1.6 E08	
Accuracy: Spec: Demo:	Aging	LATER	
Location: SGT ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 10 P&ID: M158/F4

Loc Dwg: M647/G6 Elec Scheme: E113/97 VDR ID:
Remarks:

F081-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: F081-02-007

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EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: STANDBY GAS TREATMENT SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: CU-5837B1	Temperature (°F)	104	
Component: CONTROL UNIT	Pressure (PSIG)	0	
Manufacturer: FENWAL	Relative Humidity (%)	100	
Model Number: 35003-0	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-81	Seismic	LATER	
Function/Service:	Radiation (Rad)	1.6 E08	
Accuracy: Spec: Demo:	Aging	LATER	
Location: SGT ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 10 P&ID: M158/B4

Loc Dwg: M647/F6 Elec Scheme: E113/97 VDR ID:
Remarks:

Equip ID: F081-02-008

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: STANDBY GAS TREATMENT SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: CU-5837B2	Temperature (°F)	104	
Component: CONTROL UNIT	Pressure (PSIG)	0	
Manufacturer: FENWAL	Relative Humidity (%)	100	
Model Number: 35003-0	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-81	Seismic	LATER	
Function/Service:	Radiation (Rad)	1.6 E08	
Accuracy: Spec: Demo:	Aging	LATER	
Location: SGT ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 10 P&ID: M158/B4

Loc Dwg: M647/F6 Elec Scheme: E113/97 VDR ID:
Remarks:

G080-42
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

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Revision 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: HEATER Manufacturer: GE Model Number: 47C518675	Operating Time	30 DAYS		SEE GEN NOTE 4	001		---	---	NONE
	Temperature (°F)	130		SEE GEN NOTE 7	001		---	---	NONE
	Pressure (PSIG)	0		SEE GEN NOTE 7	001		---	---	NONE
	Relative Humidity (%)	100		SEE GEN NOTE 7	001		---	---	NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	1.5 E07		1.0 E08	001		REF. (A)	ANALYSIS	NONE
	Aging	LATER		---	---		---	---	SEE NOTE (1)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. MAIN STEAM ISOLATION VALVE LEAKAGE CONTROL SYSTEM HEATERS QUALIFICATION BY ANALYSIS FOR NUCLEAR POWER STATION SERVICE PER IEEE 323-1974 BY BECHTEL POWER CORPORATION JANUARY, 1982 (CHRON 5814)	1. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

G080-42
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: G080-42-001

Sheet No. 85
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: G080-42-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: MAIN STEAM LINE ISOL VALVE LEAKAGE CONT.	Operating Time	30 DAYS	
Plant I.D. Number: 1S-122A	Temperature (°F)	130	
Component: HEATER	Pressure (PSIG)	0	
Manufacturer: GE	Relative Humidity (%)	100	
Model Number: 47C518675	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR 159	Seismic	LATER	
Function/Service: GE	Radiation (Rad)	1.5 E07	
VAPORIZATION OF MAIN STEAM LINE "A" LEAKAGE	Aging	LATER	
Accuracy: Spec: NA Demo: NA	Submergence	NOT APPLICABLE	
Location: STEAM TUNNEL			
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 05 P&ID: M184/F4

Loc Dwg: E328/E4 Elec Scheme: E122/37 VDR ID: B21-B926A
Remarks: 7884-B21-3(3)-3

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: MAIN STEAM LINE ISOL VALVE LEAKAGE CONT.	Operating Time	30 DAYS	
Plant I.D. Number: 1S-122B	Temperature (°F)	130	
Component: HEATER	Pressure (PSIG)	0	
Manufacturer: GE	Relative Humidity (%)	100	
Model Number: 47C518675	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR 159	Seismic	LATER	
Function/Service: GE	Radiation (Rad)	1.5 E07	
VAPORIZATION OF MAIN STEAM LINE 'B' LEAKAGE	Aging	LATER	
Accuracy: Spec: NA Demo: NA	Submergence	NOT APPLICABLE	
Location: STEAM TUNNEL			
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 05 P&ID: M184/B8

Loc Dwg: E328/E4 Elec Scheme: E122/37 VDR ID: B21-B926B
Remarks: 7884-B21-3(3)-3

G080-42
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: G080-42-003

Sheet No. 86
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Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: MAIN STEAM LINE ISOL VALVE LEAKAGE CONT.	Operating Time	30 DAYS	
Plant I.D. Number: 1S-122C	Temperature (°F)	130	
Component: HEATER	Pressure (PSIG)	0	
Manufacturer: GE	Relative Humidity (%)	100	
Model Number: 47C518675	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR 159	Seismic	LATER	
Function/Service: GE VAPORIZATION OF MAIN STEAM LINE "C" LEAKAGE	Radiation (Rad)	1.5 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 05 P&ID: M184/B3

Loc Dwg: E328/E4 Elec Scheme: E122/37 VDR ID: B21-B926C
Remarks: 7884-B21-3(3)-3

Equip ID: G080-42-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: MAIN STEAM LINE ISOL VALVE LEAKAGE CONT.	Operating Time	30 DAYS	
Plant I.D. Number: 1S-1220	Temperature (°F)	130	
Component: HEATER	Pressure (PSIG)	0	
Manufacturer: GE	Relative Humidity (%)	100	
Model Number: 47C518675	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR 159	Seismic	LATER	
Function/Service: GE VAPORIZATION OF MAIN STEAM LINE "D" LEAKAGE	Radiation (Rad)	1.5 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 05 P&ID: M184/E8

Loc Dwg: E328/E4 Elec Scheme: E122/37 VDR ID: B21-B926D
Remarks: 7884-B21-3(3)-3

G080-45
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 87
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Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: PUMP MOTOR Manufacturer: GE Model Number: 5K6336XC213A	Operating Time	30 DAYS		SEE GEN NOTE 4	001		---	---	NONE
	Temperature (°F)	140		SEE GEN NOTE 7	001		---	---	NONE
	Pressure (PSIG)	0		SEE GEN NOTE 7	001		---	---	NONE
	Relative Humidity (%)	100		SEE GEN NOTE 7	001		---	---	NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	5.9 E06		NONE	001		---	---	SEE NOTE (1)
	Aging	LATER		---	---		---	---	SEE NOTE (2)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
	1. SEE ACTION ITEM NO 7 2. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

G080-45
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: G080-45-001

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Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: G080-45-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: 1P-229A	Temperature (°F)	140	
Component: PUMP MOTOR	Pressure (PSIG)	0	
Manufacturer: GE	Relative Humidity (%)	100	
Model Number: 5K6336XC213A	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: GE	Radiation (Rad)	5.9 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: SE CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M120/B3

Loc Dwg: M1/C5 Elec Scheme: E121/41 VDR ID: E11-C002
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: 1P-229B	Temperature (°F)	104	
Component: PUMP MOTOR	Pressure (PSIG)	0	
Manufacturer: GE	Relative Humidity (%)	100	
Model Number: 5K6336XC213A	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: GE	Radiation (Rad)	5.9 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: NW CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M119/B7

Loc Dwg: M1/F7 Elec Scheme: E121/41 VDR ID: E11-C002
Remarks:

G080-45
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: G080-45-003

Sheet No. 89
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: G080-45-003

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: 1P-229C	Temperature (°F)	140	
Component: PUMP MOTOR	Pressure (PSIG)	0	
Manufacturer: GE	Relative Humidity (%)	100	
Model Number: 5K6336XC213A	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: GE	Radiation (Rad)	5.9 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: SE CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M120/B2

Loc Dwg: M1/C5 Elec Scheme: E121/41 VDR ID: E11-C002

Remarks:

Equip ID: G080-45-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: 1P-229D	Temperature (°F)	104	
Component: PUMP MOTOR	Pressure (PSIG)	0	
Manufacturer: GE	Relative Humidity (%)	100	
Model Number: 5K6336XC213A	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: GE	Radiation (Rad)	5.9 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: NW CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M119/B8

Loc Dwg: M1/F7 Elec Scheme: E121/41 VDR ID: E11-C002

Remarks:

G080-46
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 90
Revision 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: PUMP MOTOR Manufacturer: GE Model Number: 5K6336XC229A	Operating Time	30 DAYS		SEE GENERAL NOTE 4	001		---	---	NONE
	Temperature (°F)	140		SEE GEN NOTE 7	001		---	---	NONE
	Pressure (PSIG)	0		SEE GEN NOTE 7	001		---	---	NONE
	Relative Humidity (%)	100		SEE GEN NOTE 7	001		---	---	NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	5.9 E06		NONE	001		---	---	SEE NOTE (1)
	Aging	LATER		---	---		---	---	SEE NOTE (2)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
	1. SEE ACTION ITEM NO 8 2. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

G080-46
Owner: IOWA ELECTRIC
Facility: QUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: G080-46-001

Sheet No. 91
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: G080-46-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CORE SPRAY SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: 1P-211A	Temperature (°F)	140	
Component: PUMP MOTOR	Pressure (PSIG)	0	
Manufacturer: GE	Relative Humidity (%)	100	
Model Number: 5K6336XC229A	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service:	Radiation (Rad)	5.9 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: SE CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 08 P&ID: M121/C3
Loc Dwg: E317/D2 Elec Scheme: E121/3 VDR ID: E21-C001A
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CORE SPRAY SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: 1P-211B	Temperature (°F)	104	
Component: PUMP MOTOR	Pressure (PSIG)	0	
Manufacturer: GE	Relative Humidity (%)	100	
Model Number: 5K6336XC229A	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service:	Radiation (Rad)	5.9 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: NW CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 08 P&ID: M121/C4
Loc Dwg: E316/F8 Elec Scheme: E121/3 VDR ID: E21-C001B
Remarks:

G080-48
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

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EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: PRESSURE DIFF.TRANSMI Manufacturer: GE Model Number: DIFF PRESSURE TRANSMI	Operating Time	30 DAYS		SEE GEN NOTE 4	001		---	---	NONE
	Temperature (°F)	140		SEE GEN NOTE 7	002		---	---	NONE
	Pressure (PSIG)	0		SEE GEN NOTE 7	001		---	---	NONE
	Relative Humidity (%)	100		SEE GEN NOTE 7	001		---	---	NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	5.9 E06		NONE	001		---	---	SEE NOTE (1)
	Aging	LATER		---	---		---	---	SEE NOTE (2)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
	1. SEE ACTION ITEM NO. 6 2. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

G080-48
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: G080-48-001

Sheet No. 93
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: G080-48-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: PDT-1947	Temperature (°F)	104	
Component: PRESSURE DIFF.TRANSMI	Pressure (PSIG)	0	
Manufacturer: GE	Relative Humidity (%)	100	
Model Number: DIFF PRESSURE TRANSMI	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: GE SERVICE WATER INLET DIFFERTIAL PRESSURE	Radiation (Rad)	5.9 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: NW CRNR RM/1C-129B	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M119/C4
Loc Dwg: M1/E7 Elec Scheme: E121/58 VDR ID: E11-N002B
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: PDT-2046	Temperature (°F)	140	
Component: PRESSURE DIFF.TRANSMI	Pressure (PSIG)	0	
Manufacturer: GE	Relative Humidity (%)	100	
Model Number: DIFF PRESSURE TRANSMI	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: GE SERVICE WATER INLET DIFFERTIAL PRESSURE	Radiation (Rad)	5.9 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: SE CRNR RM/1C-129A	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M120/C5
Loc Dwg: M1/E7 Elec Scheme: E121/57 VDR ID: E11-N002A
Remarks:

G080-49
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

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EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: PRESSURE TRANSMITTER Manufacturer: GE Model Number: 551032GK222	Operating Time	30 DAYS		SEE GEN NOTE 4	001		---	---	NONE
	Temperature (°F)	140		SEE GEN NOTE 7	001		---	---	NONE
	Pressure (PSIG)	0		SEE GEN NOTE 7	001		---	---	NONE
	Relative Humidity (%)	100		SEE GEN NOTE 7	001		---	---	NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	8.1 E06		NONE	001		---	---	GEN NOTE 1
	Aging	LATER		---	---		---	---	SEE NOTE (1)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
	1. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

G080-49
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: G080-49-001

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EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: PT-2306	Temperature (°F)	140	
Component: PRESSURE TRANSMITTER	Pressure (PSIG)	0	
Manufacturer: GE	Relative Humidity (%)	100	
Model Number: 551032GK222	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service:	Radiation (Rad)	8.1 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: HPCI ROOM/1C-120	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'9" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X		X	X	

Walkdown: Environment: HARSH System: 36 P&ID: M123/D4

Loc Dwg: E317/B4 Elec Scheme: E121/25 VDR ID: E41-N009
Remarks:

Equip ID: G080-49-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: PT-2207	Temperature (°F)	140	
Component: PRESSURE TRANSMITTER	Pressure (PSIG)	0	
Manufacturer: GE	Relative Humidity (%)	100	
Model Number: 551032GK222	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service:	Radiation (Rad)	8.1 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: HPCI ROOM/1C-120	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'9" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X		X	X	

Walkdown: Environment: HARSH System: 36 P&ID: M122/F2

Loc Dwg: E317/B4 Elec Scheme: E121/25 VDR ID: E41-N013
Remarks:

G080-59
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
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EQUIPMENT QUALIFICATION REPORT
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EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: PRESSURE TRANSMITTER Manufacturer: GE Model Number: 551032EKZZ2	Operating Time	30 DAYS		SEE GEN NOTE 4	001		---	---	NONE
	Temperature (°F)	140		SEE GEN NOTE 7	002		---	---	NONE
	Pressure (PSIG)	0		SEE GEN NOTE 7	001		---	---	NONE
	Relative Humidity (%)	100		SEE GEN NOTE 7	001		---	---	NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	5.9 E06		NONE	001		---	---	GEN NOTE 1
	Aging	LATER		---	---		---	---	SEE NOTE (1)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
	1. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

G080-59
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: G080-59-001

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: PT-2126	Temperature (°F)	104	
Component: PRESSURE TRANSMITTER	Pressure (PSIG)	0	
Manufacturer: GE	Relative Humidity (%)	100	
Model Number: 551032EKZZ2	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service:	Radiation (Rad)	5.9 E06	
Accuracy: Spec: Demo: Location: NW CRNR RM/1C-124	Aging	LATER	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 36 P&ID: M121/E4

Loc Dwg: E316/E7 Elec Scheme: E121/10 VDR ID: E21-N001B
Remarks:

Equip ID: G080-59-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: PT-2106	Temperature (°F)	140	
Component: PRESSURE TRANSMITTER	Pressure (PSIG)	0	
Manufacturer: GE	Relative Humidity (%)	100	
Model Number: 551032EKZZ2	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service:	Radiation (Rad)	5.9 E06	
Accuracy: Spec: Demo: Location: SE CRNR RM/1C-123	Aging	LATER	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 36 P&ID: M121/E3

Loc Dwg: E317/D3 Elec Scheme: E121/9 VDR ID: E21-N001A
Remarks:

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
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EQUIPMENT QUALIFICATION REPORT
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EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: FLOW TRANSMITTER Manufacturer: GE Model Number: 555111BCAA-3ABA	Operating Time	30 DAYS		NONE	001		---	---	GEN NOTE 1
	Temperature (°F)	277		NONE	001		---	---	GEN NOTE 1
	Pressure (PSIG)	1.2		NONE	001		---	---	GEN NOTE 1
	Relative Humidity (%)	100		NONE	001		---	---	GEN NOTE 1
	Chemical Spray --	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	1.3 E07		NONE	001		---	---	GEN NOTE 1
	Aging	LATER		---	---		---	---	SEE NOTE (1)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
	1. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30,1982

G080-66
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: G080-66-001

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EQUIPMENT QUALIFICATION REPORT
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EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: FT-3707	Temperature (°F)	277	
Component: FLOW TRANSMITTER	Pressure (PSIG)	1.2	
Manufacturer: GE	Relative Humidity (%)	100	
Model Number: 555111BCAA-3ABA	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service:	Radiation (Rad)	1.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 36 P&ID: M137/H6

Loc Dwg: E317/F3 Elec Scheme: E125/5 VDR ID: G11-N003
Remarks:

Equip ID: G080-66-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: FT-3708	Temperature (°F)	277	
Component: FLOW TRANSMITTER	Pressure (PSIG)	1.2	
Manufacturer: GE	Relative Humidity (%)	100	
Model Number: 555111BCAA-3ABA	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service:	Radiation (Rad)	1.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 36 P&ID: M137/E6

Loc Dwg: E316/D7 Elec Scheme: E125/5 VDR ID: G11-N012
Remarks:

G080-84
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

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EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: ELECTRICAL PENETRATIONS Manufacturer: GE Model Number: NS04	Operating Time	30 DAYS		30 DAYS	001		REF. (A)	TYPE TEST/ ANAL	NONE
	Temperature (°F)	SEE GEN NOTE 6		340	001		REF. (A)	TYPE TEST	NONE
	Pressure (PSIG)	SEE GEN NOTE 6		63	001		REF. (A)	TYPE TEST	NONE
	Relative Humidity (%)	100		100	001		REF. (A)	TYPE TEST	NONE
	Chemical Spray	DEMIN WATER		SEE NOTE (1)	001		REF. (A)	TYPE TEST	SEE NOTE (2)
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	4.3 E07		1.0 E08	001		REF. (B)	ANALYSIS	NONE
	Aging	LATER		---	---		---	---	SEE NOTE (3)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. GE QUALIFICATION TEST REPORT FOR F01 ELECTRICAL PENETRATION ASSEMBLIES DATED APRIL 30, 1971 B. LETTER BY G G SHERWOOD, MANAGER OF SAFETY AND LICENSING OPERATION, GENERAL ELECTRIC TO D G EISENHUT, DIVISION OF OPERATING REACTORS, NUCLEAR REGULATORY COMMISSION DATED DECEMBER 2, 1977.	1. REPRESENTATIVE ELECTRICAL PENETRATION ASSEMBLIES WERE SUBJECTED TO A SUPERHEATED STEAM ENVIRONMENT AS PART OF THEIR TEST PROGRAM. 2. SEE ACTION ITEM 20 SEE ACTION ITEM 20 3. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: G080-84-001

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: ANCILLARY COMPONENTS	Operating Time	30 DAYS	
Plant I.D. Number: JX-104A	Temperature (°F)	SEE GENERAL NOTE 6	
Component: ELECTRICAL PENETRATIONS	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: GE	Relative Humidity (%)	100	
Model Number: NS04	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: E-001	Seismic	LATER	
Function/Service: SUPPORT/INSTRUMENT AND CONTROL	Radiation (Rad)	4.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 761'-2"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 32 P&ID: M115/E5

Loc Dwg: E369 Elec Scheme: E62 VDR ID:
Remarks: 238X702RSG001

Equip ID: G080-84-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: ANCILLARY COMPONENTS	Operating Time	30 DAYS	
Plant I.D. Number: JX-104B	Temperature (°F)	SEE GENERAL NOTE 6	
Component: ELECTRICAL PENETRATIONS	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: GE	Relative Humidity (%)	100	
Model Number: NS04	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: E-001	Seismic	LATER	
Function/Service: SUPPORT/INSTRUMENT AND CONTROL	Radiation (Rad)	4.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 761'-2"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 32 P&ID: M115/E5

Loc Dwg: E369 Elec Scheme: E62 VDR ID:
Remarks: 238X702RSG001

G080-84
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: G080-84-003

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EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: ANCILLARY COMPONENTS	Operating Time	30 DAYS	
Plant I.D. Number: JX-104C	Temperature (°F)	SEE GENERAL NOTE 6	
Component: ELECTRICAL PENETRATIONS	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: GE	Relative Humidity (%)	100	
Model Number: NS04	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: E-001	Seismic	LATER	
Function/Service: SUPPORT/INSTRUMENT AND CONTROL	Radiation (Rad)	4.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'-4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 32 P&ID: M115/E5

Loc Dwg: E369 Elec Scheme: E62 VDR ID:
Remarks: 238X702RSG001

Equip ID: G080-84-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: ANCILLARY COMPONENTS	Operating Time	30 DAYS	
Plant I.D. Number: JX-104D	Temperature (°F)	SEE GENERAL NOTE 6	
Component: ELECTRICAL PENETRATIONS	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: GE	Relative Humidity (%)	100	
Model Number: NS04	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: E-001	Seismic	LATER	
Function/Service: SUPPORT/INSTRUMENT AND CONTROL	Radiation (Rad)	4.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'-4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 32 P&ID: M115/E5

Loc Dwg: E369 Elec Scheme: E62 VDR ID:
Remarks: 238X702RSG001

G080-88
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
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EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: ELECTRICAL PENETRATION Manufacturer: GE Model Number: NS03	Operating Time	30 DAYS		30 DAYS	001		REF. (A)	TYPE TEST/ ANAL	NONE
	Temperature (°F)	SEE GEN NOTE 6		340	001		REF. (A)	TYPE TEST	NONE
	Pressure (PSIG)	SEE GEN NOTE 6		63	001		REF. (A)	TYPE TEST	NONE
	Relative Humidity (%)	100		100	001		REF. (A)	TYPE TEST	NONE
	Chemical Spray	DEMIN WATER		SEE NOTE (1)	001		REF. (A)	TYPE TEST	SEE NOTE (2)
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	4.3 E07		1.0 E08	001		REF. (B)	ANALYSIS	NONE
	Aging	LATER		---	---		---	---	SEE NOTE (3)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. GE QUALIFICATION TEST REPORT FOR F01 ELECTRICAL PENETRATION ASSEMBLIES DATED APRIL 30, 1971 B. LETTER BY G G SHERWOOD, MANAGER OF SAFETY AND LICENSING OPERATION, GENERAL ELECTRIC TO D G EISENHUT, DIVISION OF OPERATING REACTORS, NUCLEAR REGULATORY COMMISSION DATED DECEMBER 2, 1977.	1. REPRESENTATIVE ELECTRICAL PENETRATION ASSEMBLIES WERE SUBJECTED TO A SUPERHEATED STEAM ENVIRONMENT AS PART OF THEIR TEST PROGRAM. 2. SEE ACTION ITEM 20 SEE ACTION ITEM 20 3. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

G080-88
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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Equip ID: G080-88-001

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: ANCILLARY COMPONENTS	Operating Time	30 DAYS	
Plant I.D. Number: JX-101A	Temperature (°F)	SEE GENERAL NOTE 6	
Component: ELECTRICAL PENETRATION	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: GE	Relative Humidity (%)	100	
Model Number: NS03	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: E-001	Seismic	LATER	
Function/Service: SUPPORT/MEDIUM VOLTAGE	Radiation (Rad)	4.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 32 P&ID: M115/E5

Loc Dwg: E369 Elec Scheme: E62 VDR ID:
Remarks: 238X703RSG001

Equip ID: G080-88-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: ANCILLARY COMPONENTS	Operating Time	30 DAYS	
Plant I.D. Number: JX-101B	Temperature (°F)	SEE GENERAL NOTE 6	
Component: ELECTRICAL PENETRATION	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: GE	Relative Humidity (%)	100	
Model Number: NS03	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: E-001	Seismic	LATER	
Function/Service: SUPPORT/MEDIUM VOLTAGE	Radiation (Rad)	4.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 32 P&ID: M115/E5

Loc Dwg: E369 Elec Scheme: E62 VDR ID:
Remarks: 238X703RSG001

G080-89
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 105
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EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: ELECTRICAL PENETRATIO Manufacturer: GE Model Number: NS02-I	Operating Time	30 DAYS		30 DAYS	001		REF. (A)	TYPE TEST/ ANAL	NONE
	Temperature (°F)	SEE GEN NOTE 6		340	001		REF. (A)	TYPE TEST	NONE
	Pressure (PSIG)	SEE GEN NOTE 6		63	001		REF. (A)	TYPE TEST	NONE
	Relative Humidity (%)	100		100	001		REF. (A)	TYPE TEST	NONE
	Chemical Spray	DEMIN WATER		SEE NOTE. (1)	001		REF. (A)	TYPE TEST	SEE NOTE (2)
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	4.3 E07		1.0 E08	001		REF. (B)	ANALYSIS	NONE
	Aging	LATER		---	---		---	---	SEE NOTE (3)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. GE QUALIFICATION TEST REPORT FOR F01 ELECTRICAL PENETRATION ASSEMBLIES DATED APRIL 30, 1971 B. LETTER BY G G SHERWOOD, MANAGER OF SAFETY AND LICENSING OPERATION, GENERAL ELECTRIC TO D G EISENHUT, DIVISION OF OPERATING REACTORS, NUCLEAR REGULATORY COMMISSION DATED DECEMBER 2, 1977.	1. REPRESENTATIVE ELECTRICAL PENETRATION ASSEMBLIES WERE SUBJECTED TO A SUPERHEATED STEAM ENVIRONMENT AS PART OF THEIR TEST PROGRAM 2. SEE ACTION ITEM 20 SEE ACTION ITEM 20 3. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

G080-89
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: G080-89-001

Sheet No. 106
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: ANCILLARY COMPONENTS	Operating Time	30 DAYS	
Plant I.D. Number: JX-105A	Temperature (°F)	SEE GENERAL NOTE 6	
Component: ELECTRICAL PENETRATIO	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: GE	Relative Humidity (%)	100	
Model Number: NS02-I	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: E-001	Seismic	LATER	
Function/Service: SUPPORT/LOW VOLTAGE AND MISC. POWER	Radiation (Rad)	4.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 761'-2"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 32 P&ID: M115/E5

Loc Dwg: E369 Elec Scheme: E62 VDR ID:
Remarks: 238X704RSG001

Equip ID: G080-89-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: ANCILLARY COMPONENTS	Operating Time	30 DAYS	
Plant I.D. Number: JX-105B	Temperature (°F)	SEE GENERAL NOTE 6	
Component: ELECTRICAL PENETRATIO	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: GE	Relative Humidity (%)	100	
Model Number: NS02-I	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: E-001	Seismic	LATER	
Function/Service: SUPPORT/LOW VOLTAGE AND MISC. POWER	Radiation (Rad)	4.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 761'-2"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 32 P&ID: M115/E5

Loc Dwg: E369 Elec Scheme: E62 VDR ID:
Remarks: 238X704RSG001

G080-89
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: G080-89-003

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: ANCILLARY COMPONENTS	Operating Time	30 DAYS	
Plant I.D. Number: JX-105C	Temperature (°F)	SEE GENERAL NOTE 6	
Component: ELECTRICAL PENETRATIO	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: GE	Relative Humidity (%)	100	
Model Number: NS02-I	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: E-001	Seismic	LATER	
Function/Service: SUPPORT/LOWVOLTAGE AND MISC. POWER	Radiation (Rad)	4.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 761'-2"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 32 P&ID: M115/E5

Loc Dwg: E369 Elec Scheme: E62 VDR ID:
Remarks: 238X704RSG001

Equip ID: G080-89-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: ANCILLARY COMPONENTS	Operating Time	30 DAYS	
Plant I.D. Number: JX-105D	Temperature (°F)	SEE GENERAL NOTE 6	
Component: ELECTRICAL PENETRATIO	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: GE	Relative Humidity (%)	100	
Model Number: NS02-I	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: E-001	Seismic	LATER	
Function/Service: SUPPORT/LOW VOLTAGE AND MISC. PWOER	Radiation (Rad)	4.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 761'-2"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 32 P&ID: M115/E5

Loc Dwg: E369 Elec Scheme: E62 VDR ID:
Remarks: 238X704RSG001

G080-90
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 108
Revision 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: ELECTRICAL PENETRATIO Manufacturer: GE Model Number: NS02	Operating Time	30 DAYS		30 DAYS	001		REF. (A)	TYPE TEST/ ANAL	NONE
	Temperature (°F)	SEE GEN NOTE 6		340	001		REF. (A)	TYPE TEST	NONE
	Pressure (PSIG)	SEE GEN NOTE 6		63	001		REF. (A)	TYPE TEST	NONE
	Relative Humidity (%)	100		100	001		REF. (A)	TYPE TEST	NONE
	Chemical Spray	DEMIN WATER		SEE NOTE (1)	001		REF. (A)	TYPE TEST	SEE NOTE (2)
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	4.3 E07		1.0 E08	001		REF. (B)	ANALYSIS	NONE
	Aging	LATER		---	---		---	---	SEE NOTE (3)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. GE QUALIFICATION TEST REPORT FOR F01 ELECTRICAL PENETRATION ASSEMBLIES DATED APRIL 30, 1971 B. LETTER BY G G SHERWOOD, MANAGER OF SAFETY AND LICENSING OPERATION, GENERAL ELECTRIC TO D G EISENHUT, DIVISION OF OPERATING REACTORS, NUCLEAR REGULATORY COMMISSION DATED DECEMBER 2, 1977.	1. REPRESENTATIVE ELECTRICAL PENETRATION ASSEMBLIES WERE SUBJECTED TO A SUPERHEATED STEAM ENVIRONMENT AS PART OF THEIR TEST PROGRAM. 2. SEE ACTION ITEM 20 SEE ACTION ITEM 28 3. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: G080-90-001

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: ANCILLARY COMPONENTS	Operating Time	30 DAYS	
Plant I.D. Number: JX-103	Temperature (°F)	SEE GENERAL NOTE 6	
Component: ELECTRICAL PENETRATIO	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: GE	Relative Humidity (%)	100	
Model Number: NS02	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: E-001	Seismic	LATER	
Function/Service: SUPPORT/THERMOCOUPLE	Radiation (Rad)	4.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 761'2"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 32 P&ID: M115/E5

Loc Dwg: E369 Elec Scheme: E62 VDR ID:
Remarks: 238X705RSG001

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System:	Operating Time		
Plant I.D. Number:	Temperature (°F)		
Component:	Pressure (PSIG)		
Manufacturer:	Relative Humidity (%)		
Model Number:	Chemical Spray		
Purchase Order Number:	Seismic		
Function/Service:	Radiation (Rad)		
Accuracy: Spec: Demo:	Aging		
Location:	Submergence		
Floor Elevation:			
Flood Level Elevation: Above Flood Level: Yes: No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM

Walkdown: Environment: System: P&ID:

Loc Dwg: Elec Scheme: VDR ID:
Remarks:

G080-91
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 110
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Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: RADIATION ELEMENT Manufacturer: GE Model Number: 237X731G001	Operating Time	30 DAYS		SEE GEN NOTE 4	001		---	---	NONE
	Temperature (°F)	130		SEE GEN NOTE 7	001		---	---	NONE
	Pressure (PSIG)	0		SEE GEN NOTE 7	001		---	---	NONE
	Relative Humidity (%)	100		SEE GEN NOTE 7	001		---	---	NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	1.5 E07		NONE	001		---	---	GEN NOTE 1
	Aging	LATER		---	---		---	---	SEE NOTE (1)
	Submergence			---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
	1. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: G080-91-001

Sheet No. 111
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: G080-91-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: RE-4448A	Temperature (°F)	130	
Component: RADIATION ELEMENT	Pressure (PSIG)	1.8	
Manufacturer: GE	Relative Humidity (%)	100	
Model Number: 237X731G001	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: 22A1436AE N006	Seismic	LATER	
Function/Service: MAIN STEAM LINE RAD MONITOR/ DETECT MAJOR FISSION PRODUCT RELEASE	Radiation (Rad)	1.5 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M114/E2

Loc Dwg: E328/E4 Elec Scheme: E64 VDR ID: B21-N006A
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: RE-4448B	Temperature (°F)	130	
Component: RADIATION ELEMENT	Pressure (PSIG)	1.8	
Manufacturer: GE	Relative Humidity (%)	100	
Model Number: 237X731G001	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: 22A1436AE---N006	Seismic	LATER	
Function/Service: MAIN STEAM LINE PROCESS RAD MONITOR/ DETECT MAJOR FISSION PRODUCT RELEASE	Radiation (Rad)	1.5 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M114/D8

Loc Dwg: E328/E4 Elec Scheme: E64 VDR ID: B21-N006B
Remarks:

G080-91
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: G080-91-003

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Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: G080-91-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: RE-4448C	Temperature (°F)	130	
Component: RADIATION ELEMENT	Pressure (PSIG)	1.8	
Manufacturer: GE	Relative Humidity (%)	100	
Model Number: 237X731G001	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: 22A1436AE N006	Seismic	LATER	
Function/Service: MAIN STEAM PROCESS RAD MONITOR/ DETECT MAJOR FISSION PRODUCT RELEASE	Radiation (Rad)	1.5 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M114/D8

Loc Dwg: E328/E4 Elec Scheme: E64 VDR ID: B21-N006C

Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: RE-4448D	Temperature (°F)	130	
Component: RADIATION ELEMENT	Pressure (PSIG)	1.8	
Manufacturer: GE	Relative Humidity (%)	100	
Model Number: 237X731G001	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: 22A1436AE N006	Seismic	LATER	
Function/Service: MAIN STEAM PROCESS RAD MONITOR/ DETECT MAJOR FISSION PRODUCT RELEASE	Radiation (Rad)	1.5 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M114/E8

Loc Dwg: E328/E4 Elec Scheme: E64 VDR ID: B21-N006D

Remarks:

G315-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 113
Revision 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: TEMPERATURE ELEMENT Manufacturer: GULTON INDUSTRIES Model Number: TCA-0646	Operating Time	30 DAYS		SEE GEN NOTE 4	001		---	---	NONE
	Temperature (°F)	104		SEE GEN NOTE 7	001		---	---	NONE
	Pressure (PSIG)	0		SEE GEN NOTE 7	001		---	---	NONE
	Relative Humidity (%)	100		SEE GEN NOTE 7	001		---	---	NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	1.6 E08		NONE	001		---	---	SEE NOTE (1)
	Aging	LATER		---	---		---	---	SEE NOTE (2)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
	1. SEE ACTION ITEM NO 26 2. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982.

G315-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: G315-01-001

Sheet No. 114
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: G315-01-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: STANDBY GAS TREATMENT SYSTEM Plant I.D. Number: TE-5805A Component: TEMPERATURE ELEMENT Manufacturer: GULTON INDUSTRIES Model Number: TCA-0646 Purchase Order Number: M-81 Function/Service: ELECTRIC HEATER CONT STANDBY GAS TREATMENT SYSTEM-ELECTRICAL HEATER Accuracy: Spec: Demo: Location: SGT ROOM Floor Elevation: 786'0"	Operating Time	30 DAYS	
	Temperature (°F)	104	
	Pressure (PSIG)	0	
	Relative Humidity (%)	100	
	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
	Seismic	LATER	
	Radiation (Rad)	1.6 E08	
	Aging	LATER	
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 10 P&ID: M158/G5

Loc Dwg: M647/G6 Elec Scheme: E113/13 VDR ID:
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: STANDBY GAS TREATMENT SYSTEM Plant I.D. Number: TE-5805B Component: TEMPERATURE ELEMENT Manufacturer: GULTON INDUSTRIES Model Number: TCA-0646 Purchase Order Number: M-81 Function/Service: ELECTRIC HEATER CONT/ STANDBY GAS TREATMENT SYSTEM-ELECTRIC HEATER Accuracy: Spec: Demo: Location: SGT ROOM Floor Elevation: 786'0"	Operating Time	30 DAYS	
	Temperature (°F)	104	
	Pressure (PSIG)	0	
	Relative Humidity (%)	100	
	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
	Seismic	LATER	
	Radiation (Rad)	1.6 E08	
	Aging	LATER	
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 10 P&ID: M158/C5

Loc Dwg: M647/F6 Elec Scheme: E113/13 VDR ID:
Remarks:

G315-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: G315-01-003

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Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: STANDBY GAS TREATMENT SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: TE-5805U	Temperature (°F)	104	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	0	
Manufacturer: GULTON INDUSTRIES	Relative Humidity (%)	100	
Model Number: TCA-0646	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-73	Seismic	LATER	
Function/Service: DIFFERENTIAL TEMP TRANSMITTER/ STANDBY GAS TREATMENT SYSTEM-ROUGHING FILTER	Radiation (Rad)	1.6 E08	
Accuracy: Spec: Demo:	Aging	LATER	
Location: SGT ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 10 P&ID: M158/G5

Loc Dwg: E315/G5 Elec Scheme: E113/113 VDR ID:
Remarks:

Equip ID: G315-01-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: STANDBY GAS TREATMENT SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: TE-5805V	Temperature (°F)	104	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	0	
Manufacturer: GULTON INDUSTRIES	Relative Humidity (%)	100	
Model Number: TCA-0646	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-73	Seismic	LATER	
Function/Service: STANDBY GAS TREATMENT SYSTEM -CARBON BED FILTER	Radiation (Rad)	1.6 E08	
Accuracy: Spec: Demo:	Aging	LATER	
Location: SGT ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 10 P&ID: M158/G4

Loc Dwg: E315/G4 Elec Scheme: E113/114 VDR ID:
Remarks:

G315-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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Equip ID: G315-01-005

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: STANDBY GAS TREATMENT SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: TE-5805W	Temperature (°F)	104	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	0	
Manufacturer: GULTON INDUSTRIES	Relative Humidity (%)	100	
Model Number: TCA-0646	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-73	Seismic	LATER	
Function/Service: DIFFERENTIAL TEMP TRANSMITTER/ STANDBY GAS TREATMENT SYSTEM-ROUGHING FILTER	Radiation (Rad)	1.6 E08	
Accuracy: Spec: Demo:	Aging	LATER	
Location: SGT ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 10 P&ID: M158/C5

Loc Dwg: E315/F5 Elec Scheme: E113/113 VDR ID:
Remarks:

Equip ID: G315-01-006

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: STANDBY GAS TREATMENT SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: TE-5805X	Temperature (°F)	104	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	0	
Manufacturer: GULTON INDUSTRIES	Relative Humidity (%)	100	
Model Number: TCA-0646	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-73	Seismic	LATER	
Function/Service: STANDBY GAS TREATMENT SYSTEM -CARBON BED FILTER	Radiation (Rad)	1.6 E08	
Accuracy: Spec: Demo:	Aging	LATER	
Location: SGT ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 10 P&ID: M158/C4

Loc Dwg: E315/F4 Elec Scheme: E113/114 VDR ID:
Remarks:

I045-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

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EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: TEMPERATURE SWITCH Manufacturer: INDUSTRIAL ENG. EQUIPMENT CO. Model Number: CT32-23	Operating Time	30 DAYS		SEE GEN NOTE 4	001		---	---	NONE
	Temperature (°F)	104		SEE GEN NOTE 7	001		---	---	NONE
	Pressure (PSIG)	0		SEE GEN NOTE 7	001		---	---	NONE
	Relative Humidity (%)	100		SEE GEN NOTE 7	001		---	---	NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	1.6 E08		NONE	001		---	---	SEE NOTE (1)
	Aging	LATER		---	---		---	---	SEE NOTE (2)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
	1. SEE ACTION ITEM 27 2. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982.

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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Equip ID: I045-01-001

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EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: STANDBY GAS TREATMENT SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: TS-5836A	Temperature (°F)	104	
Component: TEMPERATURE SWITCH	Pressure (PSIG)	0	
Manufacturer: INDUSTRIAL ENG. EQUIPMENT CO.	Relative Humidity (%)	100	
Model Number: CT32-23	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-81	Seismic	LATER	
Function/Service:	Radiation (Rad)	1.6 E08	
Accuracy: Spec: Demo:	Aging	LATER	
Location: SGT ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 10 P&ID: M158/G5

Loc Dwg: M647/G6 Elec Scheme: E113/13 VDR ID:
Remarks:

Equip ID: I045-01-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: STANDBY GAS TREATMENT SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: TS-5836B	Temperature (°F)	104	
Component: TEMPERATURE SWITCH	Pressure (PSIG)	0	
Manufacturer: INDUSTRIAL ENG. EQUIPMENT CO.	Relative Humidity (%)	100	
Model Number: CT32-23	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-81	Seismic	LATER	
Function/Service:	Radiation (Rad)	1.6 E08	
Accuracy: Spec: Demo:	Aging	LATER	
Location: SGT ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 10 P&ID: M158/C5

Loc Dwg: M647/F6 Elec Scheme: E113/13 VDR ID:
Remarks:

I204-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

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EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: LEVEL/PRESSURE TRANSMITTER Manufacturer: ITT BARTON Model Number: 764	Operating Time	30 DAYS		SEE NOTE (1)	001		REF. (A)	TYPE TEST /ANAL	SEE NOTE (2)
	Temperature (°F)	277		320	003		REF. (A)	TYPE TEST	SEE NOTE (2)
	Pressure (PSIG)	1.2		5.4	003		REF. (B)	TYPE TEST	SEE NOTE (2)
	Relative Humidity (%)	100		100	001		REF. (A)	TYPE TEST	SEE NOTE (2)
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	1.3 E07		1.0 E08	003		REF. (A)	TYPE TEST	SEE NOTE (2)
	Aging	LATER		---	---		---	---	SEE NOTE (3)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. REFER TO IEEE 323-1971 CLASS 1E QUALIFICATION TESTS FOR ITT BARTON PRESSURE TRANSMITTER MODEL 764. ITT TRANSMITTER MODEL 764 REPORT NO. R3-764-3 DATED MAY 1,1979. REPORT NO. R3-764-3 SECTION 5.3 OR SECTION 5.5 B. REFER ITT REPORT NO. R3-764-3 APPENDIX A-4	1. ALTHOUGH TESTED FOR 7 DAYS (REF A), THE EQUIPMENT IS QUALIFIED FOR A 30 DAY OPERATING TIME BY EXTRAPOLATION ANALYSIS. RADIATION IS THE ONLY CRITICAL ENVIRONMENTAL QUALIFICATION PARAMETER IN THE LONG TERM AND THE EQUIPMENT IS QUALIFIED FOR 30 DAY RADIATION DOSE BY TEST (REF A). 2. EQUIPMENT IS QUALIFIED TO IEEE STANDARD 323-1971.

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EQUIPMENT QUALIFICATION REPORT

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DOCUMENTATION REFERENCES:	NOTES:
	NUREG 0588 QUALIFICATION PROGRAM IS IN PROGRESS. 3. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982.

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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Equip ID: I204-02-001

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: PT-4398A	Temperature (°F)	90	
Component: LEVEL/PRESSURE TRANSMITTER	Pressure (PSIG)	0	
Manufacturer: ITT BARTON	Relative Humidity (%)	100	
Model Number: 764	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR-933	Seismic	LATER	
Function/Service: DRYWELL PRESSURE INDICATIOR	Radiation (Rad)	4.7 E05	
Accuracy: Spec: Demo:	Aging	LATER	
Location: RB-S	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 35 P&ID: M143/F7

Loc Dwg: E319/E6 Elec Scheme: E124/3 VDR ID:
Remarks: GE SPEC$22A7898

Equip ID: I204-02-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: PT-4398B	Temperature (°F)	90	
Component: LEVEL/PRESSURE TRANSMITTER	Pressure (PSIG)	0	
Manufacturer: ITT BARTON	Relative Humidity (%)	100	
Model Number: 764	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR-933	Seismic	LATER	
Function/Service: DRYWELL PRESSURE INDICATIOR	Radiation (Rad)	4.7 E05	
Accuracy: Spec: Demo:	Aging	LATER	
Location: RB-N	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 35 P&ID: M143/D5

Loc Dwg: E320/C4 Elec Scheme: E124/3 VDR ID:
Remarks: GE SPEC$22A7898

I204-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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Equip ID: I204-02-003

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: I204-02-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: LT-4396A	Temperature (°F)	277	
Component: LEVEL/PRESSURE TRANSMITTER	Pressure (PSIG)	1.2	
Manufacturer: ITT BARTON	Relative Humidity (%)	100	
Model Number: 764	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR-933	Seismic	LATER	
Function/Service: TORUS WATER LEVEL DETECTION	Radiation (Rad)	1.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 35 P&ID: M143/B6

Loc Dwg: E316/F6 Elec Scheme: E122/19A VDR ID:
Remarks: GE SPEC$22A7726

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: LT-4396B	Temperature (°F)	277	
Component: LEVEL/PRESSURE TRANSMITTER	Pressure (PSIG)	1.2	
Manufacturer: ITT BARTON	Relative Humidity (%)	100	
Model Number: 764	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR-933	Seismic	LATER	
Function/Service: TORUS WATER LEVEL DETECTION	Radiation (Rad)	1.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 35 P&ID: M143/B4

Loc Dwg: E316/E3 Elec Scheme: E122/19A VDR ID:
Remarks: GE SPEC$22A7726

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Facility: DUANE ARNOLD
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: I204-02-006

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: LT-4397A	Temperature (°F)	277	
Component: LEVEL/PRESSURE TRANSMITTER	Pressure (PSIG)	1.2	
Manufacturer: ITT BARTON	Relative Humidity (%)	100	
Model Number: 764	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR-933	Seismic	LATER	
Function/Service: TORUS WATER LEVEL DETECTION	Radiation (Rad)	1.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 35 P&ID: M143/B5

Loc Dwg: E316/F6 Elec Scheme: E122/20 VDR ID:
Remarks: GE SPEC$22A7726

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: LT-4397B	Temperature (°F)	140	
Component: LEVEL/PRESSURE TRANSMITTER	Pressure (PSIG)	0	
Manufacturer: ITT BARTON	Relative Humidity (%)	100	
Model Number: 764	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR-933	Seismic	LATER	
Function/Service: TORUS WATER LEVEL DETECTION	Radiation (Rad)	1.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 35 P&ID: M143/B5

Loc Dwg: E316/E3 Elec Scheme: E122/20 VDR ID:
Remarks: GE SPEC$22A7726

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EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: 5 KV CABLE Manufacturer: KERITE Model Number: HT KERITE WITH NS JACKET	Operating Time	30 DAYS		100 DAYS	001		REF. (A)	TYPE TEST	NONE
	Temperature (°F)	300		325	001		REF. (A)	TYPE TEST	NONE
	Pressure (PSIG)	1.2		82	001		REF. (A)	TYPE TEST	NONE
	Relative Humidity (%)	100		100	001		REF. (A)	TYPE TEST	NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	1.5 E07		1.2 E08	001		REF. (A)	TYPE TEST	NONE
	Aging	LATER		---	---		---	---	SEE NOTE (1)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. THE FRANKLIN INSTITUTE RESEARCH LABORATORIES TECHNICAL REPORT NO. F-C2737 DATED APRIL 30, 1970	1. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30,1982

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Equip ID:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: ANCILLARY COMPONENTS	Operating Time	30 DAYS	THE REQUIRED ENVIRONMENT IS A COMB OF WORST CASE CONDITIONS OUTSIDE DRYWELL. TEMP AND RAD FROM STEAM TUNNEL, PRESS FROM RWCU ROOMS. NOT USED IN SGTS ROOM.
Plant I.D. Number: 5KV CABLE	Temperature (°F)	300	
Component: 5 KV CABLE	Pressure (PSIG)	1.2	
Manufacturer: KERITE	Relative Humidity (%)	100	
Model Number: HT KERITE WITH NS JACKET	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: E-018	Seismic	LATER	
Function/Service: SUPPORT/SUPPLY 5KV POWER TO EQUIPMENT	Radiation (Rad)	1.5 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: OUTSIDE DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: VARIOUS			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 32 P&ID: NA
Loc Dwg: NA Elec Scheme: NA VDR ID:
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System:	Operating Time		
Plant I.D. Number:	Temperature (°F)		
Component:	Pressure (PSIG)		
Manufacturer:	Relative Humidity (%)		
Model Number:	Chemical Spray		
Purchase Order Number:	Seismic		
Function/Service:	Radiation (Rad)		
Accuracy: Spec: Demo:	Aging		
Location:	Submergence		
Floor Elevation:			
Flood Level Elevation: Above Flood Level: Yes: No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM

Walkdown: Environment: System: P&ID:
Loc Dwg: Elec Scheme: VDR ID:
Remarks:

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EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: TEMPERATURE ELEMENT Manufacturer: LEEDS & NORTHRUP Model Number: 8197-10-S	Operating Time	30 DAYS		NONE	005		---	---	GEN NOTE 1
	Temperature (°F)	SEE GEN NOTE 6		NONE	005		---	---	GEN NOTE 1
	Pressure (PSIG)	SEE GEN NOTE 6		NONE	005		---	---	GEN NOTE 1
	Relative Humidity (%)	100		NONE	001		---	---	GEN NOTE 1
	Chemical Spray	DEMIN WATER		NONE	005		---	---	GEN NOTE 1
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	4.3 E07		NONE	005		---	---	GEN NOTE 1
	Aging	LATER		---	---		---	---	SEE NOTE (1)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
	1. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982.

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	1 HOUR	LOCATED ON EXTERIOR TORUS CATWALK
Plant I.D. Number: TE-4328A	Temperature (°F)	277	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.2	
Manufacturer: LEEDS & NORTHRUP	Relative Humidity (%)	100	
Model Number: 8197-10-S	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: FIELD	Seismic	LATER	
Function/Service: TORUS ROOM AIR TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 746'3"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
				X	X		

Walkdown: Environment: HARSH System: 36 P&ID: M143/C5

Loc Dwg: E316/F5 Elec Scheme: E122/18 VDR ID:
Remarks:

Equip ID: L130-01-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	1 HOUR	LOCATED ON EXTERIOR TORUS CATWALK
Plant I.D. Number: TE-4328B	Temperature (°F)	277	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.2	
Manufacturer: LEEDS & NORTHRUP	Relative Humidity (%)	100	
Model Number: 8197-10-S	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: FIELD	Seismic	LATER	
Function/Service: TORUS ROOM AIR TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 746'3"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 36 P&ID: M143/C5

Loc Dwg: E316/B2 Elec Scheme: E122/18 VDR ID:
Remarks:

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Equip ID: L130-01-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION Plant I.D. Number: TE-4328C Component: TEMPERATURE ELEMENT Manufacturer: LEEDS & NORTHRUP Model Number: 8197-10-S Purchase Order Number: FIELD Function/Service: TORUS ROOM AIR TEMPERATURE Accuracy: Spec: Demo: Location: TORUS ROOM SOUTH Floor Elevation: 746'3"	Operating Time	1 HOUR	LOCATED ON EXTERIOR TORUS CATWALK
	Temperature (°F)	277	
	Pressure (PSIG)	1.2	
	Relative Humidity (%)	100	
	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
	Seismic	LATER	
	Radiation (Rad)	1.0 E06	
	Aging	LATER	
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
				X	X		

Walkdown: Environment: HARSH System: 36 P&ID: M143/C5

Loc Dwg: E317/G5 Elec Scheme: E122/18 VDR ID:
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION Plant I.D. Number: TE-4328D Component: TEMPERATURE ELEMENT Manufacturer: LEEDS & NORTHRUP Model Number: 8197-10-S Purchase Order Number: FIELD Function/Service: TORUS ROOM AIR TEMPERATURE Accuracy: Spec: Demo: Location: TORUS ROOM SOUTH Floor Elevation: 746'3"	Operating Time	1 HOUR	LOCATED ON EXTERIOR TORUS CATWALK
	Temperature (°F)	277	
	Pressure (PSIG)	1.2	
	Relative Humidity (%)	100	
	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
	Seismic	LATER	
	Radiation (Rad)	1.0 E06	
	Aging	LATER	
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
				X	X		

Walkdown: Environment: HARSH System: 36 P&ID: M143/C5

Loc Dwg: E317/H8 Elec Scheme: E122/18 VDR ID:
Remarks:

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Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION

System: SAFETY DISPLAY INSTRUMENTATION
Plant I.D. Number: TE-4328E
Component: TEMPERATURE ELEMENT
Manufacturer: LEEDS & NORTHRUP
Model Number: 8197-10-S
Purchase Order Number: FIELD
Function/Service: DRYWELL TEMPERATURE
Accuracy: Spec: Demo:
Location: DRYWELL
Floor Elevation: 742'-9"
Flood Level Elevation: 744'
Above Flood Level: Yes: X No:

ENVIRONMENT

Parameter	Required	Remarks
Operating Time	30 DAYS	
Temperature (°F)	SEE GENERAL NOTE 6	
Pressure (PSIG)	SEE GENERAL NOTE 6	
Relative Humidity (%)	100	
Chemical Spray	DEMIN WATER SPRAY	
Seismic	LATER	
Radiation (Rad)	4.3 E07	
Aging	LATER	
Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M143/D6
Loc Dwg: E331/C3 Elec Scheme: E122/20 VDR ID:
Remarks:

Equip ID: L130-01-006

EQUIPMENT DESCRIPTION

System: SAFETY DISPLAY INSTRUMENTATION
Plant I.D. Number: TE-4328F
Component: TEMPERATURE ELEMENT
Manufacturer: LEEDS & NORTHRUP
Model Number: 8197-10-S
Purchase Order Number: FIELD
Function/Service: DRYWELL TEMPERATURE
Accuracy: Spec: Demo:
Location: DRYWELL
Floor Elevation: 742'-9"
Flood Level Elevation: 744'
Above Flood Level: Yes: X No:

ENVIRONMENT

Parameter	Required	Remarks
Operating Time	30 DAYS	
Temperature (°F)	SEE GENERAL NOTE 6	
Pressure (PSIG)	SEE GENERAL NOTE 6	
Relative Humidity (%)	100	
Chemical Spray	DEMIN WATER SPRAY	
Seismic	LATER	
Radiation (Rad)	4.3 E07	
Aging	LATER	
Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M143/D6
Loc Dwg: E331/F6 Elec Scheme: E122/20 VDR ID:
Remarks:

L130-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L130-01-007

Sheet No. 130
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: TE-4328G	Temperature (°F)	SEE GENERAL NOTE 6	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: LEEDS & NORTHRUP	Relative Humidity (%)	100	
Model Number: 8197-10-S	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: FIELD	Seismic	LATER	
Function/Service: DRYWELL TEMPERATURE	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'-4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M143/D6

Loc Dwg: E329/B4 Elec Scheme: E122/20 VDR ID:
Remarks:

Equip ID: L130-01-008

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: TE-4328H	Temperature (°F)	SEE GENERAL NOTE 6	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: LEEDS & NORTHRUP	Relative Humidity (%)	100	
Model Number: 8197-10-S	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: FIELD	Seismic	LATER	
Function/Service: DRYWELL TEMPERATURE	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'-4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M143/D6

Loc Dwg: E329/G4 Elec Scheme: E122/20 VDR ID:
Remarks:

L130-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L130-01-009

Sheet No. 131
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: TE-4328J	Temperature (°F)	SEE GENERAL NOTE 6	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: LEEDS & NORTHRUP	Relative Humidity (%)	100	
Model Number: 8197-10-S	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: FIELD	Seismic	LATER	
Function/Service: DRYWELL TEMPERATURE	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'-4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M143/E6

Loc Dwg: E330/E2 Elec Scheme: E122/20 VDR ID:
Remarks:

Equip ID: L130-01-010

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: TE-4328K	Temperature (°F)	SEE GENERAL NOTE 6	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: LEEDS & NORTHRUP	Relative Humidity (%)	100	
Model Number: 8197-10-S	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: FIELD	Seismic	LATER	
Function/Service: DRYWELL TEMPERATURE	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 761'-2"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M143/E6

Loc Dwg: E330/E6 Elec Scheme: E122/20 VDR ID:
Remarks:

L130-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L130-01-011

Sheet No. 132
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: TE-4328L	Temperature (°F)	SEE GENERAL NOTE 6	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: LEEDS & NORTHRUP	Relative Humidity (%)	100	
Model Number: 8197-10-S	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: FIELD	Seismic	LATER	
Function/Service: DRYWELL TEMPERATURE	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 805'-5"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M143/E6

Loc Dwg: E330/F4 Elec Scheme: E122/20 VDR ID:
Remarks:

Equip ID: L130-01-012

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: TE-4328M	Temperature (°F)	SEE GENERAL NOTE 6	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: LEEDS & NORTHRUP	Relative Humidity (%)	100	
Model Number: 8197-10-S	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: FIELD	Seismic	LATER	
Function/Service: DRYWELL TEMPERATURE	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 805'-5"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M143/D6

Loc Dwg: E331/D4 Elec Scheme: E122/20 VDR ID:
Remarks:

L130-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 133
Revision 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: TEMPERATURE ELEMENT Manufacturer: LEEDS & NORTHRUP Model Number: 8920-404-00-3-21	Operating Time	30 DAYS		NONE	005		---	---	GEN NOTE 1
	Temperature (°F)	SEE GEN NOTE 6		NONE	005		---	---	GEN NOTE 1
	Pressure (PSIG)	SEE GEN NOTE 6		NONE	005		---	---	GEN NOTE 1
	Relative Humidity (%)	100		NONE	001		---	---	GEN NOTE 1
	Chemical Spray	DEMIN WATER		NONE	005		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	4.3 E07		NONE	005		---	---	GEN NOTE 1
	Aging	LATER		---	---		---	---	SEE NOTE (1)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
	1. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

L130-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L130-02-001

Sheet No. 134
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION Plant I.D. Number: TE-4386A Component: TEMPERATURE ELEMENT Manufacturer: LEEDS & NORTHRUP Model Number: 8920-404-00-3-21 Purchase Order Number: FIELD Function/Service: TORUS ROOM AIR TEMPERATURE Accuracy: Spec: Demo: Location: TORUS ROOM NORTH Floor Elevation: 716'9" Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:	Operating Time	1 HOUR	LOCATED ON EXTERIOR TORUS CATWALK
	Temperature (°F)	277	
	Pressure (PSIG)	1.2	
	Relative Humidity (%)	100	
	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
	Seismic	LATER	
	Radiation (Rad)	1.0 E06	
	Aging	LATER	
	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
				X	X		

Walkdown: Environment: HARSH System: 36 P&ID: M143/C5

Loc Dwg: E316/F5 Elec Scheme: E122/18 VDR ID:
Remarks:

Equip ID: L130-02-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION Plant I.D. Number: TE-4386B Component: TEMPERATURE ELEMENT Manufacturer: LEEDS & NORTHRUP Model Number: 8920-404-00-3-21 Purchase Order Number: Function/Service: TORUS ROOM AIR TEMPERATURE Accuracy: Spec: Demo: Location: TORUS ROOM NORTH Floor Elevation: 716'9" Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:	Operating Time	1 HOUR	LOCATED ON EXTERIOR TORUS CATWALK
	Temperature (°F)	277	
	Pressure (PSIG)	1.2	
	Relative Humidity (%)	100	
	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
	Seismic	LATER	
	Radiation (Rad)	1.0 E06	
	Aging	LATER	
	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
				X	X		

Walkdown: Environment: HARSH System: 36 P&ID: M143/C5

Loc Dwg: E316/B2 Elec Scheme: E122/18 VDR ID:
Remarks:

L130-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L130-02-003

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Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	1 HOUR	LOCATED ON EXTERIOR TORUS CATWALK
Plant I.D. Number: TE-4386C	Temperature (°F)	277	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.2	
Manufacturer: LEEDS & NORTHRUP	Relative Humidity (%)	100	
Model Number: 8920-404-00-3-21	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: FIELD	Seismic	LATER	
Function/Service: TORUS ROOM AIR TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
				X	X		

Walkdown: Environment: HARSH System: 36 P&ID: M143/C5

Loc Dwg: E317/G5 Elec Scheme: E122/18 VDR ID:
Remarks:

Equip ID: L130-02-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	1 HOUR	LOCATED ON EXTERIOR TORUS CATWALK
Plant I.D. Number: TE-4386D	Temperature (°F)	277	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.2	
Manufacturer: LEEDS & NORTHRUP	Relative Humidity (%)	100	
Model Number: 8920-404-00-3-21	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: FIELD	Seismic	LATER	
Function/Service: TORUS ROOM AIR TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
				X	X		

Walkdown: Environment: HARSH System: 36 P&ID: M143/C5

Loc Dwg: E317/H8 Elec Scheme: E122/18 VDR ID:
Remarks:

L130-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L130-02-005

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Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: TE-4386E	Temperature (°F)	SEE GENERAL NOTE 6	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: LEEDS & NORTHRUP	Relative Humidity (%)	100	
Model Number: 8920-404-00-3-21	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: FIELD	Seismic	LATER	
Function/Service: DRYWELL TEMPERATURE	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 805'5"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M143/D6

Loc Dwg: E331/C3 Elec Scheme: E122/20 VDR ID:
Remarks:

Equip ID: L130-02-006

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: TE-4386F	Temperature (°F)	SEE GENERAL NOTE 6	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: LEEDS & NORTHRUP	Relative Humidity (%)	100	
Model Number: 8920-404-00-3-21	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: FIELD	Seismic	LATER	
Function/Service: DRYWELL TEMPERATURE	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 805'5"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M143/D6

Loc Dwg: E331/F6 Elec Scheme: E122/20 VDR ID:
Remarks:

L130-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L130-02-007

Sheet No. 137
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: L130-02-008

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: TE-4386G	Temperature (°F)	SEE GENERAL NOTE 6	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: LEEDS & NORTHRUP	Relative Humidity (%)	100	
Model Number: 8920-404-00-3-21	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: FIELD	Seismic	LATER	
Function/Service: DRYWELL TEMPERATURE	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 805'5"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M143/D6

Loc Dwg: E329/B4 Elec Scheme: E122/20 VDR ID:
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: TE-4386H	Temperature (°F)	SEE GENERAL NOTE 6	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: LEEDS & NORTHRUP	Relative Humidity (%)	100	
Model Number: 8920-404-00-3-21	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: FIELD	Seismic	LATER	
Function/Service: DRYWELL TEMPERATURE	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 805'5"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M143/D6

Loc Dwg: E329/G4 Elec Scheme: E122/20 VDR ID:
Remarks:

L130-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L130-02-009

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Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: L130-02-010

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: TE-4386J	Temperature (°F)	SEE GENERAL NOTE 6	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: LEEDS & NORTHRUP	Relative Humidity (%)	100	
Model Number: 8920-404-00-3-21	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: FIELD	Seismic	LATER	
Function/Service: DRYWELL TEMPERATURE	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 805'5"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M143/E6

Loc Dwg: E330/D2 Elec Scheme: E122/20 VDR ID:
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: TE-4386K	Temperature (°F)	SEE GENERAL NOTE 6	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: LEEDS & NORTHRUP	Relative Humidity (%)	100	
Model Number: 8920-404-00-3-21	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: FIELD	Seismic	LATER	
Function/Service: DRYWELL TEMPERATURE	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 805'5"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M143/E6

Loc Dwg: E330/D6 Elec Scheme: E122/20 VDR ID:
Remarks:

L130-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L130-02-011

Sheet No. 139
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: TE-4386L	Temperature (°F)	SEE GENERAL NOTE 6	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: LEEDS & NORTHRUP	Relative Humidity (%)	100	
Model Number: 8920-404-00-3-21	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: FIELD	Seismic	LATER	
Function/Service: DRYWELL TEMPERATURE	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 805'5"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M143/E6

Loc Dwg: E330/F5 Elec Scheme: E122/20 VDR ID:

Remarks:

Equip ID: L130-02-012

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: TE-4386M	Temperature (°F)	SEE GENERAL NOTE 6	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: LEEDS & NORTHRUP	Relative Humidity (%)	100	
Model Number: 8920-404-00-3-21	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: FIELD	Seismic	LATER	
Function/Service: DRYWELL TEMPERATURE	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 805'5"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M143/D6

Loc Dwg: E331/D4 Elec Scheme: E122/20 VDR ID:

Remarks:

L200-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

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EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: MOTOR OPERATED VALVE Manufacturer: LIMITORQUE Model Number: SMB-0,AC-CLASS B	Operating Time	30 DAYS		SEE NOTE (1)	002		REF A,C,D	TYPE TEST/ ANALYSIS	NONE SEE GENERAL NOTE 11
	Temperature (°F)	277		SEE NOTE (2)	002		REF A,B, D,E	TYPE TEST	NONE SEE GENERAL NOTE 11
	Pressure (PSIG)	1.2		105	002		REF B,C	TYPE TEST	NONE SEE GENERAL NOTE 11
	Relative Humidity (%)	100		100	002		REF A,B,C D,E	TYPE TEST	NONE SEE GENERAL NOTE 11
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	1.3 E07		2.0 E07	002		REF A,F	TYPE TEST	NONE SEE GENERAL NOTE 11
	Aging	LATER		---	---		---	---	SEE NOTE (3)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A . REPORT NO. B0003, PROJECT NO. 600461, QUALIFICATION TYPE TEST REPORT, LIMITORQUE VALVE ACTUATORS FOR CLASS 1E SERVICE. OUTSIDE PRIMARY CONTAINMENT. TEST PERFORMED NOV. 13, 1974 TO JAN. 23, 1975. (TEST PROFILE IS FIGURE 1 OF THIS REPORT) B . REPORT NO. B0009,PROJECT NO.600426, QUALIFICATION TYPE	1. ALTHOUGH TESTED FOR 16 DAYS (REF A), THIS VALVE OPERATOR IS QUALIFIED FOR 30 DAYS BY SIMILARITY TO OTHER VALVE OPERATORS TESTED FOR 30 DAYS IN REFERENCES C AND D. ALSO, RADIATION IS THE ONLY ENVIRONMENTAL QUALIFICATION PARAMETER OF CONCERN IN THE LONG TERM AND THIS VALVE OPERATOR IS QUALIFIED FOR THE 30 DAY RADIATION DOSE BY TEST.

L200-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket: 50-331

EQUIPMENT QUALIFICATION REPORT

Sheet No. 141
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DOCUMENTATION REFERENCES:	NOTES:
TEST REPORT, LIMITORQUE DC VALVE ACTUATORS FOR NUCLEAR POWER STATIONS. TEST PERFORMED SEPT. 2, 1975 TO NOV. 3, 1975. (TEST PROFILE IS FIGURE 1 OF THIS REPORT) C . LIMITORQUE SHOP ORDER NO. 600376A, QUALIFICATION TEST OF LIMITORQUE VALVE OPERATORS IN A SIMULATED REACTOR CONTAINMENT POST-ACCIDENT STEAM ENVIRONMENT, SEPT. 1972. (TEST PROFILE IS FIGURE 3 OF THIS REPORT) D . PROJECT NO. 600456, NUCLEAR POWER STATION, QUALIFICATION TYPE TEST REPORT, LIMITORQUE VALVE ACTUATORS FOR PWR SERVICE. TEST PERFORMED JUNE 7, 1974 TO NOV. 22, 1974. (TEST PROFILE IS FIGURE 6 OF THIS REPORT) E . REPORT NO. B0027, PROJECT NO. 600508, LIMITORQUE VALVE ACTUATOR TEMPERATURE RELATED TO HIGH SUPERHEAT AMBIENT TEMPERATURES. DATED 10/18/78. (TEST PROFILE IS FIGURE 2 OF THIS REPORT) F . REPORT NO. B0058, LIMITORQUE VALVE ACTUATOR QUALIFICATION FOR NUCLEAR POWER STATION SERVICE. DATED 1/11/80.	2. REPRESENTATIVE VALVE OPERATORS WERE TESTED TO 250F IN REFERENCE A, TO 310F IN REFERENCE D, TO 340F IN REFERENCES B AND C, AND A SMALLER SIZE VALVE OPERATOR (SMB-00) SUCCESSFULLY PASSED A HIGH TEMPERATURE TEST OF 385F IN REFERENCE E. 3. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

L200-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: L200-01-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-1932	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.2	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-0,AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-151	Seismic	LATER	
Function/Service: CORE COOLING/ SUPPRESSION POOL SPRAY HEADER ISOLATION	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M119/F5

Loc Dwg: M266 Elec Scheme: E121/49 VDR ID: E11-F028B
Remarks:

Equip ID: L200-01-003

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-1939	Temperature (°F)	104	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0.1	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-0,AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137	Seismic	LATER	
Function/Service: CORE COOLING/RHR HEAT EXCHANGER 1E-201B INLET ISOLATION	Radiation (Rad)	5.9 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: NW CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 732'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M119/D4

Loc Dwg: M253/C7 Elec Scheme: E121/43 VDR ID: E11-F047B
Remarks:

L200-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L200-01-004

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-1941	Temperature (°F)	104	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0.1	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-0,AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137A	Seismic	LATER	
Function/Service: CORE COOLING/RHR HEAT EXCHANGER 1E-201B OUTLET ISOLATION	Radiation (Rad)	5.9 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: NW CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 732'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M119/E3

Loc Dwg: M253/C7 Elec Scheme: E121/43 VDR ID: E11-F003B

Remarks:

Equip ID: L200-01-005

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SERVICE WATER SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-1942	Temperature (°F)	300	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0.1	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-0,AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137A	Seismic	LATER	
Function/Service: SUPPORT/RHR SERVICE WATER SUPPLY TO RHR SYSTEM ISOLATION	Radiation (Rad)	5.9 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: SE CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 736'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 13 P&ID: M113/F8

Loc Dwg: M266/E3 Elec Scheme: E121/46 VDR ID: E11-F075

Remarks:

L200-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L200-01-006

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-1989	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.2	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-0,AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-151	Seismic	LATER	
Function/Service: CORE COOLING/RHR TRAIN B SUPPRESSION POOL ISOLATION	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M119/D7

Loc Dwg: M245/E7 Elec Scheme: E121/45 VDR ID:
Remarks:

Equip ID: L200-01-008

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-2005	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.2	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-0,AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-151	Seismic	LATER	
Function/Service: CORE COOLING/ SUPPRESSION POOL SPRAY HEADER ISOLATION	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M120/G4

Loc Dwg: M256/D3 Elec Scheme: E121/49 VDR ID: E11-F028A
Remarks:

L200-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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Equip ID: L200-01-009

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-2029	Temperature (°F)	300	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0.1	
Manufacturer: LIMITORQUE			
Model Number: SMB-0,AC-CLASS B	Relative Humidity (%)	100	
Purchase Order Number: M-137A	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Function/Service: CORE COOLING/RHR HEAT EXCHANGER 1E201A INLET ISOLATION	Seismic	LATER	
Accuracy: Spec: NA Demo: NA	Radiation (Rad)	5.9 E06	
Location: SE CRNR RM	Aging	LATER	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M120/D5

Loc Dwg: M277/C2 Elec Scheme: E121/43 VDR ID: E11-F047A
Remarks:

Equip ID: L200-01-010

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-2031	Temperature (°F)	300	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0.1	
Manufacturer: LIMITORQUE			
Model Number: SMB-0,AC-CLASS B	Relative Humidity (%)	100	
Purchase Order Number: M-137A	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Function/Service: CORE COOLING/RHR HEAT EXCHANGER 1E201A OUTLET ISOLATION	Seismic	LATER	
Accuracy: Spec: NA Demo: NA	Radiation (Rad)	5.9 E06	
Location: SE CRNR RM	Aging	LATER	
Floor Elevation: 731'4"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M120/E7

Loc Dwg: M277/C2 Elec Scheme: E121/43 VDR ID: E11-F003A
Remarks:

L200-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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Equip ID: L200-01-011

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-2069	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.2	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-0,AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-151	Seismic	LATER	
Function/Service: CORE COOLING/RHR TRAIN A SUPPRESSION POOL ISOLATION	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M120/D3

Loc Dwg: M265/F3 Elec Scheme: E121/45 VDR ID:

Remarks:

Equip ID: L200-01-012

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CORE SPRAY SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-2115	Temperature (°F)	90	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-0,AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-133	Seismic	LATER	
Function/Service: CORE COOLING/CORE SPRAY PUMP 1P-211A DISCHARGE ISOLATION	Radiation (Rad)	4.7 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RB-S	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 08 P&ID: M121/G5

Loc Dwg: E321/D5 Elec Scheme: E121/8 VDR ID: E21-F004A

Remarks:

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
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EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CORE SPRAY SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-2135	Temperature (°F)	90	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-0,AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-133	Seismic	LATER	
Function/Service: CORE COOLING/CORE SPRAY PUMP 1P-211B DISCHARGE ISOLATION	Radiation (Rad)	4.7 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RB-N	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 08 P&ID: M121/E5

Loc Dwg: E320/F5 Elec Scheme: E121/8 VDR ID: E21-F004B
Remarks:

Equip ID:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System:	Operating Time		
Plant I.D. Number:	Temperature (°F)		
Component:	Pressure (PSIG)		
Manufacturer:	Relative Humidity (%)		
Model Number:	Chemical Spray		
Purchase Order Number:	Seismic		
Function/Service:	Radiation (Rad)		
Accuracy: Spec: Demo:	Aging		
Location:	Submergence		
Floor Elevation:			
Flood Level Elevation: Above Flood Level: Yes: No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM

Walkdown: Environment: System: P&ID:

Loc Dwg: Elec Scheme: VDR ID:
Remarks:

L200-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
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EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: MOTOR OPERATED VALVE Manufacturer: LIMITORQUE Model Number: SMB-00, AC-CLASS H	Operating Time	30 DAYS		30 DAYS	001		REF C,D	TYPE TEST	NONE SEE GENERAL NOTE 11
	Temperature (°F)	SEE GENERAL NOTE 6		SEE NOTE (1)	001		REF A,B, C,D,E	TYPE TEST	NONE SEE GENERAL NOTE 11
	Pressure (PSIG)	SEE GENERAL NOTE 6		100	001		REF B,C	TYPE TEST	NONE SEE GENERAL NOTE 11
	Relative Humidity (%)	100		100	001		REF A,B,C D,E	TYPE TEST	NONE SEE GENERAL NOTE 11
	Chemical Spray	DEMIN WATER		SEE NOTE (2)	001		REF D	TYPE TEST	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	4.3 E07		2.0 E08	001		REF C,D,F	TYPE TEST	NONE SEE GENERAL NOTE 11
	Aging	LATER		---	---		---	---	SEE NOTE (3)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A . REPORT NO. B0003, PROJECT NO. 600461, QUALIFICATION TYPE TEST REPORT, LIMITORQUE VALVE ACTUATORS FOR CLASS 1E SERVICE. OUTSIDE PRIMARY CONTAINMENT. TEST PERFORMED NOV. 13, 1974 TO JAN. 23, 1975. (TEST PROFILE IS FIGURE 1 OF THIS REPORT) B . REPORT NO. B0009,PROJECT NO.600426, QUALIFICATION TYPE	1. REPRESENTATIVE VALVE OPERATORS WERE TESTED TO 250F IN REFERENCE A, TO 310F IN REFERENCE D, TO 340F IN REFERENCES B AND C, AND A SIMILAR SIZE VALVE OPERATOR (SMB-00) SUCCESSFULLY PASSED A HIGH TEMPERATURE TEST OF 385F IN REFERENCE E. 2. REPRESENTATIVE VALVE OPERATORS WERE SUBJECTED TO SPRAY

DOCUMENTATION REFERENCES:	NOTES:
TEST REPORT, LIMITORQUE DC VALVE ACTUATORS FOR NUCLEAR POWER STATIONS. TEST PERFORMED SEPT. 2, 1975 TO NOV. 3, 1975. (TEST PROFILE IS FIGURE 1 OF THIS REPORT) C . LIMITORQUE SHOP ORDER NO. 600376A, QUALIFICATION TEST OF LIMITORQUE VALVE OPERATORS IN A SIMULATED REACTOR CONTAINMENT POST-ACCIDENT STEAM ENVIRONMENT, SEPT. 1972. (TEST PROFILE IS FIGURE 3 OF THIS REPORT) D . PROJECT NO. 600456, NUCLEAR POWER STATION, QUALIFICATION TYPE TEST PERFORMED JUNE 7, 1974 TO NOV. 22, 1974. TEST REPORT, LIMITORQUE VALVE ACTUATORS FOR PWR SERVICE. (TEST PROFILE IS FIGURE 6 OF THIS REPORT) E . REPORT NO. 80027, PROJECT NO. 600508, LIMITORQUE VALVE ACTUATOR TEMPERATURE RELATED TO HIGH SUPERHEAT AMBIENT TEMPERATURES. DATED 10/18/78. (TEST PROFILE IS FIGURE 2 OF THIS REPORT) F . REPORT NO. 80058, LIMITORQUE VALVE ACTUATOR QUALIFICATION FOR NUCLEAR POWER STATION SERVICE. DATED 1/11/80.	CHEMISTRY DESCRIBED IN IEEE STANDARD 382-1972 TABLE 1 WHICH IS MORE SEVERE THAN DEMIN WATER 3. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30,1982.

L200-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: L200-02-007

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-1900	Temperature (°F)	SEE GENERAL NOTE 6	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-00, AC-CLASS H	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: M-133	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /REACTOR VESSEL HEAD SPRAY ISOLATION	Radiation (Rad)	4.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 811'-6"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M119/G8
Loc Dwg: E5 Elec Scheme: E122/2 VDR ID: E11-F022
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-2006	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.2	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-00, AC-CLASS H	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137A	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /SUPPRESSION POOL SPRAY ISOLATION	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M120/F4
Loc Dwg: M246/D7 Elec Scheme: E121/59 VDR ID: E11-F027A
Remarks:

L200-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L200-02-008

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Revision: 0
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EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SERVICE WATER SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-1943A	Temperature (°F)	300	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0.1	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-00, AC-CLASS H	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137A	Seismic	LATER	
Function/Service: SUPPORT/RHR SERVICE WATER PUMPS A,C SERVICE WATER SUPPLY TO THE RHR SYSTEM	Radiation (Rad)	5.9 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: SE CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 736'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 13 P&ID: M113/G8

Loc Dwg: E317/E3 Elec Scheme: E121/45 VDR ID: E11-F073A
Remarks:

Equip ID: L200-02-009

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SERVICE WATER SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-1943B	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.2	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-00, AC-CLASS H	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137A	Seismic	LATER	
Function/Service: SUPPORT/RHR SERVICE WATER PUMPS B,D SERVICE WATER SUPPLY TO THE RHR SYSTEM	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 746'3"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 13 P&ID: M113/G8

Loc Dwg: E317/F7 Elec Scheme: E121/45 VDR ID: E11-F073B
Remarks:

L200-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L200-02-016

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CORE SPRAY SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-2100	Temperature (°F)	300	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0.1	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-00, AC-CLASS H	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137A	Seismic	LATER	
Function/Service: CORE COOLING/ ISOLATION SPRAY PUMP SUCTION FROM THE SUPPRESSION POOL	Radiation (Rad)	5.9 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: SE CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 08 P&ID: M121/B5

Loc Dwg: E317/D3 Elec Scheme: E121/4 VDR ID: E21-F001A
Remarks:

Equip ID: L200-02-018

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CORE SPRAY SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-2146	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.2	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-00, AC-CLASS H	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-151	Seismic	LATER	
Function/Service: CORE COOLING/CORE SPRAY PUMP 1P-211B SUPPRESSION POOL SUCTION ISOLATION	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 08 P&ID: M121/C5

Loc Dwg: E316/C7 Elec Scheme: E121/4 VDR ID: E21-F038A
Remarks:

L200-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L200-02-019

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CORE SPRAY SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-2147	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.2	
Manufacturer: LIMITORQUE			
Model Number: SMB-00, AC-CLASS H	Relative Humidity (%)	100	
Purchase Order Number: M-151	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Function/Service: CORE COLLING/CORE SPRAY PUMP 1P-211A SUPPRESSION POOL SUCTION ISOLATION	Seismic	LATER	
Accuracy: Spec: NA Demo: NA	Radiation (Rad)	1.3 E07	
Location: TORUS ROOM SOUTH	Aging	LATER	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 08 P&ID: M121/B5

Loc Dwg: E317/D5 Elec Scheme: E121/4 VDR ID: E21-F038B
Remarks:

Equip ID: L200-02-023

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: MO-2400	Temperature (°F)	SEE GENERAL NOTE 6	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: LIMITORQUE			
Model Number: SMB-00, AC-CLASS H	Relative Humidity (%)	100	
Purchase Order Number: M-133	Chemical Spray	DEMIN WATER SPRAY	
Function/Service: CONTAINMENT ISOLATION /RCIC-STEAM SUPPLY LINE ISOLATION	Seismic	LATER	
Accuracy: Spec: NA Demo: NA	Radiation (Rad)	4.3 E07	
Location: DRYWELL	Aging	LATER	
Floor Elevation: 777'			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X			X		

Walkdown: Environment: HARSH System: 03 P&ID: M124/H7

Loc Dwg: E330/E3 Elec Scheme: E121/29 VDR ID: E51-F007
Remarks:

L200-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L200-02-027

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EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: MO-2700	Temperature (°F)	SEE GENERAL NOTE 6	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-00, AC-CLASS H	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: M-134	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /RWCU LINE INBOARD ISOLATION	Radiation (Rad)	4.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 780'			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X					

Walkdown: Environment: HARSH System: 03 P&ID: M127/F8

Loc Dwg: E330/D5 Elec Scheme: E122/3 VDR ID: G31-F001
Remarks:

Equip ID: L200-02-031

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: MO-4423	Temperature (°F)	SEE GENERAL NOTE 6	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-00, AC-CLASS H	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: M-133	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM LINE CONDENSATE DRAIN ISOLATION	Radiation (Rad)	4.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 754'			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X					

Walkdown: Environment: HARSH System: 03 P&ID: M114/B3

Loc Dwg: E329/E2 Elec Scheme: E122/2 VDR ID: B21-F016
Remarks:

L200-03
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

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EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: MOTOR OPERATED VALVE Manufacturer: LIMITORQUE Model Number: SMB-000, AC-CLASS B	Operating Time	30 DAYS		SEE NOTE (1)	001		REF A,C,D	TYPE TEST/ ANALYSIS	NONE SEE GENERAL NOTE 11
	Temperature (°F)	277		SEE NOTE (2)	001		REF A,B, C,D,E	TYPE TEST	NONE SEE GENERAL NOTE 11
	Pressure (PSIG)	1.5		105	024		REF B,C	TYPE TEST	NONE SEE GENERAL NOTE 11
	Relative Humidity (%)	100		100	001		REF A,B,C D,E	TYPE TEST	NONE SEE GENERAL NOTE 11
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	1.5 E07		2.0 E07	027		REF A,F	TYPE TEST	NONE SEE GENERAL NOTE 11
	Aging	LATER		---	---		---	---	SEE NOTE (3)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A . REPORT NO. B0003, PROJECT NO. 600461, QUALIFICATION TYPE TEST REPORT, LIMITORQUE VALVE ACTUATORS FOR CLASS 1E SERVICE. OUTSIDE PRIMARY CONTAINMENT. TEST PERFORMED NOV. 13, 1974 TO JAN. 23, 1975. (TEST PROFILE IS FIGURE 1 OF THIS REPORT) B . REPORT NO. B0009,PROJECT NO.600426, QUALIFICATION TYPE	1. ALTHOUGH TESTED FOR 16 DAYS (REF A), THIS VALVE OPERATOR IS QUALIFIED FOR 30 DAYS BY SIMILARITY TO OTHER VALVE OPERATORS TESTED FOR 30 DAYS IN REFERENCES C AND D. ALSO, RADIATION IS THE ONLY ENVIRONMENTAL QUALIFICATION PARAMETER OF CONCERN IN THE LONG TERM AND THIS VALVE OPERATOR IS QUALIFIED FOR THE 30 DAY RADIATION DOSE BY TEST.

L200-03
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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EQUIPMENT QUALIFICATION REPORT

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DOCUMENTATION REFERENCES:	NOTES:
TEST REPORT, LIMITORQUE DC VALVE ACTUATORS FOR NUCLEAR POWER STATIONS. TEST PERFORMED SEPT. 2, 1975 TO NOV. 3, 1975. (TEST PROFILE IS FIGURE 1 OF THIS REPORT) C . LIMITORQUE SHOP ORDER NO. 600376A, QUALIFICATION TEST OF LIMITORQUE VALVE OPERATORS IN A SIMULATED REACTOR CONTAINMENT POST-ACCIDENT STEAM ENVIRONMENT, SEPT. 1972. (TEST PROFILE IS FIGURE 3 OF THIS REPORT) D . PROJECT NO. 600456, NUCLEAR POWER STATION, QUALIFICATION TYPE TEST REPORT, LIMITORQUE VALVE ACTUATORS FOR PWR SERVICE. TEST PERFORMED JUNE 7, 1974 TO NOV. 22, 1974. (TEST PROFILE IS FIGURE 6 OF THIS REPORT) E . REPORT NO. B0027, PROJECT NO. 600508, LIMITORQUE VALVE ACTUATOR TEMPERATURE RELATED TO HIGH SUPERHEAT AMBIENT TEMPERATURES. DATED 10/18/78. (TEST PROFILE IS FIGURE 2 OF THIS REPORT) F . REPORT NO. B0058, LIMITORQUE VALVE ACTUATOR QUALIFICATION FOR NUCLEAR POWER STATION SERVICE. DATED 1/11/80.	2. REPRESENTATIVE VALVE OPERATORS WERE TESTED TO 250F IN REFERENCE A, TO 310F IN REFERENCE D, TO 340F IN REFERENCES B AND C, AND A SIMILAR SIZE VALVE OPERATOR (SMB-00) SUCCESSFULLY PASSED A HIGH TEMPERATURE TEST OF 385F IN REFERENCE E. 3. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30 1982

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-1935	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.2	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-000, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137B	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /RHR PUMPS 1P229B,D MINI FLOW LINE ISOLATION	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 746'3"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M119/C5

Loc Dwg: M256/D3 Elec Scheme: E121/54 VDR ID: E11-F007B
Remarks:

Equip ID: L200-03-003

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-1949A	Temperature (°F)	104	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0.1	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-000, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-141	Seismic	LATER	
Function/Service: CORE COOLING/RHR HEAT EXCHANGER IE-201B VENT ISOLATION	Radiation (Rad)	5.9 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: NW CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 747'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M119/C4

Loc Dwg: E316/E8 Elec Scheme: E121/47 VDR ID: E11-F103B
Remarks:

L200-03
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L200-03-004

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-1949B	Temperature (°F)	104	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0.1	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-000, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-141	Seismic	LATER	
Function/Service: CORE COOLING/RHR HEAT EXCHANGER 1E-201B VENT ISOLATION	Radiation (Rad)	5.9 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: NW CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 747'			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M119/D4

Loc Dwg: E316/E8 Elec Scheme: E121/47 VDR ID: E11-F104B
Remarks:

Equip ID: L200-03-005

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-1967	Temperature (°F)	104	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0.1	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-000, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137B	Seismic	LATER	
Function/Service: CORE COOLING/RHR TRAIN B CONDENSATE RETURN TO RCIC	Radiation (Rad)	5.9 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: NW CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 732'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M119/E2

Loc Dwg: M246/E7 Elec Scheme: E121/50 VDR ID: E11-F026B
Remarks:

L200-03
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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Equip ID: L200-03-006

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-1970	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.2	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-000, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137B	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /RHR TRAIN B TEST LINE ISOLATION	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 746'3"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M119/F3
Loc Dwg: M246/E7 Elec Scheme: E121/50 VDR ID: E11-F011B
Remarks:

Equip ID: L200-03-007

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-2009	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.2	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-000, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137B	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /RHR PUMPS 1P-229A,C MINI FLOW LINE ISOLATION	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M120/C4
Loc Dwg: M277/D5 Elec Scheme: E121/54 VDR ID: E11-F007A
Remarks:

L200-03
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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Equip ID: L200-03-008

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-2036	Temperature (°F)	300	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0.1	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-000, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137B	Seismic	LATER	
Function/Service: CORE COOLING/RHR TRAIN A CONDENSATE TO RCIC	Radiation (Rad)	5.9 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: SE CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 731'4"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M120/E8
Loc Dwg: M277/C3 Elec Scheme: E121/50 VDR ID: E11-F026A
Remarks:

Equip ID: L200-03-009

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-2038	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.2	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-000, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137B	Seismic	LATER	
Function/Service: CORE COOLING/RHR TRAIN A TEST LINE ISOLATION	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M120/F7
Loc Dwg: M277/D5 Elec Scheme: E121/50 VDR ID: E11-F011A
Remarks:

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-2044A	Temperature (°F)	300	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0.1	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-000, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-141	Seismic	LATER	
Function/Service: CORE COOLING/RHR HEAT EXCHANGER 1E-201A VENT ISOLATION	Radiation (Rad)	5.9 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: SE CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 747'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M120/C6

Loc Dwg: E317/D3 Elec Scheme: E121/47 VDR ID: E11-F103A
Remarks:

Equip ID: L200-03-013

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-2044B	Temperature (°F)	300	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0.1	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-000, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-141	Seismic	LATER	
Function/Service: CORE COOLING/RHR HEAT EXCHANGER 1E-201A VENT ISOLATION	Radiation (Rad)	5.9 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: SE CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 747'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M120/C6

Loc Dwg: E317/D3 Elec Scheme: E121/47 VDR ID: E11-F104A
Remarks:

L200-03
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L200-03-016

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EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CORE SPRAY SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-2104	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.2	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-000, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-141	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /CORE SPRAY MINI FLO LINE ISOLATION	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 08 P&ID: M121/D4

Loc Dwg: E317/E5 Elec Scheme: E121/6 VDR ID: E21-F031A
Remarks:

Equip ID: L200-03-017

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CORE SPRAY SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-2124	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.2	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-000, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-141	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /CORE SPRAY MINI FLO LINE ISOLATION	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 746'3"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 08 P&ID: M121/D4

Loc Dwg: E316/F6 Elec Scheme: E121/6 VDR ID: E21-F031B
Remarks:

L200-03
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L200-03-019

Sheet No. 163
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: L200-03-020

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: HIGH PRESSURE COOLANT INJECTION Plant I.D. Number: MO-2290A Component: MOTOR OPERATED VALVE Manufacturer: LIMITORQUE Model Number: SMB-000, AC-CLASS B Purchase Order Number: M-141 Function/Service: CORE COOLING/ SUPPRESSION POOL VACUUM BREAKER Accuracy: Spec: NA Demo: NA Location: TORUS ROOM SOUTH Floor Elevation: 716'9"	Operating Time	30 DAYS	QUALIFICATION NOT REQUIRED FOR LOCA RADIATION SOURCE, SEE GEN NOTE 2
	Temperature (°F)	277	
	Pressure (PSIG)	1.2	
	Relative Humidity (%)	100	
	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
	Seismic	LATER	
	Radiation (Rad)	1.0 E06	
	Aging	LATER	
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
		X	X		X	X	

Walkdown: Environment: HARSH System: 06 P&ID: M122/B8

Loc Dwg: E317/D5 Elec Scheme: E121/23A VDR ID:
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: HIGH PRESSURE COOLANT INJECTION Plant I.D. Number: MO-2290B Component: MOTOR OPERATED VALVE Manufacturer: LIMITORQUE Model Number: SMB-000, AC-CLASS B Purchase Order Number: M-141 Function/Service: CORE COOLING/ SUPPRESSION POOL VACUUM BREAKER Accuracy: Spec: NA Demo: NA Location: TORUS ROOM SOUTH Floor Elevation: 716'9"	Operating Time	30 DAYS	QUALIFICATION NOT REQUIRED FOR LOCA RADIATION SOURCE, SEE GEN NOTE 2
	Temperature (°F)	277	
	Pressure (PSIG)	1.2	
	Relative Humidity (%)	100	
	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
	Seismic	LATER	
	Radiation (Rad)	1.0 E06	
	Aging	LATER	
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
		X	X		X	X	

Walkdown: Environment: HARSH System: 06 P&ID: M122/B8

Loc Dwg: E317/D5 Elec Scheme: E121/23A VDR ID:
Remarks:

L200-03
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L200-03-021

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Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: MO-2516	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.2	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-000, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137	Seismic	LATER	
Function/Service: RCIC PUMP SUCTION /ISOLATION FROM SUPPRESSION POOL	Radiation (Rad)	2.6 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X					

Walkdown: Environment: HARSH System: 03 P&ID: M125/B5

Loc Dwg: E317/E6 Elec Scheme: E121/33 VDR ID: E51-F031
Remarks:

Equip ID: L200-03-023

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: MO-4320A	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.2	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-000, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-141	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /CAD SYSTEM NITROGEN SUPPLY LINE ISOLATION	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M143/C3

Loc Dwg: E317/B4 Elec Scheme: E122/31 VDR ID:
Remarks:

L200-03
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L200-03-024

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Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: MO-4320B	Temperature (°F)	140	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.5	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-000, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-141	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /CAD SYSTEM NITROGEN SUPPLY LINE ISOLATION	Radiation (Rad)	8.1 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: HPCI ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 731'9"			
Flood Level Elevation: 717'9" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M143/C4

Loc Dwg: E317/B3 Elec Scheme: E122/31 VDR ID:
Remarks:

Equip ID: L200-03-025

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: MO-4841A	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.2	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-000, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137B	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /REACTOR RECIRC PUMP AND DRYWELL DRAIN SUMP HEAT EXCHANGER ISOLATION	Radiation (Rad)	2.6 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X					

Walkdown: Environment: HARSH System: 03 P&ID: M112/E3

Loc Dwg: E316/E5 Elec Scheme: E111/17 VDR ID:
Remarks:

L200-03
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L200-03-026

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Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: MO-4841B	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.2	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-000, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137B	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /REACTOR RECIRC PUMP AND DRYWELL DRAIN SUMP HEAT EXCHANGER ISOLATION	Radiation (Rad)	2.6 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X					

Walkdown: Environment: HARSH System: 03 P&ID: M112/F3

Loc Dwg: E316/E5 Elec Scheme: E111/17 VDR ID:
Remarks:

Equip ID: L200-03-027

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: MAIN STEAM LINE ISOL VALVE LEAKAGE CONT.	Operating Time	30 DAYS	
Plant I.D. Number: MO-8401A	Temperature (°F)	130	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-000, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: PREVENT RELEASE OF RADIOACTIVE MATERIAL/ MAIN STEAM LINE "A" LEAKAGE INBOARD BLEED VALVE	Radiation (Rad)	1.5 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 05 P&ID: M184/F3

Loc Dwg: E328/B6 Elec Scheme: E122/38 VDR ID: B21-F920A
Remarks:

L200-03
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L200-03-028

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Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: L200-03-029

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: MAIN STEAM LINE ISOL VALVE LEAKAGE CONT.	Operating Time	30 DAYS	
Plant I.D. Number: MO-8401B	Temperature (°F)	130	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-000, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: PREVENT RELEASE OF RADIOACTIVE MATERIAL/ MAIN STEAM LINE 'B' BLEED VALVE	Radiation (Rad)	1.5 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 05 P&ID: M184/C8

Loc Dwg: E328/B6 Elec Scheme: E122/38 VDR ID: B21-F920B

Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: MAIN STEAM LINE ISOL VALVE LEAKAGE CONT.	Operating Time	30 DAYS	
Plant I.D. Number: MO-8401C	Temperature (°F)	130	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-000, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: PREVENT RELEASE OF RADIOACTIVE MATERIAL/ MAIN STEAM LINE "C" LEAKAGE INBOARD BLEED VALVE	Radiation (Rad)	1.5 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 05 P&ID: M184/C3

Loc Dwg: E328/B6 Elec Scheme: E122/38 VDR ID: B21-F920C

Remarks:

L200-03
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L200-03-030

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Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: MAIN STEAM LINE ISOL VALVE LEAKAGE CONT.	Operating Time	30 DAYS	
Plant I.D. Number: MO-8401D	Temperature (°F)	130	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-000, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: PREVENT RELEASE OF RADIOACTIVE MATERIAL/ MAIN STEAM LINE "D" LEAKAGE INBOARD BLEED VALVE	Radiation (Rad)	1.5 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 05 P&ID: M184/F8

Loc Dwg: E328/B6 Elec Scheme: E122/38 VDR ID: B21-F920D
Remarks:

Equip ID: L200-03-031

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: MAIN STEAM LINE ISOL VALVE LEAKAGE CONT.	Operating Time	30 DAYS	
Plant I.D. Number: MO-8402A	Temperature (°F)	130	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-000, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: PREVENT RELEASE OF RADIOACTIVE MATERIAL/ MAIN STEAM LINE "A" LEAKAGE OUTBOARD BLEED VALVE	Radiation (Rad)	1.5 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 05 P&ID: M184/F3

Loc Dwg: E328/B6 Elec Scheme: E122/38 VDR ID: B21-F921A
Remarks:

L200-03
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L200-03-032

Sheet No. 169
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: L200-03-033

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: MAIN STEAM LINE ISOL VALVE LEAKAGE CONT.	Operating Time	30 DAYS	
Plant I.D. Number: MO-8402B	Temperature (°F)	130	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-000, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: PREVENT RELEASE OF RADIOACTIVE MATERIAL/ MAIN STEAM LINE "B" LEAKAGE OUTBOARD BLEED VALVE	Radiation (Rad)	1.5 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 05 P&ID: M184/C8

Loc Dwg: E328/B6 Elec Scheme: E122/38 VDR ID: B21-F921B

Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: MAIN STEAM LINE ISOL VALVE LEAKAGE CONT.	Operating Time	30 DAYS	
Plant I.D. Number: MO-8402C	Temperature (°F)	130	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-000, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: PREVENT RELEASE OF RADIOACTIVE MATERIAL/ MAIN STEAM LINE "C" LEAKAGE OUTBOARD BLEED VALVE	Radiation (Rad)	1.5 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 05 P&ID: M184/C3

Loc Dwg: E328/ Elec Scheme: E122/38 VDR ID: B21-F921C

Remarks:

L200-03
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L200-03-034

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Revision: 0
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: L200-03-035

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: MAIN STEAM LINE ISOL VALVE LEAKAGE CONT.	Operating Time	30 DAYS	
Plant I.D. Number: MO-8402D	Temperature (°F)	130	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-000, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: PREVENT RELEASE OF RADIOACTIVE MATERIAL/ MAIN STEAM LINE 'D' LEAKAGE OUTBOARD BLEED VALVE	Radiation (Rad)	1.5 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 05 P&ID: M184/F8

Loc Dwg: E328/B6 Elec Scheme: E122/38 VDR ID: B21-F921D
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: MAIN STEAM LINE ISOL VALVE LEAKAGE CONT.	Operating Time	30 DAYS	
Plant I.D. Number: MO-8403A	Temperature (°F)	130	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-000, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: PREVENT RELEASE OF RADIOACTIVE MATERIAL/ MAIN STEAM LINE "A" LEAKAGE TEST LINE BYPASS VALVE	Radiation (Rad)	1.5 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 05 P&ID: M184/F4

Loc Dwg: E328/B5 Elec Scheme: E122/38 VDR ID: B21-F92A
Remarks:

L200-03
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L200-03-036

Sheet No. 171
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: MAIN STEAM LINE ISOL VALVE LEAKAGE CONT.	Operating Time	30 DAYS	
Plant I.D. Number: MO-8403B	Temperature (°F)	130	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-000, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
B21-F922 Function/Service: PREVENT RELEASE OF RADIOACTIVE MATERIAL/ MAIN STEAM LINE "B" LEAKAGE TEST LINE BYPASS VALVE	Radiation (Rad)	1.5 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 05 P&ID: M184/C8

Loc Dwg: E328/B4 Elec Scheme: E122/38 VDR ID: B21-F922B
Remarks:

Equip ID: L200-03-037

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: MAIN STEAM LINE ISOL VALVE LEAKAGE CONT.	Operating Time	30 DAYS	
Plant I.D. Number: MO-8403C	Temperature (°F)	130	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-000, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
B21-F922 Function/Service: PREVENT RELEASE OF RADIOACTIVE MATERIAL/ MAIN STEAM LINE "C" LEAKAGE TEST LINE BYPASS VALVE	Radiation (Rad)	1.5 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 05 P&ID: M184/C3

Loc Dwg: E328/B4 Elec Scheme: E122/38 VDR ID: B21-F922C
Remarks:

L200-03
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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Equip ID: L200-03-038

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: MAIN STEAM LINE ISOL VALVE LEAKAGE CONT.	Operating Time	30 DAYS	
Plant I.D. Number: MO-8403D	Temperature (°F)	130	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-000, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: PREVENT RELEASE OF RADIOACTIVE MATERIAL/ MAIN STEAM LINE 'D' LEAKAGE TEST LINE BYPASS VALVE	Radiation (Rad)	1.5 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 05 P&ID: M184/F8

Loc Dwg: E328/B4 Elec Scheme: E122/38 VDR ID: B21-F922D

Remarks:

Equip ID:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System:	Operating Time		
Plant I.D. Number:	Temperature (°F)		
Component:	Pressure (PSIG)		
Manufacturer:	Relative Humidity (%)		
Model Number:	Chemical Spray		
Purchase Order Number:	Seismic		
Function/Service:	Radiation (Rad)		
Accuracy: Spec: Demo:	Aging		
Location:	Submergence		
Floor Elevation:			
Flood Level Elevation: Above Flood Level: Yes: No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM

Walkdown: Environment: System: P&ID:

Loc Dwg: Elec Scheme: VDR ID:

Remarks:

L200-05
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

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EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: MOTOR OPERATED VALVE Manufacturer: LIMITORQUE Model Number: SMB-1, AC-CLASS B	Operating Time	30 DAYS		SEE NOTE (1)	001		REF A,C,D	TYPE TEST/ ANALYSIS	NONE SEE GENERAL NOTE 11
	Temperature (°F)	277		SEE NOTE (2)	001		REF A,B, C,D,E	TYPE TEST	NONE SEE GENERAL NOTE 11
	Pressure (PSIG)	1.2		105	001		REF B,C	TYPE TEST	NONE SEE GENERAL NOTE 11
	Relative Humidity (%)	100		100	001		REF A,B,C D,E	TYPE TEST	NONE SEE GENERAL NOTE 11
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	1.3 E07		2.0 E07	001		REF A,F	TYPE TEST	NONE SEE GENERAL NOTE 11
	Aging	LATER		---	---		---	---	SEE NOTE (3)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A . REPORT NO. B0003, PROJECT NO. 600461, QUALIFICATION TYPE TEST REPORT, LIMITORQUE VALVE ACTUATORS FOR CLASS 1E SERVICE. OUTSIDE PRIMARY CONTAINMENT. TEST PERFORMED NOV. 13, 1974 TO JAN. 23, 1975. (TEST PROFILE IS FIGURE 1 OF THIS REPORT) B . REPORT NO. B0009,PROJECT NO.600426, QUALIFICATION TYPE	1. ALTHOUGH TESTED FOR 16 DAYS (REF A), THIS VALVE OPERATOR IS QUALIFIED FOR 30 DAYS BY SIMILARITY TO OTHER VALVE OPERATORS TESTED FOR 30 DAYS IN REFERENCES C AND D. ALSO, RADIATION IS THE ONLY ENVIRONMENTAL QUALIFICATION PARAMETER OF CONCERN IN THE LONG TERM AND THIS VALVE OPERATOR IS QUALIFIED FOR THE 30 DAY RADIATION DOSE BY TEST.

DOCUMENTATION REFERENCES:	NOTES:
TEST REPORT, LIMITORQUE DC VALVE ACTUATORS FOR NUCLEAR POWER STATIONS. TEST PERFORMED SEPT. 2, 1975 TO NOV. 3, 1975. (TEST PROFILE IS FIGURE 1 OF THIS REPORT) C . LIMITORQUE SHOP ORDER NO. 600376A, QUALIFICATION TEST OF LIMITORQUE VALVE OPERATORS IN A SIMULATED REACTOR CONTAINMENT POST-ACCIDENT STEAM ENVIRONMENT, SEPT. 1972. (TEST PROFILE IS FIGURE 3 OF THIS REPORT) D . PROJECT NO. 600456, NUCLEAR POWER STATION, QUALIFICATION TYPE TEST REPORT, LIMITORQUE VALVE ACTUATORS FOR PWR SERVICE. TEST PERFORMED JUNE 7, 1974 TO NOV. 22, 1974. (TEST PROFILE IS FIGURE 6 OF THIS REPORT) E . REPORT NO. B0027, PROJECT NO. 600508, LIMITORQUE VALVE ACTUATOR TEMPERATURE RELATED TO HIGH SUPERHEAT AMBIENT TEMPERATURES. DATED 10/18/78. (TEST PROFILE IS FIGURE 2 OF THIS REPORT) F . REPORT NO. B0058, LIMITORQUE VALVE ACTUATOR QUALIFICATION FOR NUCLEAR POWER STATION SERVICE. DATED 1/11/80.	2. REPRESENTATIVE VALVE OPERATORS WERE TESTED TO 250F IN REFERENCE A, TO 310F IN REFERENCE D, TO 340F IN REFERENCES B AND C, AND A SMALLER SIZE VALVE OPERATOR (SMB-00) SUCCESSFULLY PASSED A HIGH TEMPERATURE TEST OF 385F IN REFERENCE E. 3. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30 1982

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: L200-05-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-2010	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.2	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-1, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137	Seismic	LATER	
Function/Service: CORE COOLING/RHR SYSTEM CROSS TIE ISOLATION VALVE	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 746'3"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M120/D5

Loc Dwg: E316/C8 Elec Scheme: E121/45 VDR ID: E11-F010
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CORE SPRAY SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-2112	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.2	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-1, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-151	Seismic	LATER	
Function/Service: CORE COOLING/CORE SPRAY TEST LINE CONTROL VALVE	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 746'3"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 08 P&ID: M121/F5

Loc Dwg: E317/D5 Elec Scheme: E121/7 VDR ID: E21-F015A
Remarks:

L200-05
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L200-05-003

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CORE SPRAY SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-2132	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.2	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-1, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-151	Seismic	LATER	
Function/Service: CONTAINMNT ISOLATION /CORE SPRAY TEST LINE ISOLATION VALVE	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 746'3"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 08 P&ID: M121/E5

Loc Dwg: E316/F5 Elec Scheme: E121/7 VDR ID: E21-F015B
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System:	Operating Time		
Plant I.D. Number:	Temperature (°F)		
Component:	Pressure (PSIG)		
Manufacturer:	Relative Humidity (%)		
Model Number:	Chemical Spray		
Purchase Order Number:	Seismic		
Function/Service:	Radiation (Rad)		
Accuracy: Spec: Demo:	Aging		
Location:	Submergence		
Floor Elevation:			
Flood Level Elevation: Above Flood Level: Yes: No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM

Walkdown: Environment: System: P&ID:

Loc Dwg: Elec Scheme: VDR ID:
Remarks:

L200-06
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

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EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: MOTOR OPERATED VALVE Manufacturer: LIMITORQUE Model Number: SMB-2, AC-CLASS H	Operating Time	30 DAYS		30 DAYS	001		REF C,D	TYPE TEST	NONE SEE GENERAL NOTE 11
	Temperature (°F)	SEE GENERAL NOTE 6		SEE NOTE (1)	003		REF A,B, C,D,E	TYPE TEST	NONE SEE GENERAL NOTE 11
	Pressure (PSIG)	SEE GENERAL NOTE 6		105	003		REF B,C	TYPE TEST	NONE SEE GENERAL NOTE 11
	Relative Humidity (%)	100		100	001		REF A,B,C D,E	TYPE TEST	NONE SEE GENERAL NOTE 11
	Chemical Spray	DEMIN WATER		SEE NOTE (2)	003		REF D	TYPE TEST	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	4.3 E07		2.0 E08	003		REF C,D,F	TYPE TEST	NONE SEE GENERAL NOTE 11
	Aging	LATER		---	---		---	---	SEE NOTE (3)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A . REPORT NO. B0003, PROJECT NO. 600461, QUALIFICATION TYPE TEST REPORT, LIMITORQUE VALVE ACTUATORS FOR CLASS 1E SERVICE. OUTSIDE PRIMARY CONTAINMENT. TEST PERFORMED NOV. 13, 1974 TO JAN. 23, 1975. (TEST PROFILE IS FIGURE 1 OF THIS REPORT) B . REPORT NO. B0009, PROJECT NO. 600426, QUALIFICATION TYPE	1. REPRESENTATIVE VALVE OPERATORS WERE TESTED TO 250F IN REFERENCE A, TO 310F IN REFERENCE D, TO 340F IN REFERENCES B AND C, AND A SMALLER SIZE VALVE OPERATOR (SMB-00) SUCCESSFULLY PASSED A HIGH TEMPERATURE TEST OF 385F IN REFERENCE E. 2. REPRESENTATIVE VALVE OPERATORS WERE SUBJECTED TO SPRAY

L200-06
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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EQUIPMENT QUALIFICATION REPORT

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DOCUMENTATION REFERENCES:	NOTES:
TEST REPORT, LIMITORQUE DC VALVE ACTUATORS FOR NUCLEAR POWER STATIONS. TEST PERFORMED SEPT. 2, 1975 TO NOV. 3, 1975. (TEST PROFILE IS FIGURE 1 OF THIS REPORT) C . LIMITORQUE SHOP ORDER NO. 600376A, QUALIFICATION TEST OF LIMITORQUE VALVE OPERATORS IN A SIMULATED REACTOR CONTAINMENT POST-ACCIDENT STEAM ENVIRONMENT, SEPT. 1972. (TEST PROFILE IS FIGURE 3 OF THIS REPORT) D . PROJECT NO. 600456, NUCLEAR POWER STATION, QUALIFICATION TYPE TEST REPORT, LIMITORQUE VALVE ACTUATORS FOR PWR SERVICE. TEST PERFORMED JUNE 7, 1974 TO NOV. 22, 1974. (TEST PROFILE IS FIGURE 6 OF THIS REPORT) E . REPORT NO. B0027, PROJECT NO. 600508, LIMITORQUE VALVE ACTUATOR TEMPERATURE RELATED TO HIGH SUPERHEAT AMBIENT TEMPERATURES. DATED 10/18/78. (TEST PROFILE IS FIGURE 2 OF THIS REPORT) F . REPORT NO. B0058, LIMITORQUE VALVE ACTUATOR QUALIFICATION FOR NUCLEAR POWER STATION SERVICE. DATED 1/11/80.	CHEMISTRY DESCRIBED IN IEEE STANDARD 382-1972 TABLE 1 WHICH IS MORE SEVERE THAN DEMIN WATER 3. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30 1982

L200-06
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L200-06-001

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: L200-06-005

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-1902	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.2	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-2, AC-CLASS H	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-151	Seismic	LATER	
Function/Service: CORE COOLING/ CONTAINMENTSPRAY ISOLATION	Radiation (Rad)	5.6 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RHR VALVE ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 773'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M119/G7

Loc Dwg: M248/C6 Elec Scheme: E121/48 VDR ID: E11-F021B
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-1934	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.2	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-2, AC-CLASS H	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-151	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /RHR TEST LINE	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 746'3"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M119/F5

Loc Dwg: M266/G7 Elec Scheme: E121/59 VDR ID: E11-F024B
Remarks:

L200-06
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-2000	Temperature (°F)	90	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-2, AC-CLASS H	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-151	Seismic	LATER	
Function/Service: CORE COOLING/ CONTAINMENT SPRAY ISOLATION	Radiation (Rad)	4.7 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RB-S	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M120/G2

Loc Dwg: M269/F6 Elec Scheme: E121/48 VDR ID: E11-F021A
Remarks:

Equip ID: L200-06-007

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-2001	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.2	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-2, AC-CLASS H	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-151	Seismic	LATER	
Function/Service: CORE COOLING/ CONTAINMENT SPRAY ISOLATION	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M120/G4

Loc Dwg: M257/D7 Elec Scheme: E113/89 VDR ID: E11-F016A
Remarks:

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L200-06-008

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-2007	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.2	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-2, AC-CLASS H	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-151	Seismic	LATER	
Function/Service: CORE COOLING/RHR TEST LINE ISOLATION	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 746'3"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M120/F5

Loc Dwg: M256/D3 Elec Scheme: E121/59 VDR ID: E11-F024A
Remarks:

Equip ID: L200-06-009

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CORE SPRAY SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-2117	Temperature (°F)	214	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	2.1	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-2, AC-CLASS H	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-152	Seismic	LATER	
Function/Service: CORE COOLING/REACTOR VESSEL CORE SPRAY INLET ISOLATION	Radiation (Rad)	1.8 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RWCU HEAT EXCH ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: 786'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 08 P&ID: M121/G6

Loc Dwg: E321/E5 Elec Scheme: E121/5 VDR ID: E21-F005A
Remarks:

L200-06
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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Equip ID: L200-06-010

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CORE SPRAY SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-2137	Temperature (°F)	104	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-2, AC-CLASS H	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-152	Seismic	LATER	
Function/Service: CORE COOLING/REACTOR VESSEL CORE SPRAY INLET ISOLATION	Radiation (Rad)	4.7 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RB-N	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 08 P&ID: M121/E6

Loc Dwg: E320/E5 Elec Scheme: E121/8 VDR ID: E21-F005B
Remarks:

Equip ID: L200-06-012

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: HIGH PRESSURE COOLANT INJECTION	Operating Time	NOT REQUIRED	
Plant I.D. Number: MO-2238	Temperature (°F)	SEE GENERAL NOTE 6	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-2, AC-CLASS H	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: M-133	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /HPCI TURBINE MAIN STEAM SUPPLY INBOARD ISOLATION	Radiation (Rad)	4.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 781'			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 06 P&ID: M122/G6

Loc Dwg: E330/B5 Elec Scheme: E121/14 VDR ID: E41-F002
Remarks:

L200-07
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 183
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Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: MOTOR OPERATED VALVE Manufacturer: LIMITORQUE Model Number: SMB-3, DC-CLASS B	Operating Time	1 HOUR		SEE NOTE (1)	003		REF A,B, C,D	TYPE TEST/ ANAL	NONE SEE GENERAL NOTE 11
	Temperature (°F)	300		SEE NOTE (2)	003		REF A,B, C,D,E	TYPE TEST/ ANAL	NONE SEE GENERAL NOTE 11
	Pressure (PSIG)	1.8		105	003		REF B,C	TYPE TEST/ ANAL	NONE SEE GENERAL NOTE 11
	Relative Humidity (%)	100		100	003		REF A,B, C,D,E	TYPE TEST/ ANAL	NONE SEE GENERAL NOTE 11
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	3.2 E06		2.0 E07	003		REF A,F	TYPE TEST/ ANAL	NONE SEE GENERAL NOTE 11
	Aging	LATER		---	---		---	---	SEE NOTE (3)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A . TEST REPORT, LIMITORQUE VALVE ACTUATORS FOR CLASS 1E SERVICE. OUTSIDE PRIMARY CONTAINMENT. TEST PERFORMED NOV. 13, 1974 TO JAN. 23, 1975. (TEST PROFILE IS FIGURE 1 OF THIS REPORT) B . REPORT NO. B0009,PROJECT NO.600426, QUALIFICATION TYPE TEST REPORT, LIMITORQUE DC VALVE ACTUATORS FOR NUCLEAR	1. EXCEPT FOR THE MOTOR INSULATION, THIS VALVE OPERATOR IS SIMILAR IN CONSTRUCTION AND PRINCIPLE OF OPERATION TO THE DC MOTOR VALVE OPERATORS TESTED IN REFERENCE B FOR 25 HOURS. THE MOTOR INSULATION IS SIMILAR TO THE CLASS B INSULATION OF THE AC MOTOR VALVE OPERATOR TESTED IN REFERENCE A FOR 16 DAYS. BY TEST AND SIMILARITY ANALYSIS.

DOCUMENTATION REFERENCES:	NOTES:
POWER STATIONS. TEST PERFORMED SEPT. 2, 1975 TO NOV. 3, 1975. (TEST PROFILE IS FIGURE 1 OF THIS REPORT) C . LIMITORQUE SHOP ORDER NO. G00376A, QUALIFICATION TEST OF LIMITORQUE VALVE OPERATORS IN A SIMULATED REACTOR CONTAINMENT POST-ACCIDENT STEAM ENVIRONMENT, SEPT. 1972. (TEST PROFILE IS FIGURE 3 OF THIS REPORT) D . PROJECT NO. G00456, NUCLEAR POWER STATION, QUALIFICATION PROJECT NO. 600456, NUCLEAR POWER STATION, QUALIFICATION TYPE TEST REPORT, LIMITORQUE VALVE ACTUATORS FOR PWR SERVICE. TEST PERFORMED JUNE 7, 1974 TO NOV. 22, 1974. (TEST PROFILE IS FIGURE 6 OF THIS REPORT) E . REPORT NO. B0027, PROJECT NO. 600508, LIMITORQUE VALVE ACTUATOR TEMPERATURE RELATED TO HIGH SUPERHEAT AMBIENT TEMPERATURES. DATED 10/18/78. (TEST PROFILE IS FIGURE 2 OF THIS REPORT) F . REPORT NO. B0058, LIMITORQUE VALVE ACTUATOR QUALIFICAITON FOR NUCLEAR POWER STATION SERVICE. DATED 1/11/80.	THIS VALVE OPERATOR IS QUALIFIED FOR AT LEAST 25 HOURS. 2. REPRESENTATIVE VALVE OPERATORS WERE TESTED TO 250F IN REFERENCE A, TO 310F IN REFERENCE D, TO 340F IN REFERENCES B AND C, AND A SMALLER SIZE VALVE OPERATOR (SMB-00) SUCCESSFULLY PASSED A HIGH TEMPERATURE TEST OF 385F IN REFERENCE E. 3. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

L200-07
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L200-07-003

Sheet No. 185
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: HIGH PRESSURE COOLANT INJECTION	Operating Time	1 HOUR	
Plant I.D. Number: MO-2312	Temperature (°F)	300	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.8	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-3, DC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-152	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /HPCI PUMP DISCHARGE ISOLATION	Radiation (Rad)	3.2 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X		X	X	

Walkdown: Environment: HARSH System: 06 P&ID: M123/D6

Loc Dwg: E328/D3 Elec Scheme: E121/18 VDR ID: E41-F006
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System:	Operating Time		
Plant I.D. Number:	Temperature (°F)		
Component:	Pressure (PSIG)		
Manufacturer:	Relative Humidity (%)		
Model Number:	Chemical Spray		
Purchase Order Number:	Seismic		
Function/Service:	Radiation (Rad)		
Accuracy: Spec: Demo:	Aging		
Location:	Submergence		
Floor Elevation:			
Flood Level Elevation: Above Flood Level: Yes: No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM

Walkdown: Environment: System: P&ID:

Loc Dwg: Elec Scheme: VDR ID:
Remarks:

L200-08
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 186
Revision 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: MOTOR OPERATED VALVE Manufacturer: LIMITORQUE Model Number: SMB-4, AC-CLASS B	Operating Time	30 DAYS		SEE NOTE (1)	001		REF A,C,D	TYPE TEST/ ANALYSIS	NONE SEE GENERAL NOTE 11
	Temperature (°F)	300		SEE NOTE (2)	004		REF A, C,D,E	TYPE TEST	NONE SEE GENERAL NOTE 11
	Pressure (PSIG)	1.5		105	004		REF B,C	TYPE TEST	NONE SEE GENERAL NOTE 11
	Relative Humidity (%)	100		100	001		REF A,B,C D E	TYPE TEST	NONE SEE GENERAL NOTE 11
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	8.1 E06		2.0 E07	004		REF A,F	TYPE TEST	NONE SEE GENERAL NOTE 11
	Aging	LATER		---	---		---	---	SEE NOTE (3)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A . REPORT NO. B0003, PROJECT NO. 600461, QUALIFICATION TYPE TEST REPORT, LIMITORQUE VALVE ACTUATORS FOR CLASS 1E SERVICE. OUTSIDE PRIMARY CONTAINMENT. TEST PERFORMED NOV. 13, 1974 TO JAN. 23, 1975. (TEST PROFILE IS FIGURE 1 OF THIS REPORT) B . REPORT NO. B0009,PROJECT NO.600426, QUALIFICATION TYPE	1. ALTHOUGH TESTED FOR 16 DAYS (REF A), THIS VALVE OPERATOR IS QUALIFIED FOR 30 DAYS BY SIMILARITY TO OTHER VALVE OPERATORS TESTED FOR 30 DAYS IN REFERENCES C AND D. ALSO, RADIATION IS THE ONLY ENVIRONMENTAL QUALIFICATION PARAMETER OF CONCERN IN THE LONG TERM AND THIS VALVE OPERATOR IS QUALIFIED FOR THE 30 DAY RADIATION DOSE BY TEST.

L200-08
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket: 50-331

EQUIPMENT QUALIFICATION REPORT

Sheet No. 187
Revision: 0
Date: 01/11/82

DOCUMENTATION REFERENCES:	NOTES:
TEST REPORT, LIMITORQUE DC VALVE ACTUATORS FOR NUCLEAR POWER STATIONS. TEST PERFORMED SEPT. 2, 1975 TO NOV. 3, 1975. (TEST PROFILE IS FIGURE 1 OF THIS REPORT) C . LIMITORQUE SHOP ORDER NO. 600376A, QUALIFICATION TEST OF LIMITORQUE VALVE OPERATORS IN A SIMULATED REACTOR CONTAINMENT POST-ACCIDENT STEAM ENVIRONMENT, SEPT. 1972. (TEST PROFILE IS FIGURE 3 OF THIS REPORT) D . PROJECT NO. 600456, NUCLEAR POWER STATION, QUALIFICATION TYPE TEST REPORT, LIMITORQUE VALVE ACTUATORS FOR PWR SERVICE. TEST PERFORMED JUNE 7, 1974 TO NOV. 22, 1974. (TEST PROFILE IS FIGURE 6 OF THIS REPORT) E . REPORT NO. B0027, PROJECT NO. 600508, LIMITORQUE VALVE ACTUATOR TEMPERATURE RELATED TO HIGH SUPERHEAT AMBIENT TEMPERATURES. DATED 10/18/78. (TEST PROFILE IS FIGURE 2 OF THIS REPORT) F . REPORT NO. B0058, LIMITORQUE VALVE ACTUATOR QUALIFICATION FOR NUCLEAR POWER STATION SERVICE. DATED 1/11/80.	2. REPRESENTATIVE VALVE OPERATORS WERE TESTED TO 250F IN REFERENCE A, TO 310F IN REFERENCE D, TO 340F IN REFERENCES B AND C, AND A SMALLER SIZE VALVE OPERATOR (SMB-00) SUCCESSFULLY PASSED A HIGH TEMPERATURE TEST OF 385F IN REFERENCE E. 3. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30 1982

L200-08
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L200-08-001

Sheet No. 188
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: L200-08-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-1940	Temperature (°F)	104	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0.1	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-4, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137	Seismic	LATER	
Function/Service: CORE COOLING/RHR PUMP 1P-229B,D DISCHARGE FLOW CONTROL	Radiation (Rad)	5.9 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: NW CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 732'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M119/E4

Loc Dwg: M256/C2 Elec Scheme: E121/51 VDR ID: E11-F048B
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SERVICE WATER SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-1947	Temperature (°F)	104	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0.1	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-4, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-144A	Seismic	LATER	
Function/Service: SUPPORT/RHR HEAT EXCHANGER 1E-201B SERVICE WATER DISCHARGE ISOLATION	Radiation (Rad)	5.9 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: NW CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 732'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 13 P&ID: M113/D7

Loc Dwg: E316/E8 Elec Scheme: E121/55 VDR ID: E11-F068B
Remarks:

L200-08
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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Equip ID: L200-08-004

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION

System: RESIDUAL HEAT REMOVAL SERVICE WATER SYSTEM

Plant I.D. Number: MO-2046

Component: MOTOR OPERATED VALVE

Manufacturer: LIMITORQUE

Model Number: SMB-4, AC-CLASS B

Purchase Order Number: M-144A

Function/Service: SUPPORT/RHR HEAT EXCHANGER 1E-201A SERVICE WATER DISCHARGE ISOLATION

Accuracy: Spec: NA Demo: NA

Location: HPCI ROOM

Floor Elevation: 716'9"

Flood Level Elevation: 717'9"
Above Flood Level: Yes: X No:

ENVIRONMENT

Parameter	Required	Remarks
Operating Time	30 DAYS	
Temperature (°F)	300	
Pressure (PSIG)	1.5	
Relative Humidity (%)	100	
Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Seismic	LATER	
Radiation (Rad)	8.1 E06	
Aging	LATER	
Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 13 P&ID: M113/D5

Loc Dwg: E317/D2 Elec Scheme: E121/55 VDR ID: E11-F068A
Remarks:

Equip ID: L200-08-005

EQUIPMENT DESCRIPTION

System: RESIDUAL HEAT REMOVAL SYSTEM

Plant I.D. Number: MO-2030

Component: MOTOR OPERATED VALVE

Manufacturer: LIMITORQUE

Model Number: SMB-4, AC-CLASS B

Purchase Order Number: M-137A

Function/Service: CORE CODLING/RHR PUMPS 1P229A,C DISCHARGE FLOW CONTRO

Accuracy: Spec: NA Demo: NA

Location: SE CRNR RM

Floor Elevation: 731'4"

Flood Level Elevation: NOT APP
Above Flood Level: Yes: X No:

ENVIRONMENT

Parameter	Required	Remarks
Operating Time	30 DAYS	
Temperature (°F)	300	
Pressure (PSIG)	0.1	
Relative Humidity (%)	100	
Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Seismic	LATER	
Radiation (Rad)	5.9 E06	
Aging	LATER	
Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M120/E5

Loc Dwg: M277/C2 Elec Scheme: E121/51 VDR ID: E11-F048A
Remarks:

L200-09
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 190
Revision 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: MOTOR OPERATED VALVE Manufacturer: LIMITORQUE Model Number: SMB-5, AC-CLASS B	Operating Time	30 DAYS		SEE NOTE (1)	001		REF A,C,D	TYPE TEST/ ANALYSIS	NONE SEE GENERAL NOTE 11
	Temperature (°F)	277		SEE NOTE (2)	001		REF A,B, C,D,E	TYPE TEST	NONE SEE GENERAL NOTE 11
	Pressure (PSIG)	1.2		105	001		REF B,C	TYPE TEST	NONE SEE GENERAL NOTE 11
	Relative Humidity (%)	100		100	001		REF A,B,C D,E	TYPE TEST	NONE SEE GENERAL NOTE 11
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	5.6 E06		2.0 E07	001		REF A,F	TYPE TEST	NONE SEE GENERAL NOTE 11
	Aging	LATER		---	---		---	---	SEE NOTE (3)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A . REPORT NO. B0003, PROJECT NO. 600461, QUALIFICATION TYPE TEST REPORT, LIMITORQUE VALVE ACTUATORS FOR CLASS 1E SERVICE. OUTSIDE PRIMARY CONTAINMENT. TEST PERFORMED NOV. 13, 1974 TO JAN. 23, 1975. (TEST PROFILE IS FIGURE 1 OF THIS REPORT) B . REPORT NO. B0009,PROJECT NO.600426, QUALIFICATION TYPE	1. ALTHOUGH TESTED FOR 16 DAYS (REF A), THIS VALVE OPERATOR IS QUALIFIED FOR 30 DAYS BY SIMILARITY TO OTHER VALVE OPERATORS TESTED FOR 30 DAYS IN REFERENCES C AND D. ALSO, RADIATION IS THE ONLY ENVIRONMENTAL QUALIFICATION PARAMETER OF CONCERN IN THE LONG TERM AND THIS VALVE OPERATOR IS QUALIFIED FOR THE 30 DAY RADIATION DOSE BY TEST.

L200-09
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket: 50-331

EQUIPMENT QUALIFICATION REPORT

Sheet No. 191
Revision: 0
Date: 01/11/82

DOCUMENTATION REFERENCES:	NOTES:
TEST REPORT, LIMITORQUE DC VALVE ACTUATORS FOR NUCLEAR POWER STATIONS. TEST PERFORMED SEPT. 2, 1975 TO NOV. 3, 1975. (TEST PROFILE IS FIGURE 1 OF THIS REPORT) C . LIMITORQUE SHOP ORDER NO. 600376A, QUALIFICATION TEST OF LIMITORQUE VALVE OPERATORS IN A SIMULATED REACTOR CONTAINMENT POST-ACCIDENT STEAM ENVIRONMENT, SEPT. 1972. (TEST PROFILE IS FIGURE 3 OF THIS REPORT) D . PROJECT NO. 600456, NUCLEAR POWER STATION, QUALIFICATION TYPE TEST REPORT, LIMITORQUE VALVE ACTUATORS FOR PWR SERVICE. TEST PERFORMED JUNE 7, 1974 TO NOV. 22, 1974. (TEST PROFILE IS FIGURE 6 OF THIS REPORT) E . REPORT NO. B0027, PROJECT NO. 600508, LIMITORQUE VALVE ACTUATOR TEMPERATURE RELATED TO HIGH SUPERHEAT AMBIENT TEMPERATURES. DATED 10/18/78. (TEST PROFILE IS FIGURE 2 OF THIS REPORT) F . REPORT NO. B0058, LIMITORQUE VALVE ACTUATOR QUALIFICATION FOR NUCLEAR POWER STATION SERVICE. DATED 1/11/80.	2. REPRESENTATIVE VALVE OPERATORS WERE TESTED TO 250F IN REFERENCE A, TO 310F IN REFERENCE D, TO 340F IN REFERENCES B AND C, AND A SMALLER SIZE VALVE OPERATOR (SMB-00) SUCCESSFULLY PASSED A HIGH TEMPERATURE TEST OF 385F IN REFERENCE E. 3. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30 1982

L200-09
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L200-09-001

Sheet No. 192
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: L200-09-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-1905	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.2	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-5, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-152	Seismic	LATER	
Function/Service: CORE COOLING/RHR RECIRC INJECTION LOOP ISOLATION	Radiation (Rad)	5.6 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RHR VALVE ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M119/F6

Loc Dwg: M268/G7 Elec Scheme: E121/52 VDR ID: E11-F015B
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-2003	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.2	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-5, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-152	Seismic	LATER	
Function/Service: CORE COOLING/RHR RECIRC INJECTION LOOP ISOLATION	Radiation (Rad)	5.6 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RHR VALVE ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M120/G4

Loc Dwg: M248/D7 Elec Scheme: E121/52 VDR ID: E11-F015A
Remarks:

L200-10
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 193
Revision 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: MOTOR OPERATED VALVE Manufacturer: LIMITORQUE Model Number: SMB-00, AC-CLASS B	Operating Time	30 DAYS		SEE NOTE (1)	001		REF A,C,D	TYPE TEST/ ANALYSIS	NONE SEE GENERAL NOTE 11
	Temperature (°F)	277		SEE NOTE (2)	005		REF A,B, D,E	TYPE TEST	NONE SEE GENERAL NOTE 11
	Pressure (PSIG)	006		105	006		REF B,C	TYPE TEST	NONE SEE GENERAL NOTE 11
	Relative Humidity (%)	100		100	001		REF A,B,C D,E	TYPE TEST	NONE SEE GENERAL NOTE 11
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	1.3 E07		2.0 E07	006		REF A,F	TYPE TEST	NONE SEE GENERAL NOTE 11
	Aging	LATER		---	---		---	---	SEE NOTE (3)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A . REPORT NO. B0003, PROJECT NO. 600461, QUALIFICATION TYPE TEST REPORT, LIMITORQUE VALVE ACTUATORS FOR CLASS 1E SERVICE. OUTSIDE PRIMARY CONTAINMENT. TEST PERFORMED NOV. 13, 1974 TO JAN. 23, 1975. (TEST PROFILE IS FIGURE 1 OF THIS REPORT) B . REPORT NO. B0009,PROJECT NO.600426, QUALIFICATION TYPE	1. ALTHOUGH TESTED FOR 16 DAYS (REF A), THIS VALVE OPERATOR IS QUALIFIED FOR 30 DAYS BY SIMILARITY TO OTHER VALVE OPERATORS TESTED FOR 30 DAYS IN REFERENCES C AND D. ALSO, RADIATION IS THE ONLY ENVIRONMENTAL QUALIFICATION PARAMETER OF CONCERN IN THE LONG TERM AND THIS VALVE OPERATOR IS QUALIFIED FOR THE 30 DAY RADIATION DOSE BY TEST.

DOCUMENTATION REFERENCES:	NOTES:
TEST REPORT, LIMITORQUE DC VALVE ACTUATORS FOR NUCLEAR POWER STATIONS. TEST PERFORMED SEPT. 2, 1975 TO NOV. 3, 1975. (TEST PROFILE IS FIGURE 1 OF THIS REPORT) C . LIMITORQUE SHOP ORDER NO. 600376A, QUALIFICATION TEST OF LIMITORQUE VALVE OPERATORS IN A SIMULATED REACTOR CONTAINMENT POST-ACCIDENT STEAM ENVIRONMENT, SEPT. 1972. (TEST PROFILE IS FIGURE 3 OF THIS REPORT) D . PROJECT NO. 600456, NUCLEAR POWER STATION, QUALIFICATION TYPE TEST REPORT, LIMITORQUE VALVE ACTUATORS FOR PWR SERVICE. TEST PERFORMED JUNE 7, 1974 TO NOV. 22, 1974. (TEST PROFILE IS FIGURE 6 OF THIS REPORT) E . REPORT NO. B0027, PROJECT NO. 600508, LIMITORQUE VALVE ACTUATOR TEMPERATURE RELATED TO HIGH SUPERHEAT AMBIENT TEMPERATURES. DATED 10/18/78. (TEST PROFILE IS FIGURE 2 OF THIS REPORT) F . REPORT NO. B0058, LIMITORQUE VALVE ACTUATOR QUALIFICATION FOR NUCLEAR POWER STATION SERVICE. DATED 1/11/80.	2. REPRESENTATIVE VALVE OPERATORS WERE TESTED TO 250F IN REFERENCE A, TO 310F IN REFERENCE D, TO 340F IN REFERENCES B AND C, AND A SIMILAR SIZE VALVE OPERATOR (SMB-00) SUCCESSFULLY PASSED A HIGH TEMPERATURE TEST OF 385F IN REFERENCE E. 3. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30 1982

L200-10
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L200-10-001

Sheet No. 195
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: L200-10-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-1912	Temperature (°F)	104	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0.1	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-00, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137A	Seismic	LATER	
Function/Service: CORE COOLING/VALVE FOR RHR PUMP 1P-229B SUCTION LINE ISOLATION FROM RECIRC SYSTEM	Radiation (Rad)	5.9 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: NW CRNR RM			
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M119/C7

Loc Dwg: F7 Elec Scheme: E121/44 VDR ID: E11-F006B
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-1913	Temperature (°F)	104	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0.1	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-00, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137A	Seismic	LATER	
Function/Service: CORE COOLING/RHR PUMP 1P-22B SUCTION LINE ISOLATION FROM SUPPRESSION POOL	Radiation (Rad)	5.9 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: NW CRNR RM			
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M119/C7

Loc Dwg: E316/F7 Elec Scheme: E121/43 VDR ID: E11-F004B
Remarks:

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-1920	Temperature (°F)	104	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0.1	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-00, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137A	Seismic	LATER	
Function/Service: CORE COOLING/RHR PUMP 1P-229D SUCTION LINE ISOLATION FROM RECIRC SYSTEM	Radiation (Rad)	5.9 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: NW CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M119/C8
Loc Dwg: M245/F7 Elec Scheme: E121/44 VDR ID: E11-F006D
Remarks:

Equip ID: L200-10-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-1921	Temperature (°F)	104	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0.1	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-00, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137A	Seismic	LATER	
Function/Service: CORE COOLING/RHR PUMP 1P-229D SUCTION LINE ISOLATION FROM SUPPRESSION POOL	Radiation (Rad)	5.9 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: NW CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 732'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M119/C7
Loc Dwg: M245/F7 Elec Scheme: E121/43 VDR ID: E11-F004D
Remarks:

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: L200-10-005

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-1933	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.2	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-00, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137A	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /SUPPRESSION POOL SPRAY ISOLATION	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M119/F5

Loc Dwg: M266/G7 Elec Scheme: E121/59 VDR ID: E11-F027B
Remarks:

Equip ID: L200-10-006

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-1936	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.2	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-00, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137A	Seismic	LATER	
Function/Service: CONT AINMENT ISOLATIO /ISOLATION OF RHR DISCHARGE TO THE WASTE SURGE TANK	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 746'3"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M119/D6

Loc Dwg: M246/8C Elec Scheme: E122/7 VDR ID: E11-F040
Remarks:

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Facility: DUANE ARNOLD
Unit: 1
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EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-2011	Temperature (°F)	300	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0.1	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-00, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137A	Seismic	LATER	
Function/Service: CORE COOLING/RHR PUMP 1P-229A SUCTION LINE ISOLATION FROM RECIRC SYSTEM	Radiation (Rad)	5.9 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: SE CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M120/C3
Loc Dwg: M265/F2 Elec Scheme: E121/44 VDR ID: E11-F006A
Remarks:

Equip ID: L200-10-009

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-2012	Temperature (°F)	300	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0.1	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-00, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137A	Seismic	LATER	
Function/Service: CORE COOLING/RHR PUMP 1P-229A SUCTION LINE ISOLATION FROM SUPPRESSION POOL	Radiation (Rad)	5.9 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: SE CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M120/C3
Loc Dwg: E317/E2 Elec Scheme: E121/43 VDR ID: E11-F004A
Remarks:

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
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EQUIPMENT QUALIFICATION REPORT
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EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-2015	Temperature (°F)	300	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0.1	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-00, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137A	Seismic	LATER	
Function/Service: CORE COOLING/RHR PUMP 1P-229C SUCTION LINE ISOLATION FROM SUPPRESSION POOL	Radiation (Rad)	5.9 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: SE CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M120/C2

Loc Dwg: E317/E2 Elec Scheme: E121/43 VDR ID: E11-F004C
Remarks:

Equip ID: L200-10-011

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-2016	Temperature (°F)	300	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-00, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137A	Seismic	LATER	
Function/Service: CORE COOLING/RHR PUMP 1P-229C SUCTION LINE ISOLATION FROM RECIRC SYSTEM	Radiation (Rad)	5.9 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: SE CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M120/C2

Loc Dwg: M317/E2 Elec Scheme: E121/44 VDR ID: E11-F006
Remarks:

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CORE SPRAY SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-2120	Temperature (°F)	104	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0.1	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-00, AC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137A	Seismic	LATER	
Function/Service: CORE COOLING/ ISOLATION SPRAY PUMP SUCTION FROM THE SUPPRESSION POOL	Radiation (Rad)	5.9 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: NW CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 08 P&ID: M121/B5

Loc Dwg: E316/D8 Elec Scheme: E121/4 VDR ID: E21-F001B
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System:	Operating Time		
Plant I.D. Number:	Temperature (°F)		
Component:	Pressure (PSIG)		
Manufacturer:	Relative Humidity (%)		
Model Number:	Chemical Spray		
Purchase Order Number:	Seismic		
Function/Service:	Radiation (Rad)		
Accuracy: Spec: Demo:	Aging		
Location:	Submergence		
Floor Elevation:			
Flood Level Elevation: Above Flood Level: Yes: No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM

Walkdown: Environment: System: P&ID:

Loc Dwg: Elec Scheme: VDR ID:
Remarks:

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EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: MOTOR OPERATED VALVE Manufacturer: LIMITORQUE Model Number: SMB-00,DC-CLASS B	Operating Time	1 HR		SEE NOTE (1)	002		REF A,B, C,D	TYPE TEST/ ANAL	NONE SEE GENERAL NOTE 11
	Temperature (°F)	300		SEE NOTE (2)	004		REF A,B, C,D,E	TYPE TEST/ ANAL	NONE SEE GENERAL NOTE 11
	Pressure (PSIG)	1.8		105	004		REF B,C	TYPE TEST/ ANAL	NONE SEE GENERAL NOTE 11
	Relative Humidity (%)	100		100	002		REF A,B, C,D,E	TYPE TEST/ ANAL	NONE SEE GENERAL NOTE 11
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	3.2 E06		2.0 E07	004		REF A,F	TYPE TEST/ ANAL	NONE SEE GENERAL NOTE 11
	Aging	LATER		---	---		---	---	SEE NOTE (3)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A . TEST REPORT, LIMITORQUE VALVE ACTUATORS FOR CLASS 1E SERVICE. OUTSIDE PRIMARY CONTAINMENT. TEST PERFORMED NOV. 13, 1974 TO JAN. 23, 1975. (TEST PROFILE IS FIGURE 1 OF THIS REPORT) B . REPORT NO. B0009,PROJECT NO.600426, QUALIFICATION TYPE TEST REPORT, LIMITORQUE DC VALVE ACTUATORS FOR NUCLEAR	1. EXCEPT FOR THE MOTOR INSULATION, THIS VALVE OPERATOR IS SIMILAR IN CONSTRUCTION AND PRINCIPLE OF OPERATION TO THE DC MOTOR VALVE OPERATORS TESTED IN REFERENCE B FOR 25 HOURS. THE MOTOR INSULATION IS SIMILAR TO THE CLASS B INSULATION OF THE AC MOTOR VALVE OPERATOR TESTED IN REFERENCE A FOR 16 DAYS. BY TEST AND SIMILARITY ANALYSIS,

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DOCUMENTATION REFERENCES:	NOTES:
POWER STATIONS. TEST PERFORMED SEPT. 2, 1975 TO NOV. 3, 1975. (TEST PROFILE IS FIGURE 1 OF THIS REPORT) C . LIMITORQUE SHOP ORDER NO. G00376A, QUALIFICATION TEST OF LIMITORQUE VALVE OPERATORS IN A SIMULATED REACTOR CONTAINMENT POST-ACCIDENT STEAM ENVIRONMENT, SEPT. 1972. (TEST PROFILE IS FIGURE 3 OF THIS REPORT) D . PROJECT NO. G00456, NUCLEAR POWER STATION, QUALIFICATION PROJECT NO. 600456, NUCLEAR POWER STATION, QUALIFICATION TYPE TEST REPORT, LIMITORQUE VALVE ACTUATORS FOR PWR SERVICE. TEST PERFORMED JUNE 7, 1974 TO NOV. 22, 1974. (TEST PROFILE IS FIGURE 6 OF THIS REPORT) E . REPORT NO. B0027, PROJECT NO. 600508, LIMITORQUE VALVE ACTUATOR TEMPERATURE RELATED TO HIGH SUPERHEAT AMBIENT TEMPERATURES. DATED 10/18/78 (TEST PROFILE IS FIGURE 2 DF THIS REPORT) F . REPORT NO. B0058, LIMITORQUE VALVE ACTUATOR QUALIFICATION FOR NUCLEAR POWER STATION SERVICE. DATED 1/11/80.	THIS VALVE OPERATOR IS QUALIFIED FOR AT LEAST 25 HOURS. 2. REPRESENTATIVE VALVE OPERATORS WERE TESTED TO 250F IN REFERENCE A, TO 310F IN REFERENCE D, TO 340F IN REFERENCES B AND C, AND A SIMILAR SIZE VALVE OPERATOR (SMB-00) SUCCESSFULLY PASSED A HIGH TEMPERATURE TEST OF 385F IN REFERENCE E. 3. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30 1982

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EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: HIGH PRESSURE COOLANT INJECTION	Operating Time	1 HOUR	
Plant I.D. Number: MO-2321	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.2	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-00,DC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-151	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /HPCI SUPPRESSION POOL SUCTION ISOLATION	Radiation (Rad)	2.6 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X		X	X	

Walkdown: Environment: HARSH System: 06 P&ID: M123/A7

Loc Dwg: E317/D4 Elec Scheme: E121/23 VDR ID: E41-F042
Remarks:

Equip ID: L200-13-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: MO-2401	Temperature (°F)	300	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.8	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-00,DC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-133	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /RCIC TURBINE MAIN STEAM LINE ISOLATION	Radiation (Rad)	3.2 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X			X		

Walkdown: Environment: HARSH System: 03 P&ID: M124/H6

Loc Dwg: E328/E4 Elec Scheme: E121/30 VDR ID: E51-F008
Remarks:

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EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: MO-2512	Temperature (°F)	300	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.8	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-00,DC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-133	Seismic	LATER	
Function/Service: CORE COOLING / RCIC PUMP DISCHARGE ISOLATION	Radiation (Rad)	3.2 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X					

Walkdown: Environment: HARSH System: 03 P&ID: M125/D5

Loc Dwg: E328/E3 Elec Scheme: E121/40 VDR ID: E51-F013
Remarks:

Equip ID: L200-13-006

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: MO-2701	Temperature (°F)	214	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	2.1	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-00,DC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-134	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /RWCU LINE OUTBOARD ISOLATION	Radiation (Rad)	1.1 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RWCU HEAT EXCH ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: 786'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X				X	

Walkdown: Environment: HARSH System: 03 P&ID: M127/F7

Loc Dwg: E321/E6 Elec Scheme: E122/5 VDR ID: G31-F004
Remarks:

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Facility: DUANE ARNOLD
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Equip ID:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: MO-4424	Temperature (°F)	300	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.8	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-00,DC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-133	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM LINE CONDENSATE DRAIN ISOLATION	Radiation (Rad)	3.2 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X					

Walkdown: Environment: HARSH System: 03 P&ID: M114/B3

Loc Dwg: E328/E4 Elec Scheme: E122/5 VDR ID: B21-F019
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System:	Operating Time		
Plant I.D. Number:	Temperature (°F)		
Component:	Pressure (PSIG)		
Manufacturer:	Relative Humidity (%)		
Model Number:	Chemical Spray		
Purchase Order Number:	Seismic		
Function/Service:	Radiation (Rad)		
Accuracy: Spec: Demo:	Aging		
Location:	Submergence		
Floor Elevation:			
Flood Level Elevation: Above Flood Level: Yes: No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM

Walkdown: Environment: System: P&ID:

Loc Dwg: Elec Scheme: VDR ID:
Remarks:

L200-14
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 206
Revision 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: MOTOR OPERATED VALVE Manufacturer: LIMITORQUE Model Number: SMB-000, DC CLASS B	Operating Time	30 DAYS		SEE NOTE (1)	002		REF A,B, C,D	TYPE TEST/ ANAL	NONE SEE GENERAL NOTE 11
	Temperature (°F)	300		SEE NOTE (2)	001		REF A,B, C,D,E	TYPE TEST/ ANAL	NONE SEE GENERAL NOTE 11
	Pressure (PSIG)	1.2		105	002		REF B,C	TYPE TEST/ ANAL	NONE SEE GENERAL NOTE 11
	Relative Humidity (%)	100		100	001		REF A,B, C,D,E	TYPE TEST/ ANAL	NONE SEE GENERAL NOTE 11
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	1.3 E07		2.0 E07	002		REF A,F	TYPE TEST/ ANAL	NONE SEE GENERAL NOTE 11
	Aging	LATER		---	---		---	---	SEE NOTE (3)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A . TEST REPORT, LIMITORQUE VALVE ACTUATORS FOR CLASS 1E SERVICE. OUTSIDE PRIMARY CONTAINMENT. TEST PERFORMED NOV. 13, 1974 TO JAN. 23, 1975. (TEST PROFILE IS FIGURE 1 OF THIS REPORT) B . REPORT NO. B0009,PROJECT NO.600426, QUALIFICATION TYPE TEST REPORT, LIMITORQUE DC VALVE ACTUATORS FOR NUCLEAR	1. EXCEPT FOR THE MOTOR INSULATION, THIS VALVE OPERATOR IS SIMILAR IN CONSTRUCTION AND PRINCIPLE OF OPERATION TO THE DC MOTOR VALVE OPERATORS TESTED IN REFERENCE B FOR 25 HOURS. THE MOTOR INSULATION IS SIMILAR TO THE CLASS B INSULATION OF THE AC MOTOR VALVE OPERATOR TESTED IN REFERENCE A FOR 16 DAYS. BY TEST AND SIMILARITY ANALYSIS,

DOCUMENTATION REFERENCES:	NOTES:
POWER STATIONS. TEST PERFORMED SEPT. 2, 1975 TO NOV. 3, 1975. (TEST PROFILE IS FIGURE 1 OF THIS REPORT) C . LIMITORQUE SHOP ORDER NO. G00376A, QUALIFICATION TEST OF LIMITORQUE VALVE OPERATORS IN A SIMULATED REACTOR CONTAINMENT POST-ACCIDENT STEAM ENVIRONMENT, SEPT. 1972. (TEST PROFILE IS FIGURE 3 OF THIS REPORT) D . PROJECT NO. G00456, NUCLEAR POWER STATION, QUALIFICATION PROJECT NO. 600456, NUCLEAR POWER STATION, QUALIFICATION TYPE TEST REPORT, LIMITORQUE VALVE ACTUATORS FOR PWR SERVICE. TEST PERFORMED JUNE 7, 1974 TO NOV. 22, 1974. (TEST PROFILE IS FIGURE 6 OF THIS REPORT) E . REPORT NO. B0027, PROJECT NO. 600508, LIMITORQUE VALVE ACTUATOR TEMPERATURE RELATED TO HIGH SUPERHEAT AMBIENT TEMPERATURES. DATED 10/18/78. (TEST PROFILE IS FIGURE 2 OF THIS REPORT) F . REPORT NO. B0058, LIMITORQUE VALVE ACTUATOR QUALIFICATION FOR NUCLEAR POWER STATION SERVICE. DATED 1/11/80.	THIS VALVE OPERATOR IS QUALIFIED FOR AT LEAST 25 HOURS. BECAUSE RADIATION IS THE ONLY ENVIRONMENTAL QUALIFICATION PARAMETER OF CONCERN IN THE LONG TERN AND BECAUSE THE VALVE OPERATOR IS QUALIFIED FOR THE 30 DAY RADIATION DOSE, THE VALVE OPERATOR IS QUALIFIED FOR THE 30 DAYS BY EXTRAPOLATION ANALYSIS 2. REPRESENTATIVE VALVE OPERATORS WERE TESTED TO 250F IN REFERENCE A, TO 310F IN REFERENCE D, TO 340F IN REFERENCES B ANC C, AND A SMALLER SIZE VALVE OPERATOR (SMB-00) SUCCESSFULLY PASSED A HIGH TEMPERATURE TEST OF 385F IN REFERENCE E. 3. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30 1982

L200-14
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L200-14-001

Sheet No. 208
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: MO-2517	Temperature (°F)	300	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	0.1	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-000, DC CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137B	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /RCIC PUMP SUCTION ISOLATION FROM SUPPRESSION POOL	Radiation (Rad)	9.5 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RCIC ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X					

Walkdown: Environment: HARSH System: 03 P&ID: M125/F4

Loc Dwg: E317/C5 Elec Scheme: E121/33 VDR ID: E51-F029
Remarks:

Equip ID: L200-14-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-1937	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	1.2	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-000, DC CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137B	Seismic	LATER	
Function/Service: CORE COOLING/RHR DISCHARGE TO THE WASTE SURGE TANK ISOLATION	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 746'3"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M119/D6

Loc Dwg: M246/8C Elec Scheme: E122/15 VDR ID: E11-F049
Remarks:

L200-16
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 209
Revision 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: MOTOR OPERATED VALVE Manufacturer: LIMITORQUE Model Number: SMB-2, DC-CLASS H	Operating Time	1 HR		25 HRS	003		REF A	TYPE TEST	NONE SEE GENERAL NOTE 11
	Temperature (°F)	SEE GENERAL NOTE 6		SEE NOTE (1)	003		REF A,B, C,D,E	TYPE TEST	NONE SEE GENERAL NOTE 11
	Pressure (PSIG)	SEE GENERAL NOTE 6		105	003		REF B,C	TYPE TEST	NONE SEE GENERAL NOTE 11
	Relative Humidity (%)	100		100	003		REF A,B,C D,E	TYPE TEST	NONE SEE GENERAL NOTE 11
	Chemical Spray	DEMIN WATER		SEE NOTE (2)	003		REF D	TYPE TEST	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	6.2 E06		1.0 E07	003		REF B,F	TYPE TEST	NONE SEE GENERAL NOTE 11
	Aging	LATER		---	---		---	---	SEE NOTE (3)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A . REPORT NO. B0003, PROJECT NO. 600461, QUALIFICATION TYPE TEST REPORT, LIMITORQUE VALVE ACTUATORS FOR CLASS 1E SERVICE. OUTSIDE PRIMARY CONTAINMENT. TEST PERFORMED NOV. 13, 1974 TO JAN. 23, 1975. (TEST PROFILE IS FIGURE 1 OF THIS REPORT) B . REPORT NO. B0009, PROJECT NO. 600426, QUALIFICATION TYPE	1. REPRESENTATIVE VALVE OPERATORS WERE TESTED TO 250F IN REFERENCE A, TO 310F IN REFERENCE D, TO 340F IN REFERENCES B AND C, AND A SMALLER SIZE VALVE OPERATOR (SMB-00) SUCCESSFULLY PASSED A HIGH TEMPERATURE TEST OF 385F IN REFERENCE E. 2. REPRESENTATIVE VALVE OPERATORS WERE SUBJECTED TO SPRAY

DOCUMENTATION REFERENCES:	NOTES:
TEST REPORT, LIMITORQUE DC VALVE ACTUATORS FOR NUCLEAR POWER STATIONS. TEST PERFORMED SEPT. 2, 1975 TO NOV. 3, 1975. (TEST PROFILE IS FIGURE 1 OF THIS REPORT) C . LIMITORQUE SHOP ORDER NO. 600376A, QUALIFICATION TEST OF LIMITORQUE VALVE OPERATORS IN A SIMULATED REACTOR CONTAINMENT POST-ACCIDENT STEAM ENVIRONMENT, SEPT. 1972. (TEST PROFILE IS FIGURE 3 OF THIS REPORT) D . PROJ NO.600456 ,NUCLEAR POWER STATION,QUAL TYPE PROJECT NO. 600456, NUCLEAR POWER STATION, QUALIFICATION TYPE TEST REPORT, LIMITORQUE VALVE ACTUATORS FOR PWR SERVICE. TEST PERFORMED JUNE 7, 1974 TO NOV. 22, 1974. (TEST PROFILE IS FIGURE 6 OF THIS REPORT) E . REPORT NO. B0027, PROJECT NO. 600508, LIMITORQUE VALVE ACTUATOR TEMPERATURE RELATED TO HIGH SUPERHEAT AMBIENT TEMPERATURES. DATED 10/18/78. (TEST PROFILE IS FIGURE 2 OF THIS REPORT) F . REPORT NO. B0058, LIMITORQUE VALVE ACTUATOR QUALIFICATION FOR NUCLEAR POWER STATION SERVICE. DATED 1/11/80.	CHEMISTRY DESCRIBED IN IEEE STANDARD 382-1972 TABLE 1 WHICH IS MORE SEVERE THAN DEMIN WATER 3. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30 1982

L200-16
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L200-16-003

Sheet No. 211
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: L200-16-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: MO-4627	Temperature (°F)	SEE GENERAL NOTE 6	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-2, DC-CLASS H	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: APED	Seismic	LATER	
B31-F031A Function/Service: CORE COOLING/ RECIRCULATION LOOP ISOLATION	Radiation (Rad)	4.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X					

Walkdown: Environment: HARSH System: 03 P&ID: M116/C2

Loc Dwg: E331/F4 Elec Scheme: E120/3 VDR ID: B31-F031A

Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: PRIMARY CONTAINMENT ISOL AND NSSS SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: MO-4628	Temperature (°F)	SEE GENERAL NOTE 6	
Component: MOTOR OPERATED VALVE	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-2, DC-CLASS H	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: APED	Seismic	LATER	
B31-F031B Function/Service: CORE COOLING/ RECIRCULATION LOOP ISOLATION	Radiation (Rad)	4.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 734'			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X					

Walkdown: Environment: HARSH System: 03 P&ID: M116/CB

Loc Dwg: E331/05 Elec Scheme: E120/3 VDR ID: B31-F031B

Remarks:

L200-17
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 212
Revision 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: MOTOR OPERATED VALVE WITH MOTOR BRAKE Manufacturer: LIMITORQUE Model Number: SMB-2,AC-CLASS H	Operating Time	30 DAYS		30 DAYS	001		REF C,D	TYPE TEST	NONE SEE GENERAL NOTE 11
	Temperature (°F)	SEE GENERAL NOTE 6		SEE NOTE (1)	001		REF A,B, C,D,E	TYPE TEST	NONE SEE GENERAL NOTE 11
	Pressure (PSIG)	SEE GENERAL NOTE 6		105	001		REF B,C	TYPE TEST	NONE SEE GENERAL NOTE 11
	Relative Humidity (%)	100		100	001		REF A,B,C D,E	TYPE TEST	NONE SEE GENERAL NOTE 11
	Chemical Spray	DEMIN WATER		SEE NOTE (2)	001		REF D	TYPE TEST	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	4.3 E07		2.0 E08	001		REF C,D,F	TYPE TEST	NONE SEE GENERAL NOTE 11
	Aging	LATER		---	---		---	---	SEE NOTE (3)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A . REPORT NO. B0003, PROJECT NO. 600461, QUALIFICATION TYPE TEST REPORT, LIMITORQUE VALVE ACTUATORS FOR CLASS 1E SERVICE. OUTSIDE PRIMARY CONTAINMENT. TEST PERFORMED NOV. 13, 1974 TO JAN. 23, 1975. (TEST PROFILE IS FIGURE 1 OF THIS REPORT) B . REPORT NO. B0009,PROJECT NO.600426, QUALIFICATION TYPE	1. REPRESENTATIVE VALVE OPERATORS WERE TESTED TO 250F IN REFERENCE A, TO 310F IN REFERENCE D, TO 340F IN REFERENCES B AND C, AND A SMALLER SIZE VALVE OPERATOR (SMB-00) SUCCESSFULLY PASSED A HIGH TEMPERATURE TEST OF 385F IN REFERENCE E. 2. REPRESENTATIVE VALVE OPERATORS WERE SUBJECTED TO SPRAY

L200-17
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket: 50-331

EQUIPMENT QUALIFICATION REPORT

Sheet No. 213
Revision: 0
Date: 01/11/82

DOCUMENTATION REFERENCES:	NOTES:
TEST REPORT, LIMITORQUE DC VALVE ACTUATORS FOR NUCLEAR POWER STATIONS. TEST PERFORMED SEPT. 2, 1975 TO NOV. 3, 1975. (TEST PROFILE IS FIGURE 1 OF THIS REPORT) C . LIMITORQUE SHOP ORDER NO. 600376A, QUALIFICATION TEST OF LIMITORQUE VALVE OPERATORS IN A SIMULATED REACTOR CONTAINMENT POST-ACCIDENT STEAM ENVIRONMENT, SEPT. 1972. (TEST PROFILE IS FIGURE 3 OF THIS REPORT) D . PROJECT NO. 600456, NUCLEAR POWER STATION, QUALIFICATION TYPE TEST REPORT, LIMITORQUE VALVE ACTUATORS FOR PWR SERVICE. TEST PERFORMED JUNE 7, 1974 TO NOV. 22, 1974. (TEST PROFILE IS FIGURE 6 OF THIS REPORT) E . REPORT NO. B0027, PROJECT NO. 600508, LIMITORQUE VALVE ACTUATOR TEMPERATURE RELATED TO HIGH SUPERHEAT AMBIENT TEMPERATURES. DATED 10/18/78. (TEST PROFILE IS FIGURE 2 OF THIS REPORT) F . REPORT NO. B0058, LIMITORQUE VALVE ACTUATOR QUALIFICATION FOR NUCLEAR POWER STATION SERVICE. DATED 1/11/80.	CHEMISTRY DESCRIBED IN IEEE STANDARD 382-1972 TABLE 1 WHICH IS MORE SEVERE THAN DEMIN WATER 3. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

L200-17
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L200-17-001

Sheet No. 214
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-1908	Temperature (°F)	SEE GENERAL NOTE 6	
Component: MOTOR OPERATED VALVE WITH MOTOR BRAKE	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-2,AC-CLASS H	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: M-152	Seismic	LATER	
Function/Service: CORE COOLING/RHR PUMP SUCTION FROM RECIRC SYSTEM ISOLATION	Radiation (Rad)	4.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M119/E8

Loc Dwg: M331/D6 Elec Scheme: E122/56 VDR ID: E11-F009

Remarks:

Equip ID: L200-17-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-1903	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE WITH MOTOR BRAKE	Pressure (PSIG)	1.2	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-2,AC-CLASS H	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-151	Seismic	LATER	
Function/Service: CORE COOLING/ CONTAINMENT SPRAY ISOLATION	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 746'3"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M119/G6

Loc Dwg: M266/H8 Elec Scheme: E121/60 VDR ID: E11-F016B

Remarks:

L200-18
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 215
Revision 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: MOTOR OPERATED VALVE WITH MOTOR BRAKE Manufacturer: LIMITORQUE Model Number: SMB-3, DC-CLASS B	Operating Time	1 HOUR		SEE NOTE (1)	001		REF A,B, C,D	TYPE TEST/ ANAL	SEE GENERAL NOTE 11
	Temperature (°F)	300		SEE NOTE (2)	001		REF A,B, C,D,E	TYPE TEST/ ANAL	SEE GENERAL NOTE 11
	Pressure (PSIG)	1.8		105	001		REF B,C	TYPE TEST/ ANAL	SEE GENERAL NOTE 11
	Relative Humidity (%)	100		100	001		REF A,B, C,D,E	TYPE TEST/ ANAL	SEE GENERAL NOTE 11
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	3.2 E06		1.0 E07	001		REF A,F	TYPE TEST/ ANAL	SEE GENERAL NOTE 11
	Aging	LATER		---	---		---	---	SEE NOTE (3)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A . TEST REPORT, LIMITORQUE VALVE ACTUATORS FOR CLASS 1E SERVICE. OUTSIDE PRIMARY CONTAINMENT. TEST PERFORMED NOV. 13, 1974 TO JAN. 23, 1975. (TEST PROFILE IS FIGURE 1 OF THIS REPORT) B . REPORT NO. B0009,PROJECT NO.600426, QUALIFICATION TYPE TEST REPORT, LIMITORQUE DC VALVE ACTUATORS FOR NUCLEAR	1. EXCEPT FOR THE MOTOR INSULATION, THIS VALVE OPERATOR IS SIMILAR IN CONSTRUCTION AND PRINCIPLE OF OPERATION TO THE DC MOTOR VALVE OPERATORS TESTED IN REFERENCE B FOR 25 HOURS. THE MOTOR INSULATION IS SIMILAR TO THE CLASS B INSULATION OF THE AC MOTOR VALVE OPERATOR TESTED IN REFERENCE A FOR 16 DAYS. BY TEST AND SIMILARITY ANALYSIS,

DOCUMENTATION REFERENCES:	NOTES:
POWER STATIONS. TEST PERFORMED SEPT. 2, 1975 TO NOV. 3, 1975. (TEST PROFILE IS FIGURE 1 OF THIS REPORT) C . LIMITORQUE SHOP ORDER NO. G00376A, QUALIFICATION TEST OF LIMITORQUE VALVE OPERATORS IN A SIMULATED REACTOR CONTAINMENT POST-ACCIDENT STEAM ENVIRONMENT, SEPT. 1972. (TEST PROFILE IS FIGURE 3 OF THIS REPORT) D . PROJECT NO. G00456, NUCLEAR POWER STATION, QUALIFICATION PROJECT NO. 600456, NUCLEAR POWER STATION, QUALIFICATION TYPE TEST REPORT, LIMITORQUE VALVE ACTUATORS FOR PWR SERVICE. TEST PERFORMED JUNE 7, 1974 TO NOV. 22, 1974. (TEST PROFILE IS FIGURE 6 OF THIS REPORT) E . REPORT NO. B0027, PROJECT NO. 600508, LIMITORQUE VALVE ACTUATOR TEMPERATURE RELATED TO HIGH SUPERHEAT AMBIENT TEMPERATURES. DATED 10/18/78. (TEST PROFILE IS FIGURE 2 OF THIS REPORT) F . REPORT NO. B0058, LIMITORQUE VALVE ACTUATOR QUALIFICATION FOR NUCLEAR POWER STATION SERVICE. DATED 1/11/80.	THIS VALVE OPERATOR IS QUALIFIED FOR AT LEAST 25 HOURS. 2. REPRESENTATIVE VALVE OPERATORS WERE TESTED TO 250F IN REFERENCE A, TO 310F IN REFERENCE D, TO 340F IN REFERENCES B AND C, AND A SMALLER SIZE VALVE OPERATOR (SMB-00) SUCCESSFULLY PASSED A HIGH TEMPERATURE TEST OF 385F IN REFERENCE E. 3. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

L200-18
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L200-18-001

Sheet No. 217
Revision: O
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: HIGH PRESSURE COOLANT INJECTION	Operating Time	1 HOUR	
Plant I.D. Number: MO-2239	Temperature (°F)	300	
Component: MOTOR OPERATED VALVE WITH MOTOR BRAKE	Pressure (PSIG)	1.8	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-3, DC-CLASS B	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-152	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /HPCI TURBINE STEAM SUPPLY OUTBOARD ISOLATION	Radiation (Rad)	3.2 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 06 P&ID: M122/G5

Loc Dwg: E328/D4 Elec Scheme: E121/15 VDR ID: E41-F003
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System:	Operating Time		
Plant I.D. Number:	Temperature (°F)		
Component:	Pressure (PSIG)		
Manufacturer:	Relative Humidity (%)		
Model Number:	Chemical Spray		
Purchase Order Number:	Seismic		
Function/Service:	Radiation (Rad)		
Accuracy: Spec: Demo:	Aging		
Location:	Submergence		
Floor Elevation:			
Flood Level Elevation: Above Flood Level: Yes: No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM

Walkdown: Environment: System: P&ID:

Loc Dwg: Elec Scheme: VDR ID:
Remarks:

L200-19
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 218
Revision 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: MOTOR OPERATED VALVE WITH MOTOR BRAKE Manufacturer: LIMITORQUE Model Number: SMB-2,DC-CLASS H	Operating Time	30 DAYS		SEE NOTE (1)	001		REF B,C,D	TYPE TEST/ ANALYSIS	SEE GENERAL NOTE 11
	Temperature (°F)	277		SEE NOTE (2)	001		REF A,B, C,D,E	TYPE TEST	SEE GENERAL NOTE 11
	Pressure (PSIG)	1.2		105	001		REF B,C	TYPE TEST	SEE GENERAL NOTE 11
	Relative Humidity (%)	100		100	001		REF A,B,C D,E	TYPE TEST	SEE GENERAL NOTE 11
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	5.6 E06		1.0 E07	001		REF B,F	TYPE TEST	SEE GENERAL NOTE 11
	Aging	LATER		---	---		---	---	SEE NOTE (3)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A . REPORT NO. B0003, PROJECT NO. 600461, QUALIFICATION TYPE TEST REPORT, LIMITORQUE VALVE ACTUATORS FOR CLASS 1E SERVICE. OUTSIDE PRIMARY CONTAINMENT. TEST PERFORMED NOV. 13, 1974 TO JAN. 23, 1975. (TEST PROFILE IS FIGURE 1 OF THIS REPORT) B . REPORT NO. B0009,PROJECT NO.600426, QUALIFICATION TYPE	1. ALTHOUGH TESTED FOR 25 HOURS (REF B), THIS VALVE OPERATOR IS QUALIFIED FOR 30 DAYS BY SIMILARITY TO OTHER VALVE OPERATORS TESTED FOR 30 DAYS IN REFERENCES C AND D. ALSO, RADIATION IS THE ONLY ENVIRONMENTAL QUALIFICATION PARAMETER OF CONCERN IN THE LONG TERM AND THIS VALVE OPERATOR IS QUALIFIED FOR THE 30 DAY RADIATION DOSE BY TEST.

DOCUMENTATION REFERENCES:	NOTES:
TEST REPORT, LIMITORQUE DC VALVE ACTUATORS FOR NUCLEAR POWER STATIONS. TEST PERFORMED SEPT. 2, 1975 TO NOV. 3, 1975. (TEST PROFILE IS FIGURE 1 OF THIS REPORT) C . LIMITORQUE SHOP ORDER NO. 600376A, QUALIFICATION TEST OF LIMITORQUE VALVE OPERATORS IN A SIMULATED REACTOR CONTAINMENT POST-ACCIDENT STEAM ENVIRONMENT, SEPT. 1972. (TEST PROFILE IS FIGURE 3 OF THIS REPORT) D . PROJECT NO. 600456, NUCLEAR POWER STATION, QUALIFICATION TYPE TEST REPORT, LIMITORQUE VALVE ACTUATORS FOR PWR SERVICE. TEST PERFORMED JUNE 7, 1974 TO NOV. 22, 1974. (TEST PROFILE IS FIGURE 6 OF THIS REPORT) E . REPORT NO. B0027, PROJECT NO. 600508, LIMITORQUE VALVE ACTUATOR TEMPERATURE RELATED TO HIGH SUPERHEAT AMBIENT TEMPERATURES. DATED 10/18/78. (TEST PROFILE IS FIGURE 2 OF THIS REPORT) F . REPORT NO. B0058, LIMITORQUE VALVE ACTUATOR QUALIFICATION FOR NUCLEAR POWER STATION SERVICE. DATED 1/11/80.	2. REPRESENTATIVE VALVE OPERATORS WERE TESTED TO 250F IN REFERENCE A, TO 310F IN REFERENCE D, TO 340F IN REFERENCES B AND C, AND A SMALLER SIZE VALVE OPERATOR (SMB-00) REFERENCE E. 3. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30 1982

L200-19
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L200-19-001

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: MO-1909	Temperature (°F)	277	
Component: MOTOR OPERATED VALVE WITH MOTOR BRAKE	Pressure (PSIG)	1.2	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: SMB-2,DC-CLASS H	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-152	Seismic	LATER	
Function/Service: CORE COOLING/RHR PUMP SUCTION FROM RECIRC SYSTEM ISOLATION	Radiation (Rad)	5.6 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RHR VALVE ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M119/E8

Loc Dwg: M248/D7 Elec Scheme: E122/4 VDR ID: E11-F008

Remarks:

Equip ID:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System:	Operating Time		
Plant I.D. Number:	Temperature (°F)		
Component:	Pressure (PSIG)		
Manufacturer:	Relative Humidity (%)		
Model Number:	Chemical Spray		
Purchase Order Number:	Seismic		
Function/Service:	Radiation (Rad)		
Accuracy: Spec: Demo:	Aging		
Location:	Submergence		
Floor Elevation:			
Flood Level Elevation: Above Flood Level: Yes: No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM

Walkdown: Environment: System: P&ID:

Loc Dwg: Elec Scheme: VDR ID:

Remarks:

L200-99
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 221
Revision 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: POSITION TRANSMITER Manufacturer: LIMITORQUE Model Number: NONE	Operating Time	30 DAYS		30 DAYS	001		---	ANALYSIS	GEN NOTE 12
	Temperature (°F)	300		SEE NOTE (1)	002		---	ANALYSIS	GEN NOTE 12
	Pressure (PSIG)	1.5		SEE NOTE (1)	002		---	ANALYSIS	GEN NOTE 12
	Relative Humidity (%)	100		SEE NOTE (1)	001		---	ANALYSIS	GEN NOTE 12
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	8.1 E06		SEE NOTE (1)	002		REF. (A)	ANALYSIS	GEN NOTE 12
	Aging	LATER		---	---		---	---	SEE NOTE (2)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. TELECON S PATEL OF BECHTEL POWER CORPORATION TO J B DRAB OF LIMITORQUE CORPORATION AUGUST 27, 1980.	1. MANUFACTURER INFORMATION INDICATES THAT THE POSITION TRANSMITTERS ARE MADE UP COPPER WIRE ON CERAMIC TUBE AND ALUMINUM BAR AND FOOT. NONE OF THESE MATERIALS ARE 2. ALTHOUGH TESTED FOR 25 HOURS (REF B), THIS VALVE OPERATOR IS AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982 AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982.

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L200-99-001

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SERVICE WATER SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: ZT-1947	Temperature (°F)	104	
Component: POSITION TRANSMITER	Pressure (PSIG)	0	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: NONE	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-144A	Seismic	LATER	
Function/Service: SUPPORT/TRANSMIT VALVE POSITION SIGNAL	Radiation (Rad)	5.9 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: NW CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 747'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 13 P&ID: M113/C7

Loc Dwg: M401-5 Elec Scheme: E121158A VDR ID:
Remarks:

Equip ID: L200-99-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SERVICE WATER SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: ZT-2046	Temperature (°F)	300	
Component: POSITION TRANSMITER	Pressure (PSIG)	1.5	
Manufacturer: LIMITORQUE	Relative Humidity (%)	100	
Model Number: NONE	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-144A	Seismic	LATER	
Function/Service: SUPPORT/TRANSMIT VALVE POSITION SWITCH	Radiation (Rad)	8.1 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: HPCI ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 731'9"			
Flood Level Elevation: 717'9" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 13 P&ID: M113

Loc Dwg: M265/D2 Elec Scheme: E121158 VDR ID:
Remarks: W/MO2046

L280-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

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Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: FAN MOTOR Manufacturer: LOUIS-ALLIS COMPANY Model Number: C064B	Operating Time	30 DAYS		SEE GEN NOTE 4	002		REF. (A)	---	NONE
	Temperature (°F)	104		SEE GEN NOTE 7	002		REF. (A)	---	NONE
	Pressure (PSIG)	0		SEE GEN NOTE 7	002		REF. (A)	---	NONE
	Relative Humidity (%)	100		SEE GEN NOTE 7	002		REF. (A)	---	NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	1.0 E06		1.0 E06	002		REF. (A)	---	GEN NOTE 12
	Aging	LATER		---	---		---	---	SEE NOTE (1)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. TELECON T. BRENDLE, BECHTEL TO T. GOWMIN, SERVICE ENGINEER FOR LOUIS ALLIS, JANUARY 8, 1982	1. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

L280-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: L280-01-002

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EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: STANDBY GAS TREATMENT SYSTEM Plant I.D. Number: 1V-EF-15A Component: FAN MOTOR Manufacturer: LOUIS-ALLIS COMPANY Model Number: C064B Purchase Order Number: M-81 Function/Service: Accuracy: Spec: Demo: Location: SGT ROOM Floor Elevation: 786'0"	Operating Time	30 DAYS	RAD DOSE ACCOUNTS FOR DISTANCE FROM MAJOR SOURCE
	Temperature (°F)	104	
	Pressure (PSIG)	0	
	Relative Humidity (%)	100	
	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
	Seismic	LATER	
	Radiation (Rad)	1.0 E06	
	Aging	LATER	
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 10 P&ID: M158/G2

Loc Dwg: E315/G4 Elec Scheme: E113/11 VDR ID:
Remarks:

Equip ID: L280-01-003

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: STANDBY GAS TREATMENT SYSTEM Plant I.D. Number: 1V-EF-15B Component: FAN MOTOR Manufacturer: LOUIS-ALLIS COMPANY Model Number: C064B Purchase Order Number: M-81 Function/Service: Accuracy: Spec: Demo: Location: SGT ROOM Floor Elevation: 786'0"	Operating Time	30 DAYS	RAD DOSE ACCOUNTS FOR DISTANCE FROM MAJOR SOURCE
	Temperature (°F)	104	
	Pressure (PSIG)	0	
	Relative Humidity (%)	100	
	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
	Seismic	LATER	
	Radiation (Rad)	1.0 E06	
	Aging	LATER	
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 10 P&ID: M152/C2

Loc Dwg: E315/F4 Elec Scheme: E113/11 VDR ID:
Remarks:

M302-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
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EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: POSITION SWITCH Manufacturer: MICRO SWITCH Model Number: DTF2-2RN-RH	Operating Time	1 HOUR		SEE GEN NOTE 4	001		---	---	NONE
	Temperature (°F)	140		SEE GEN NOTE 7	001		---	---	NONE
	Pressure (PSIG)	0		SEE GEN NOTE 7	001		---	---	NONE
	Relative Humidity (%)	100		SEE GEN NOTE 7	001		---	---	NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	2.6 E06		NONE	001		---	---	GEN NOTE 1
	Aging	LATER		---	---		---	---	SEE NOTE (1)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
	1. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: M302-02-001

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	1 HOUR	
Plant I.D. Number: ZS-3704	Temperature (°F)	140	
Component: POSITION SWITCH	Pressure (PSIG)	0	
Manufacturer: MICRO SWITCH	Relative Humidity (%)	100	
Model Number: DTF2-2RN-RH	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137	Seismic	LATER	
Function/Service: RADWASTE SYSTEM DRYWELL ISOLATION VALVE/DRYWELL FLOOR DRAIN SUMP DISCHARGE	Radiation (Rad)	2.6 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: TORUS ROOM SOUTH			
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M137/H7

Loc Dwg: E317/F4 Elec Scheme: E122/9 VDR ID:
Remarks:

Equip ID: M302-02-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	1 HOUR	
Plant I.D. Number: ZS-3705	Temperature (°F)	140	
Component: POSITION SWITCH	Pressure (PSIG)	0	
Manufacturer: MICRO SWITCH	Relative Humidity (%)	100	
Model Number: DTF2-2RN-RH	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137	Seismic	LATER	
Function/Service: RADWASTE SYSTEM DRYWELL ISOLATION VALVE DRYWELL FLOOR DRAIN SUMP DISCHARGE	Radiation (Rad)	2.6 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: TORUS ROOM SOUTH			
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M137/H7

Loc Dwg: E317/F4 Elec Scheme: E122/9 VDR ID:
Remarks:

M302-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: M302-02-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	1 HOUR	
Plant I.D. Number: ZS-3728	Temperature (°F)	140	
Component: POSITION SWITCH	Pressure (PSIG)	0	
Manufacturer: MICRO SWITCH	Relative Humidity (%)	100	
Model Number: DTF2-2RN-RH	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137	Seismic	LATER	
Function/Service: RADWASTE SYSTEM DRYWELL ISOLATION VALVE DRYWELL EQUIPMENT DRAIN SUMP	Radiation (Rad)	2.6 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M137/D7

Loc Dwg: E316/D6 Elec Scheme: E122/9 VDR ID:
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	1 HOUR	
Plant I.D. Number: ZS-3729	Temperature (°F)	140	
Component: POSITION SWITCH	Pressure (PSIG)	0	
Manufacturer: MICRO SWITCH	Relative Humidity (%)	100	
Model Number: DTF2-2RN-RH	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137	Seismic	LATER	
Function/Service: RADWASTE SYSTEM DRYWELL ISOLATION VALVE DRYWELL EQUIPMENT DRAIN SUMP	Radiation (Rad)	2.6 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M137/D7

Loc Dwg: E316/D6 Elec Scheme: E122/9 VDR ID:
Remarks:

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: M302-02-006

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	1 HOUR	
Plant I.D. Number: ZS-4311	Temperature (°F)	90	
Component: POSITION SWITCH	Pressure (PSIG)	0	
Manufacturer: MICRO SWITCH	Relative Humidity (%)	100	
Model Number: DTF2-2RN-RH	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137B	Seismic	LATER	
Function/Service: ATMOSPHERIC CONTROL -OUTBOARD/ MAKEUP NITROGEN GAS INLET ISOLATION	Radiation (Rad)	1.5 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: RHR VALVE ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M143/F3

Loc Dwg: E319/G7 Elec Scheme: E122/13 VDR ID:

Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	1 HOUR	
Plant I.D. Number: ZS-4312	Temperature (°F)	90	
Component: POSITION SWITCH	Pressure (PSIG)	0	
Manufacturer: MICRO SWITCH	Relative Humidity (%)	100	
Model Number: DTF2-2RN-RH	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137B	Seismic	LATER	
Function/Service: ATMOSPHERIC CONTROL -INBOARD/ CONTAINMENT NITROGEN GAS PURGE SUPPLY	Radiation (Rad)	1.5 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: RHR VALVE ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M143/F3

Loc Dwg: E318/D7 Elec Scheme: E122/12 VDR ID:

Remarks:

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Owner: IOWA ELECTRIC
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	1 HOUR	
Plant I.D. Number: ZS-4313	Temperature (°F)	90	
Component: POSITION SWITCH	Pressure (PSIG)	0	
Manufacturer: MICRO SWITCH	Relative Humidity (%)	100	
Model Number: DTF2-2RN-RH	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137B	Seismic	LATER	
Function/Service: ATMOSPHERIC CONTROL INBOARD SUPPRESSION POOL NITROGEN GAS PURGE SUPPLY	Radiation (Rad)	1.5 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: RHR VALVE ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M143/F3

Loc Dwg: E319/G7 Elec Scheme: E122/12 VDR ID:
Remarks:

Equip ID: M302-02-008

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	1 HOUR	
Plant I.D. Number: ZS-5703A	Temperature (°F)	140	
Component: POSITION SWITCH	Pressure (PSIG)	0	
Manufacturer: MICRO SWITCH	Relative Humidity (%)	100	
Model Number: DTF2-2RN-RH	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137B	Seismic	LATER	
Function/Service: DRYWELL COOL SYSTEM BACKWASH VALVE/ REACTOR BUILDING -DRYWELL LOOP A BACKWASH INLET	Radiation (Rad)	2.6 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M157/H7

Loc Dwg: E317/E5 Elec Scheme: E113/94 VDR ID:
Remarks:

M302-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	1 HOUR	
Plant I.D. Number: ZS-5703B	Temperature (°F)	140	
Component: POSITION SWITCH	Pressure (PSIG)	0	
Manufacturer: MICRO SWITCH	Relative Humidity (%)	100	
Model Number: DTF2-2RN-RH	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137B	Seismic	LATER	
Function/Service: DRYWELL COOLING SYSTEM BACKWASH/ REACTOR BUILDING DRYWELL LOOP B BACKWASH INLET	Radiation (Rad)	2.6 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M157/G7

Loc Dwg: E317/H7 Elec Scheme: E113/94 VDR ID:
Remarks:

Equip ID: M302-02-010

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	1 HOUR	
Plant I.D. Number: ZS-5704A	Temperature (°F)	140	
Component: POSITION SWITCH	Pressure (PSIG)	0	
Manufacturer: MICRO SWITCH	Relative Humidity (%)	100	
Model Number: DTF2-2RN-RH	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137A	Seismic	LATER	
Function/Service: DRYWELL COOLING SYSTEM BACKWASH VALVE REACTOR BLDG DRYWELL-LOOPA CLEANING WATER DISCH.	Radiation (Rad)	2.6 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M157/G6

Loc Dwg: E317/E5 Elec Scheme: E113/94 VDR ID:
Remarks:

M302-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	1 HOUR	
Plant I.D. Number: ZS-5704B	Temperature (°F)	140	
Component: POSITION SWITCH	Pressure (PSIG)	0	
Manufacturer: MICRO SWITCH	Relative Humidity (%)	100	
Model Number: DTF2-2RN-RH	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137A	Seismic	LATER	
Function/Service: DRYWELL COOLING SYSTEM BACKWASH VALVE REACTOR BLDG -DRYWELL LOOP A CLEANING WATER DISCH	Radiation (Rad)	2.6 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M157/G6

Loc Dwg: E317/G7 Elec Scheme: E113/94 VDR ID:
Remarks:

Equip ID: M302-02-012

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	1 HOUR	
Plant I.D. Number: ZS-5718A	Temperature (°F)	140	
Component: POSITION SWITCH	Pressure (PSIG)	0	
Manufacturer: MICRO SWITCH	Relative Humidity (%)	100	
Model Number: DTF2-2RN-RH	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137A	Seismic	LATER	
Function/Service: DRYWELL COOLING SYSTEM BACKWASH VALVE/REACTOR BLDG- DRYWELL LOOP A CLEANING WATER INTAKE	Radiation (Rad)	2.6 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M157/C8

Loc Dwg: E317/E5 Elec Scheme: E113/94 VDR ID:
Remarks:

M302-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: M302-02-014

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	1 HOUR	
Plant I.D. Number: ZS-5718B	Temperature (°F)	140	
Component: POSITION SWITCH	Pressure (PSIG)	0	
Manufacturer: MICRO SWITCH	Relative Humidity (%)	100	
Model Number: DTF2-2RN-RH	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137A	Seismic	LATER	
Function/Service: DRYWELL COOLING SYSTEM BACKWASH VALVE/REACTOR BLDG-DRYWELL LOOP B CLEANING WATER INTAKE	Radiation (Rad)	2.6 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M157/A8

Loc Dwg: E316/C7 Elec Scheme: E113/94 VDR ID:

Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	1 HOUR	
Plant I.D. Number: ZS-5719A	Temperature (°F)	140	
Component: POSITION SWITCH	Pressure (PSIG)	0	
Manufacturer: MICRO SWITCH	Relative Humidity (%)	100	
Model Number: DTF2-2RN-RH	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137B	Seismic	LATER	
Function/Service: DRYWELL COOLING SYSTEM BACKWASH VALVE/REACTOR BLDG-DRYWELL LOOP A BACK-WASH OUTLET	Radiation (Rad)	2.6 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M157/B7

Loc Dwg: E317/E5 Elec Scheme: E113/94 VDR ID:

Remarks:

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	1 HOUR	
Plant I.D. Number: ZS-5719B	Temperature (°F)	140	
Component: POSITION SWITCH	Pressure (PSIG)	0	
Manufacturer: MICRO SWITCH	Relative Humidity (%)	100	
Model Number: DTF2-2RN-RH	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-137B	Seismic	LATER	
Function/Service: DRYWELL COOLING SYSTEM BACKWASH VALVE TOR BLDG- DRYWELL LOOP B BACK-WASH OUTLET	Radiation (Rad)	2.6 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M157/A7

Loc Dwg: E316/C7 Elec Scheme: E113/94 VDR ID:

Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System:	Operating Time		
Plant I.D. Number:	Temperature (°F)		
Component:	Pressure (PSIG)		
Manufacturer:	Relative Humidity (%)		
Model Number:	Chemical Spray		
Purchase Order Number:	Seismic		
Function/Service:	Radiation (Rad)		
Accuracy: Spec: Demo:	Aging		
Location:	Submergence		
Floor Elevation:			
Flood Level Elevation: Above Flood Level: Yes: No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM

Walkdown: Environment: System: P&ID:

Loc Dwg: Elec Scheme: VDR ID:

Remarks:

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EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: POSITION SWITCH Manufacturer: MICRO SWITCH Model Number: OPD-AR	Operating Time	30 DAYS		SEE GEN NOTE 4	001		---	ANALYSIS	GEN NOTE 12
	Temperature (°F)	150		160 GEN NOTE 7	001		REF. (A)	TYPE TEST/ ANALYSIS	GEN NOTE 12
	Pressure (PSIG)	0		SEE GEN NOTE 7	001		---	---	NONE
	Relative Humidity (%)	100		100 GEN NOTE 7	001		REF. (A)	TYPE TEST/ ANALYSIS	GEN NOTE 12
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	1.5 E06		1.0 E06	002		REF. (A)	TYPE TEST/ ANALYSIS	GEN NOTE 12
	Aging	LATER		---	---		---	---	SEE NOTE (1)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. MICRO SWITCH INTEROFFICE CORRESPONDENCE BETWEEN A. YOUMANS AND V. HOCRAFFER, DATED NOVEMBER 10, 1981, SUBJECT- BECHTEL POWER CORPORATION	1. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982.

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Facility: DUANE ARNOLD
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EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: ZS-4303	Temperature (°F)	150	
Component: POSITION SWITCH	Pressure (PSIG)	0	
Manufacturer: MICRO SWITCH	Relative Humidity (%)	100	
Model Number: OPD-AR	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-144D	Seismic	LATER	
Function/Service: ATMOSPHERIC CONTROL/ OUTBOARD REACTOR VESSEL CONTAINMENT PURGE OUTLET	Radiation (Rad)	2.9 E05	
Accuracy: Spec: Demo:	Aging	LATER	
Location: H&V CONTROL VALVE RM	Submergence	NOT APPLICABLE	
Floor Elevation: 812'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M143/D7

Loc Dwg: E322/D3 Elec Scheme: E122/13 VDR ID:
Remarks:

Equip ID: M302-03-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	1 HOUR	
Plant I.D. Number: ZS-4306	Temperature (°F)	90	
Component: POSITION SWITCH	Pressure (PSIG)	0	
Manufacturer: MICRO SWITCH	Relative Humidity (%)	100	
Model Number: OPD-AR	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-144D	Seismic	LATER	
Function/Service: ATMOSPHERIC CONTROL/ OUTBOARD REACTOR VESSEL CONTAINMENT PURGE INLET	Radiation (Rad)	1.5 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: RHR VALVE ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M143/B7

Loc Dwg: E318/E6 Elec Scheme: E122/13 VDR ID:
Remarks:

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Facility: DUANE ARNOLD
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EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	1 HOUR	
Plant I.D. Number: ZS-4307	Temperature (°F)	90	
Component: POSITION SWITCH	Pressure (PSIG)	0	
Manufacturer: MICRO SWITCH	Relative Humidity (%)	100	
Model Number: OPD-AR	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-144D	Seismic	LATER	
Function/Service: ATMOSPHERIC CONTROL/ INBOARD REACTOR VESSEL CONTAINMENT PURGE INLET	Radiation (Rad)	1.5 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: RHR VALVE ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M143/E3

Loc Dwg: E318/E6 Elec Scheme: E122/12 VDR ID:
Remarks:

Equip ID: M302-03-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	1 HOUR	
Plant I.D. Number: ZS-4308	Temperature (°F)	90	
Component: POSITION SWITCH	Pressure (PSIG)	0	
Manufacturer: MICRO SWITCH	Relative Humidity (%)	100	
Model Number: OPD-AR	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-144D	Seismic	LATER	
Function/Service: ATMOSPHERIC CONTROL/ INBOARD SUPPRESSION POOL PURGE INLET	Radiation (Rad)	1.5 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: RHR VALVE ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M143/E3

Loc Dwg: E318/C6 Elec Scheme: E122/12 VDR ID:
Remarks:

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: ZS-4305	Temperature (°F)	104	
Component: POSITION SWITCH	Pressure (PSIG)	0	
Manufacturer: MICRO SWITCH	Relative Humidity (%)	100	
Model Number: OPD-AR	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-144D	Seismic	LATER	
Function/Service: TORUS VACUUM BREAKER VALVE/SUPPRESSION POOL VACUUM BREAKER ISOLATION	Radiation (Rad)	2.9 E05	
Accuracy: Spec: Demo:	Aging	LATER	
Location: NE CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 735'7"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M143/B7

Loc Dwg: E316/E2 Elec Scheme: E122/23 VDR ID:
Remarks:

Equip ID: M302-03-008

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	RAD DOSE ACCOUNTS FOR DISTANCE FROM MAJOR SOURCE
Plant I.D. Number: ZS-7602A	Temperature (°F)	104	
Component: POSITION SWITCH	Pressure (PSIG)	0	
Manufacturer: MICRO SWITCH	Relative Humidity (%)	100	
Model Number: OPD-AR	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-144E	Seismic	LATER	
Function/Service: ISOLATION DAMPER CONTROL/STANDBY GAS TREATMENT SYSTEM INLET	Radiation (Rad)	7.0 E05	
Accuracy: Spec: Demo:	Aging	LATER	
Location: SGT ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 36 P&ID: M176/A4

Loc Dwg: E315/G3 Elec Scheme: E113/64 VDR ID:
Remarks:

M302-03
Owner: IOWA ELECTRIC
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: M302-03-008

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION Plant I.D. Number: ZS-4305 Component: POSITION SWITCH Manufacturer: MICRO SWITCH Model Number: OPD-AR Purchase Order Number: M-144D Function/Service: TORUS VACUUM BREAKER VALVE/SUPPRESSION POOL VACUUM BREAKER ISOLATION Accuracy: Spec: Demo: Location: NE CRNR RM Floor Elevation: 735'7"	Operating Time	30 DAYS	
	Temperature (°F)	104	
	Pressure (PSIG)	0	
	Relative Humidity (%)	100	
	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
	Seismic	LATER	
	Radiation (Rad)	2.9 E05	
	Aging	LATER	
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M143/B7

Loc Dwg: E316/E2 Elec Scheme: E122/23 VDR ID:
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION Plant I.D. Number: ZS-7602A Component: POSITION SWITCH Manufacturer: MICRO SWITCH Model Number: OPD-AR Purchase Order Number: M-144E Function/Service: ISOLATION DAMPER CONTROL/STANDBY GAS TREATMENT SYSTEM INLET Accuracy: Spec: Demo: Location: SGT ROOM Floor Elevation: 786'0"	Operating Time	30 DAYS	RAD DOSE ACCOUNTS FOR DISTANCE FROM MAJOR SOURCE
	Temperature (°F)	104	
	Pressure (PSIG)	0	
	Relative Humidity (%)	100	
	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
	Seismic	LATER	
	Radiation (Rad)	7.0 E05	
	Aging	LATER	
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 36 P&ID: M176/A4

Loc Dwg: E315/G3 Elec Scheme: E113/64 VDR ID:
Remarks:

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: M302-03-012

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION Plant I.D. Number: ZS-7602B Component: POSITION SWITCH Manufacturer: MICRO SWITCH Model Number: OPD-AR Purchase Order Number: M-144E Function/Service: ISOLATION DAMPER CONTROL/STANDBY GAS TREATMENT SYSTEM INLET Accuracy: Spec: Demo: Location: SGT ROOM Floor Elevation: 786'0"	Operating Time	30 DAYS	RAD DOSE ACCOUNTS FOR DISTANCE FROM MAJOR SOURCE
	Temperature (°F)	104	
	Pressure (PSIG)	0	
	Relative Humidity (%)	100	
	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
	Seismic	LATER	
	Radiation (Rad)	7.0 E05	
	Aging	LATER	
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 36 P&ID: M176/A4

Loc Dwg: E315/G3 Elec Scheme: E113/64 VDR ID:
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION Plant I.D. Number: ZS-4301 Component: POSITION SWITCH Manufacturer: MICRO SWITCH Model Number: OPD-AR Purchase Order Number: M-144D Function/Service: ATMOSPHERIC CONTROL /OUTBOARD SUPPRESSION POOL PURGE OUTLET Accuracy: Spec: Demo: Location: NE CRNR RM Floor Elevation: 735'7"	Operating Time	30 DAYS	
	Temperature (°F)	104	
	Pressure (PSIG)	0	
	Relative Humidity (%)	100	
	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
	Seismic	LATER	
	Radiation (Rad)	2.9 E05	
	Aging	LATER	
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M143/C8

Loc Dwg: E316/E2 Elec Scheme: E122/13 VDR ID:
Remarks:

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Owner: IOWA ELECTRIC
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: ZS-4304	Temperature (°F)	104	
Component: POSITION SWITCH	Pressure (PSIG)	0	
Manufacturer: MICRO SWITCH	Relative Humidity (%)	100	
Model Number: OPD-AR	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-144D	Seismic	LATER	
Function/Service: TORUS VACUUM BREAKER VALVE/SUPPRESSION POOL VACUUM BREAKER ISOLATION	Radiation (Rad)	2.9 E05	
Accuracy: Spec: Demo:	Aging	LATER	
Location: NE CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 735'7"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M143/D7

Loc Dwg: E316/E3 Elec Scheme: E122/23 VDR ID:
Remarks:

Equip ID: M302-03-018

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	RAD DOSE ACCOUNTS FOR DISTANCE FROM MAJOR SOURCE
Plant I.D. Number: ZS-5825A	Temperature (°F)	104	
Component: POSITION SWITCH	Pressure (PSIG)	0	
Manufacturer: MICRO SWITCH	Relative Humidity (%)	100	
Model Number: OPD-AR	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-144E	Seismic	LATER	
Function/Service: STANDBY GAS TREATMENT SYSTEM CONTROL/ STANDBY GAS TREATMENT SYSTEM-AIR INTAKE	Radiation (Rad)	7.0 E05	
Accuracy: Spec: Demo:	Aging	LATER	
Location: SGT ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 36 P&ID: M158/F6

Loc Dwg: E315/G5 Elec Scheme: E113/11 VDR ID:
Remarks:

M302-03
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: M302-03-019

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	RAD DOSE ACCOUNTS FOR DISTANCE FROM MAJOR SOURCE
Plant I.D. Number: ZS-5825B	Temperature (°F)	104	
Component: POSITION SWITCH	Pressure (PSIG)	0	
Manufacturer: MICRO SWITCH	Relative Humidity (%)	100	
Model Number: OPD-AR	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-144E	Seismic	LATER	
Function/Service: STANDBY GAS TREATMENT SYSTEM CONTROL/ STANDBY GAS TREATMENT SYSTEM-AIR INTAKE	Radiation (Rad)	7.0 E05	
Accuracy: Spec: Demo:	Aging	LATER	
Location: SGT ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 36 P&ID: M158/D6

Loc Dwg: E315/F5 Elec Scheme: E113/11 VDR ID:
Remarks:

Equip ID:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System:	Operating Time		
Plant I.D. Number:	Temperature (°F)		
Component:	Pressure (PSIG)		
Manufacturer:	Relative Humidity (%)		
Model Number:	Chemical Spray		
Purchase Order Number:	Seismic		
Function/Service:	Radiation (Rad)		
Accuracy: Spec: Demo:	Aging		
Location:	Submergence		
Floor Elevation:			
Flood Level Elevation: Above Flood Level: Yes: No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM

Walkdown: Environment: System: P&ID:

Loc Dwg: Elec Scheme: VDR ID:
Remarks:

N003-05
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 241
Revision 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: RADIATION ELEMENT Manufacturer: NMC Model Number: GA-2TO	Operating Time	1 HOUR		SEE GEN NOTE 4	003		---	---	NONE
	Temperature (°F)	104		SEE GEN NOTE 7	003		---	---	NONE
	Pressure (PSIG)	0		SEE GEN NOTE 7	003		---	---	NONE
	Relative Humidity (%)	100		SEE GEN NOTE 7	003		---	---	NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	9.7 E05		1.0 E06	003		REF. (A)	ANALYSIS	NONE
	Aging	LATER		---	---		---	---	SEE NOTE (1)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. TELEPHONE CONVERSATION BETWEEN D. POHL OF BECHTEL AND MR. HILDEBRANT OF NMC ON DECEMBER 21, 1981	1. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30 1982

N003-05
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: N003-05-003

Sheet No. 242
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: STANDBY GAS TREATMENT SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: RE-7606A	Temperature (°F)	104	
Component: RADIATION ELEMENT	Pressure (PSIG)	0	
Manufacturer: NMC	Relative Humidity (%)	100	
Model Number: GA-2TO	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-194	Seismic	LATER	
Function/Service:	Radiation (Rad)	4.7 E05	
Accuracy: Spec: Demo:	Aging	LATER	
Location: A CRD RR	Submergence	NOT APPLICABLE	
Floor Elevation: 771'10"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 10 P&ID: M176/A3

Loc Dwg: E318/G2 Elec Scheme: E113/11 VDR ID:
Remarks:

Equip ID: N003-05-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: STANDBY GAS TREATMENT SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: RE-7606B	Temperature (°F)	104	
Component: RADIATION ELEMENT	Pressure (PSIG)	0	
Manufacturer: NMC	Relative Humidity (%)	100	
Model Number: GA-2TO	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-194	Seismic	LATER	
Function/Service:	Radiation (Rad)	4.7 E05	
Accuracy: Spec: Demo:	Aging	LATER	
Location: A CRD RR	Submergence	NOT APPLICABLE	
Floor Elevation: 771'10"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 10 P&ID: M176/A3

Loc Dwg: E318/G2 Elec Scheme: E113/11 VDR ID:
Remarks:

N007-03
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 243
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Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: POSITION SWITCH Manufacturer: NAMCO Model Number: EA 740	Operating Time	30 DAYS		30 DAYS	009		REF. (A)	TYPE TEST	NONE
	Temperature (°F)	SEE GEN NOTE		340	001		REF. (A)	TYPE TEST	NONE
	Pressure (PSIG)	SEE GEN NOTE		70	001		REF. (A)	TYPE TEST	NONE
	Relative Humidity (%)	100		100	001		REF. (A)	TYPE TEST	NONE
	Chemical Spray	DEMIN WATER		SEE NOTE (1)	---		REF. (A)	TYPE TEST	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	2.1 E07		2.0 E08	001		REF. (A)	TYPE TEST	NONE
	Aging	LATER		---	---		---	---	SEE NOTE (2)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. NAMCO CONTROLS TEST PLAN NO. LP10767-3 DATED OCT. 27 1981 (REVISION 4)	1. STEAM AND CHEMICAL SPRAY AS DEFINED IN IEEE 382-1972 PART III, TABLE 1 AND IEEE 323-1974 APPENDIX A, TABLE A1. 2. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

N007-03
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: N007-03-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: REACTOR PROTECTION SYSTEM	Operating Time	1 HOUR	SEE REMARK FOR ZS-4412
Plant I.D. Number: ZS-4413	Temperature (°F)	300	
Component: POSITION SWITCH	Pressure (PSIG)	1.8	
Manufacturer: NAMCO	Relative Humidity (%)	100	
Model Number: EA 740	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR-895	Seismic	LATER	
Function/Service: REACTOR SHUTDOWN/ TRIP ON CLOSURE OF MAIN STEAM LINE ISOLATION VALVE	Radiation (Rad)	3.2 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 16 P&ID: M114/E2

Loc Dwg: M268/G2 Elec Scheme: E122/11 VDR ID:

Remarks:

Equip ID: N007-03-003

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: REACTOR PROTECTION SYSTEM	Operating Time	1 HOUR	SEE REMARK FOR ZS-4412
Plant I.D. Number: ZS-4415	Temperature (°F)	SEE GENERAL NOTE 6	
Component: POSITION SWITCH	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: NAMCO	Relative Humidity (%)	100	
Model Number: EA 740	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-895	Seismic	LATER	
Function/Service: REACTOR SHUTDOWN/ TRIP ON CLOSURE OF MAIN STEAM LINE ISOLATION VALVE	Radiation (Rad)	2.1 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 761'2"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 16 P&ID: M114/D7

Loc Dwg: M341/C3 Elec Scheme: E122/11 VDR ID:

Remarks:

N007-03
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: N007-03-004

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: N007-03-005

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: REACTOR PROTECTION SYSTEM Plant I.D. Number: ZS-4416 Component: POSITION SWITCH Manufacturer: NAMCO Model Number: EA 740 Purchase Order Number: DCR-895 Function/Service: REACTOR SHUTDOWN/ TRIP ON CLOSURE OF MAIN STEAM LINE ISOLATION VALVE Accuracy: Spec: NA Demo: NA Location: STEAM TUNNEL Floor Elevation: 757'6"	Operating Time	1 HOUR	SEE REMARK FOR ZS-4412
	Temperature (°F)	300	
	Pressure (PSIG)	1.8	
	Relative Humidity (%)	100	
	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
	Seismic	LATER	
	Radiation (Rad)	3.2 E06	
	Aging	LATER	
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 16 P&ID: M114/D8

Loc Dwg: M263/G2 Elec Scheme: E122/11 VDR ID:
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: REACTOR PROTECTION SYSTEM Plant I.D. Number: ZS-4418 Component: POSITION SWITCH Manufacturer: NAMCO Model Number: EA 740 Purchase Order Number: DCR-895 Function/Service: REACTOR SHUTDOWN/ TRIP ON CLOSURE OF MAIN STEAM LINE ISOLATION VALVE Accuracy: Spec: NA Demo: NA Location: DRYWELL Floor Elevation: 761'2"	Operating Time	1 HOUR	SEE REMARK FOR ZS-4412
	Temperature (°F)	SEE GENERAL NOTE 6	
	Pressure (PSIG)	SEE GENERAL NOTE 6	
	Relative Humidity (%)	100	
	Chemical Spray	DEMIN WATER SPRAY	
	Seismic	LATER	
	Radiation (Rad)	2.1 E07	
	Aging	LATER	
Flood Level Elevation: 744' Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 16 P&ID: M114/D3

Loc Dwg: M341/F3 Elec Scheme: E122/11 VDR ID:
Remarks:

N007-03
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: N007-03-006

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: N007-03-007

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: REACTOR PROTECTION SYSTEM Plant I.D. Number: ZS-4419 Component: POSITION SWITCH Manufacturer: NAMCO Model Number: EA 740 Purchase Order Number: DCR-895 Function/Service: REACTOR SHUTDOWN/ TRIP ON CLOSURE OF MAIN STEAM LINE ISOLATION VALVE Accuracy: Spec: NA Demo: NA Location: STEAM TUNNEL Floor Elevation: 757'6"	Operating Time	1 HOUR	SEE REMARK FOR ZS-4412
	Temperature (°F)	300	
	Pressure (PSIG)	1.8	
	Relative Humidity (%)	100	
	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
	Seismic	LATER	
	Radiation (Rad)	3.2 E06	
	Aging	LATER	
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 16 P&ID: M114/D2
Loc Dwg: M248/D3 Elec Scheme: E122/11 VDR ID:
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: REACTOR PROTECTION SYSTEM Plant I.D. Number: ZS-4420 Component: POSITION SWITCH Manufacturer: NAMCO Model Number: EA 740 Purchase Order Number: DCR-895 Function/Service: REACTOR SHUTDOWN/ TRIP ON CLOSURE OF MAIN STEAM LINE ISOLATION VALVE Accuracy: Spec: NA Demo: NA Location: DRYWELL Floor Elevation: 761'2"	Operating Time	1 HOUR	SEE REMARK FOR ZS-4412
	Temperature (°F)	SEE GENERAL NOTE 6	
	Pressure (PSIG)	SEE GENERAL NOTE 6	
	Relative Humidity (%)	100	
	Chemical Spray	DEMIN WATER SPRAY	
	Seismic	LATER	
	Radiation (Rad)	2.1 E07	
	Aging	LATER	
Flood Level Elevation: 744' Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 16 P&ID: M114/E7
Loc Dwg: M341/E3 Elec Scheme: E122/11 VDR ID:
Remarks:

N007-03
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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Equip ID: N007-03-008

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EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: REACTOR PROTECTION SYSTEM	Operating Time	1 HOUR	SEE REMARK FOR ZS-4412
Plant I.D. Number: ZS-4421	Temperature (°F)	300	
Component: POSITION SWITCH	Pressure (PSIG)	1.8	
Manufacturer: NAMCO	Relative Humidity (%)	100	
Model Number: EA 740	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR-895	Seismic	LATER	
Function/Service: REACTOR SHUTDOWN/ TRIP ON CLOSURE OF MAIN STEAM LINE ISOLATION VALVE	Radiation (Rad)	3.2 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 16 P&ID: M114/E8

Loc Dwg: M248/C2 Elec Scheme: E122/11 VDR ID:
Remarks:

Equip ID: N007-03-009

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: ZS-1906A	Temperature (°F)	SEE GENERAL NOTE 6	
Component: POSITION SWITCH	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: NAMCO	Relative Humidity (%)	100	
Model Number: EA 740	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number:	Seismic	LATER	
Function/Service:	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 36 P&ID: M119/F7

Loc Dwg: E329/C5 Elec Scheme: E121/58A VDR ID:
Remarks:

N007-03
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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Equip ID: N007-03-010

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EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: ZS-2002B	Temperature (°F)	SEE GENERAL NOTE 6	
Component: POSITION SWITCH	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: NAMCO	Relative Humidity (%)	100	
Model Number: EA 740	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number:	Seismic	LATER	
Function/Service:	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 36 P&ID: M120/E3

Loc Dwg: E329/F5 Elec Scheme: E121/58 VDR ID:
Remarks:

Equip ID:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System:	Operating Time		
Plant I.D. Number:	Temperature (°F)		
Component:	Pressure (PSIG)		
Manufacturer:	Relative Humidity (%)		
Model Number:	Chemical Spray		
Purchase Order Number:	Seismic		
Function/Service:	Radiation (Rad)		
Accuracy: Spec: Demo:	Aging		
Location:	Submergence		
Floor Elevation:			
Flood Level Elevation: Above Flood Level: Yes: No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM

Walkdown: Environment: System: P&ID:

Loc Dwg: Elec Scheme: VDR ID:
Remarks:

N007-04
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
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EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: POSITION SWITCH Manufacturer: NAMCO Model Number: EA170-41302	Operating Time	30 DAYS		SEE GEN NOTE 4	001		---	---	NONE
	Temperature (°F)	140		194 GEN NOTE 7	001		REF. (A)	ANALYSIS	NONE
	Pressure (PSIG)	0		0 GEN NOTE 7	001		REF. (A)	ANALYSIS	NONE
	Relative Humidity (%)	100		100 GEN NOTE 7	001		REF. (A)	ANALYSIS	NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	5.9 E06		2.0 E08	001		REF. (A)	ANALYSIS	NONE
	Aging	LATER		---	---		---	---	SEE NOTE (1)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. TELEPHONE CONVERSATION BETWEEN NAVIN SHAH OF BECHTEL AND ROBERT H. KANTER OF NAMCO ON 23 NOV.81, AND LETTER DATED 17 NOV.81 FROM ROBERT H. KANTER OF NAMCO TO KEVIN MURPHY OF BECHTEL. REFER TO CHRON.0005444	1. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30,1982

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: N007-04-001

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: ZS-8773A	Temperature (°F)	104	
Component: POSITION SWITCH	Pressure (PSIG)	0	
Manufacturer: NAMCO	Relative Humidity (%)	100	
Model Number: EA170-41302	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR-932A	Seismic	LATER	
Function/Service:	Radiation (Rad)	5.9 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: NW CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 35 P&ID: M187/C3

Loc Dwg: E316/F6 Elec Scheme: E113/64 VDR ID:
Remarks:

Equip ID: N007-04-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: ZS-8773B	Temperature (°F)	104	
Component: POSITION SWITCH	Pressure (PSIG)	0	
Manufacturer: NAMCO	Relative Humidity (%)	100	
Model Number: EA170-41302	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR-932A	Seismic	LATER	
Function/Service:	Radiation (Rad)	5.9 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: NW CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 35 P&ID: M187/C2

Loc Dwg: E316/F6 Elec Scheme: E113/64 VDR ID:
Remarks:

N007-05
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
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EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: POSITION SWITCH Manufacturer: NAMCO Model Number: SAI-131	Operating Time	30 DAYS		SEE GEN NOTE 4	001		---	---	NONE
	Temperature (°F)	140		SEE GEN NOTE 7	001		---	---	NONE
	Pressure (PSIG)	0		SEE GEN NOTE 7	001		---	---	NONE
	Relative Humidity (%)	100		SEE GEN NOTE 7	001		---	---	NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	8.1 E06		NONE	001		---	---	GEN NOTE 1
	Aging	LATER		---	---		---	---	SEE NOTE (1)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
	1. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

N007-05
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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Equip ID: N007-05-001

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Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: ZS-2234	Temperature (°F)	140	
Component: POSITION SWITCH	Pressure (PSIG)	0	
Manufacturer: NAMCO	Relative Humidity (%)	100	
Model Number: SAI-131	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-141	Seismic	LATER	
Function/Service:	Radiation (Rad)	8.1 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: HPCI ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'9" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X		X	X	

Walkdown: Environment: HARSH System: 36 P&ID: M122/C5

Loc Dwg: E317/A3 Elec Scheme: E121/26 VDR ID:
Remarks:

Equip ID: N007-05-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: ZS-2235	Temperature (°F)	140	
Component: POSITION SWITCH	Pressure (PSIG)	0	
Manufacturer: NAMCO	Relative Humidity (%)	100	
Model Number: SAI-131	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-141	Seismic	LATER	
Function/Service:	Radiation (Rad)	8.1 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: HPCI ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'9" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X		X	X	

Walkdown: Environment: HARSH System: 36 P&ID: M122/C6

Loc Dwg: E317/A3 Elec Scheme: E121/26 VDR ID:
Remarks:

N007-05
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: N007-05-003

Sheet No. 253
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: ZS-2435	Temperature (°F)	140	
Component: POSITION SWITCH	Pressure (PSIG)	0	
Manufacturer: NAMCO	Relative Humidity (%)	100	
Model Number: SAI-131	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-141	Seismic	LATER	
Function/Service:	Radiation (Rad)	5.5 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: RCIC ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X		X	

Walkdown: Environment: HARSH System: 36 P&ID: M124/B5

Loc Dwg: M405/B6 Elec Scheme: E121/39 VDR ID:
Remarks:

Equip ID: N007-05-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: ZS-2436	Temperature (°F)	140	
Component: POSITION SWITCH	Pressure (PSIG)	0	
Manufacturer: NAMCO	Relative Humidity (%)	100	
Model Number: SAI-131	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-141	Seismic	LATER	
Function/Service:	Radiation (Rad)	5.5 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: RCIC ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X		X	

Walkdown: Environment: HARSH System: 36 P&ID: M124/B5

Loc Dwg: M405/B6 Elec Scheme: E121/39 VDR ID:
Remarks:

N007-05
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: N007-05-005

Sheet No. 254
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: ZS-4640	Temperature (°F)	104	
Component: POSITION SWITCH	Pressure (PSIG)	0	
Manufacturer: NAMCO	Relative Humidity (%)	100	
Model Number: SAI-131	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-123	Seismic	LATER	
Function/Service:	Radiation (Rad)	1.8 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: RWCU HEAT EXCH ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: 786'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M116/F7

Loc Dwg: E321/E5 Elec Scheme: E122/10 VDR ID:
Remarks:

Equip ID:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System:	Operating Time		
Plant I.D. Number:	Temperature (°F)		
Component:	Pressure (PSIG)		
Manufacturer:	Relative Humidity (%)		
Model Number:	Chemical Spray		
Purchase Order Number:	Seismic		
Function/Service:	Radiation (Rad)		
Accuracy: Spec: Demo:	Aging		
Location:	Submergence		
Floor Elevation:			
Flood Level Elevation: Above Flood Level: Yes: No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM

Walkdown: Environment: System: P&ID:

Loc Dwg: Elec Scheme: VDR ID:
Remarks:

N007-06
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 255
Revision 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: POSITION SWITCH Manufacturer: NAMCO Model Number: SAI-31	Operating Time	30 DAYS		NONE	003		---	---	GEN NOTE 1
	Temperature (°F)	SEE GEN NOTE 6		NONE	007		---	---	GEN NOTE 1
	Pressure (PSIG)	SEE GEN NOTE 6		NONE	007		---	---	GEN NOTE 1
	Relative Humidity (%)	100		NONE	003		---	---	GEN NOTE 1
	Chemical Spray	DEMIN WATER		NONE	007		---	---	GEN NOTE 1
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	2.1 E07		NONE	007		---	---	GEN NOTE 1
	Aging	LATER		---	---		---	---	SEE NOTE (1)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
	1. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

N007-06
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: N007-06-003

Sheet No. 256
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: ZS-4310	Temperature (°F)	150	
Component: POSITION SWITCH	Pressure (PSIG)	0	
Manufacturer: NAMCO	Relative Humidity (%)	100	
Model Number: SAI-31	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-141	Seismic	LATER	
Function/Service:	Radiation (Rad)	2.9 E05	
Accuracy: Spec: Demo:	Aging	LATER	
Location: H&V CONTROL VALVE RM	Submergence	NOT APPLICABLE	
Floor Elevation: 812'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M143/D7
Loc Dwg: E322/D4 Elec Scheme: E122/12 VDR ID:
Remarks:

Equip ID: N007-06-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: ZS-2211	Temperature (°F)	140	
Component: POSITION SWITCH	Pressure (PSIG)	1.5	
Manufacturer: NAMCO	Relative Humidity (%)	100	
Model Number: SAI-31	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-141	Seismic	LATER	
Function/Service:	Radiation (Rad)	8.1 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: HPCI ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'9" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X		X	X	

Walkdown: Environment: HARSH System: 36 P&ID: M122/D2
Loc Dwg: E317/C3 Elec Scheme: E121/26 VDR ID:
Remarks:

N007-06
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: N007-06-005

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Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: ZS-2212	Temperature (°F)	140	
Component: POSITION SWITCH	Pressure (PSIG)	1.5	
Manufacturer: NAMCO	Relative Humidity (%)	100	
Model Number: SAI-31	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-141	Seismic	LATER	
Function/Service:	Radiation (Rad)	8.1 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: HPCI ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'9" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X		X	X	

Walkdown: Environment: HARSH System: 36 P&ID: M122/D2

Loc Dwg: E317/C3 Elec Scheme: E121/26 VDR ID:
Remarks:

Equip ID: N007-06-006

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: ZS-4309	Temperature (°F)	104	
Component: POSITION SWITCH	Pressure (PSIG)	0	
Manufacturer: NAMCO	Relative Humidity (%)	100	
Model Number: SAI-31	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-141	Seismic	LATER	
Function/Service:	Radiation (Rad)	2.9 E05	
Accuracy: Spec: Demo:	Aging	LATER	
Location: NE CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 735'7"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M143/C7

Loc Dwg: E316/E2 Elec Scheme: E122/12 VDR ID:
Remarks:

N007-06
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: N007-06-007

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Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	1 HOUR	
Plant I.D. Number: ZS-4639	Temperature (°F)	SEE GENERAL NOTE 6	
Component: POSITION SWITCH	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: NAMCO	Relative Humidity (%)	100	
Model Number: SAI-31	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: M-123	Seismic	LATER	
Function/Service:	Radiation (Rad)	2.1 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M116/F6

Loc Dwg: E330/B5 Elec Scheme: E122/10 VDR ID:

Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System:	Operating Time		
Plant I.D. Number:	Temperature (°F)		
Component:	Pressure (PSIG)		
Manufacturer:	Relative Humidity (%)		
Model Number:	Chemical Spray		
Purchase Order Number:	Seismic		
Function/Service:	Radiation (Rad)		
Accuracy: Spec: Demo:	Aging		
Location:	Submergence		
Floor Elevation:			
Flood Level Elevation: Above Flood Level: Yes: No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM

Walkdown: Environment: System: P&ID:

Loc Dwg: Elec Scheme: VDR ID:

Remarks:

N007-07
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 259
Revision 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: POSITION SWITCH Manufacturer: NAMCO Model Number: SL-2C-11	Operating Time	30 DAYS		NONE	001		---	---	GEN NOTE 1
	Temperature (°F)	SEE GEN NOTE 6		NONE	001		---	---	GEN NOTE 1
	Pressure (PSIG)	SEE GEN NOTE 6		NONE	001		---	---	GEN NOTE 1
	Relative Humidity (%)	100		NONE	001		---	---	GEN NOTE 1
	Chemical Spray	DEMIN WATER		NONE	001		---	---	GEN NOTE 1
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	4.3 E07		NONE	001		---	---	GEN NOTE 1
	Aging	LATER		---	---		---	---	SEE NOTE (1)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
	1. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982.

N007-07
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: N007-07-001

Sheet No. 260
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION Plant I.D. Number: ZS-2002A Component: POSITION SWITCH Manufacturer: NAMCO Model Number: SL-2C-11 Purchase Order Number: M-152 Function/Service: LIMIT SWITCH, VALVE POSITION ACTUATION/ REACTOR RECIRC PUMP DISCHARGE VALVE OPEN/ CLOSE ACTUATION Accuracy: Spec: Demo: Location: DRYWELL Floor Elevation: 757'-4"	Operating Time	30 DAYS	POSITION OF CV-2002 IS INDICATIVE OF RHR FLOW TO RCS
	Temperature (°F)	SEE GENERAL NOTE 6	
	Pressure (PSIG)	SEE GENERAL NOTE 6	
	Relative Humidity (%)	100	
	Chemical Spray	DEMIN WATER SPRAY	
	Seismic	LATER	
	Radiation (Rad)	4.3 E07	
	Aging	LATER	
Flood Level Elevation: 744' Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 36 P&ID: M120/F3

Loc Dwg: E329/F5 Elec Scheme: E121/58 VDR ID:
Remarks:

Equip ID: N007-07-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION Plant I.D. Number: ZS-1906B Component: POSITION SWITCH Manufacturer: NAMCO Model Number: SL-2C-11 Purchase Order Number: M-152 Function/Service: LIMIT SWITCH, VALVE POSITION ACTUATED/ REACTOR RECIRC PUMP DISCHARGE VALVE OPEN /CLOSE INDICATION Accuracy: Spec: Demo: Location: DRYWELL Floor Elevation: 757'-4"	Operating Time	30 DAYS	POSITION OF CV-1906 IS INDICATIVE OF RHR FLOW TO RCS
	Temperature (°F)	SEE GENERAL NOTE 6	
	Pressure (PSIG)	SEE GENERAL NOTE 6	
	Relative Humidity (%)	100	
	Chemical Spray	DEMIN WATER SPRAY	
	Seismic	LATER	
	Radiation (Rad)	4.3 E07	
	Aging	LATER	
Flood Level Elevation: 744' Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 36 P&ID: M119/E7

Loc Dwg: E329/C5 Elec Scheme: E121/58A VDR ID:
Remarks:

N070-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 261
Revision 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: TEMPERATURE ELEMENT Manufacturer: NECI Model Number: N145C3023	Operating Time	1 HOUR		1 HOUR	001		REF. (A)	TYPE TEST	GEN NOTE 9
	Temperature (°F)	300		156	001		REF. (A)	TYPE TEST	GEN NOTE 9
	Pressure (PSIG)	1.5		.25	001		REF. (A)	TYPE TEST	GEN NOTE 9
	Relative Humidity (%)	100		90	001		REF. (A)	TYPE TEST	GEN NOTE 9
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	1.0 E06		SEE GEN NOTE 10	013		---	---	NONE
	Aging	LATER		---	---		---	---	SEE NOTE (1)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. GE LETTER D. BUTCHER TO P. WARD G-KE-0-159 DATED SEPT. 30, 1980 (CHRON 2572) NSE 80229	1. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

N070-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: N070-02-001

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Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2262A	Temperature (°F)	300	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.5	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3023	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /HPCI VENT AIR INLET TEMP.	Radiation (Rad)	2.1 E03	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: HPCI ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'9" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
				X			

Walkdown: Environment: HARSH System: 27 P&ID: M122/A4

Loc Dwg: E317/C2 Elec Scheme: E124/6 VDR ID: E41-N028A
Remarks:

Equip ID: N070-02-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2262B	Temperature (°F)	300	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.5	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3023	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /HPCI VENT AIR INLET TEMP.	Radiation (Rad)	2.1 E03	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: HPCI ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'9" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
				X			

Walkdown: Environment: HARSH System: 27 P&ID: M122/A4

Loc Dwg: E317/C2 Elec Scheme: E124/6 VDR ID: E41-N028B
Remarks:

N070-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: N070-02-003

Sheet No. 263
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2263A	Temperature (°F)	300	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.5	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3023	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /HPCI VENT AIR OUTLET TEMP.	Radiation (Rad)	2.1 E03	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: HPCI ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'9" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
				X			

Walkdown: Environment: HARSH System: 27 P&ID: M122/A3

Loc Dwg: M661/D4 Elec Scheme: E124/6 VDR ID: E41-N029A
Remarks:

Equip ID: N070-02-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2263B	Temperature (°F)	300	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.5	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3023	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /HPCI VENT AIR OUTLET TEMP.	Radiation (Rad)	2.1 E03	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: HPCI ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'9" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
				X			

Walkdown: Environment: HARSH System: 27 P&ID: M122/A3

Loc Dwg: M661/D4 Elec Scheme: E124/6 VDR ID: E41-N029B
Remarks:

N070-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: N070-02-005

Sheet No. 264
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: N070-02-006

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2264A	Temperature (°F)	300	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.5	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3023	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /HPCI AREA COOLER TEMP.	Radiation (Rad)	2.1 E03	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: HPCI ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 747'0"			
Flood Level Elevation: 717'9" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
				X			

Walkdown: Environment: HARSH System: 27 P&ID: M122/A2

Loc Dwg: E317/C3 Elec Scheme: E124/7 VDR ID: E41-N030A
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2264B	Temperature (°F)	300	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.5	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3023	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /HPCI AREA COOLER TEMP.	Radiation (Rad)	2.1 E03	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: HPCI ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 747'0"			
Flood Level Elevation: 717'9" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
				X			

Walkdown: Environment: HARSH System: 27 P&ID: M122/A2

Loc Dwg: E317/C3 Elec Scheme: E124/7 VDR ID: E41-N030B
Remarks:

N070-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: N070-02-013

Sheet No. 265
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: N070-02-014

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2522A	Temperature (°F)	277	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.2	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3023	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /SUPPRESSION POOL AREA VENT AIR INLET TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: TORUS ROOM NORTH			
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
				X	X		

Walkdown: Environment: HARSH System: 27 P&ID: M125/B4

Loc Dwg: M646/C3 Elec Scheme: E124/6 VDR ID: E51-N026A

Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2522B	Temperature (°F)	277	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.2	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3023	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /SUPPRESSION POOL AREA VENT AIR INLET TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: TORUS ROOM SOUTH			
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
				X	X		

Walkdown: Environment: HARSH System: 27 P&ID: M125/B3

Loc Dwg: M660/H8 Elec Scheme: E124/6 VDR ID: E51-N026B

Remarks:

N070-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: N070-02-015

Sheet No. 266
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: N070-02-016

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM Plant I.D. Number: TE-2522C Component: TEMPERATURE ELEMENT Manufacturer: NECI Model Number: N145C3023 Purchase Order Number: APED Function/Service: CONTAINMENT ISOLATION /SUPPRESSION POOL AREA VENT AIR INLET TEMPERATURE Accuracy: Spec: 1.5% Demo: 1.5% Location: TORUS ROOM SOUTH Floor Elevation: 746'3"	Operating Time	1 HOUR	
	Temperature (°F)	277	
	Pressure (PSIG)	1.2	
	Relative Humidity (%)	100	
	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
	Seismic	LATER	
	Radiation (Rad)	1.0 E06	
	Aging	LATER	
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
				X	X		

Walkdown: Environment: HARSH System: 27 P&ID: M125/A4

Loc Dwg: M660/F7 Elec Scheme: E124/6 VDR ID: E51-N026C
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM Plant I.D. Number: TE-2522D Component: TEMPERATURE ELEMENT Manufacturer: NECI Model Number: N145C3023 Purchase Order Number: APED Function/Service: CONTAINMENT ISOLATION /SUPPRESSION POOL AREA VENT AIR INLET TEMPERATURE Accuracy: Spec: 1.5% Demo: 1.5% Location: TORUS ROOM SOUTH Floor Elevation: 716'9"	Operating Time	1 HOUR	
	Temperature (°F)	277	
	Pressure (PSIG)	1.2	
	Relative Humidity (%)	100	
	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
	Seismic	LATER	
	Radiation (Rad)	1.0 E06	
	Aging	LATER	
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
				X	X		

Walkdown: Environment: HARSH System: 27 P&ID: M125/A3

Loc Dwg: M660/D5 Elec Scheme: E124/6 VDR ID: E51-N026D
Remarks:

N070-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: N070-02-017

Sheet No. 267
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2523A	Temperature (°F)	277	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.2	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3023	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /SUPPRESSION POOL AREA VENT AIR OUTLET TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
				X	X		

Walkdown: Environment: HARSH System: 27 P&ID: M125/B4

Loc Dwg: E316/E3 Elec Scheme: E124/6 VDR ID: E51-N027A
Remarks:

Equip ID: N070-02-018

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2523B	Temperature (°F)	277	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.2	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3023	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /SUPPRESSION POOL AREA VENT AIR OUTLET TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
				X	X		

Walkdown: Environment: HARSH System: 27 P&ID: M125/B3

Loc Dwg: E316/E3 Elec Scheme: E124/6 VDR ID: E51-N027B
Remarks:

N070-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: N070-02-019

Sheet No. 268
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2523C	Temperature (°F)	277	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.2	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3023	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /SUPPRESSION POOL AREA VENT AIR OUTLET TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
				X	X		

Walkdown: Environment: HARSH System: 27 P&ID: M125/A4

Loc Dwg: E316/E3 Elec Scheme: E124/6 VDR ID: E51-N027C
Remarks:

Equip ID: N070-02-020

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2523D	Temperature (°F)	277	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.2	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3023	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /SUPPRESSION POOL AREA VENT AIR OUTLET TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
				X	X		

Walkdown: Environment: HARSH System: 27 P&ID: M125/A3

Loc Dwg: E316/E3 Elec Scheme: E124/6 VDR ID: E51-N027D
Remarks:

N070-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: N070-02-021

Sheet No. 269
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2526A	Temperature (°F)	277	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.2	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3023	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /SUPPRESSION POOL AREA AMBIENT TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
				X	X		

Walkdown: Environment: HARSH System: 27 P&ID: M125/B4

Loc Dwg: M646/F4 Elec Scheme: E124/6 VDR ID: E51-N025A
Remarks:

Equip ID: N070-02-022

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2526B	Temperature (°F)	277	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.2	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3023	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /SUPPRESSION POOL AREA AMBIENT TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
				X	X		

Walkdown: Environment: HARSH System: 27 P&ID: M125/B2

Loc Dwg: M646/B8 Elec Scheme: E124/6 VDR ID: E51-N025B
Remarks:

N070-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: N070-02-023

Sheet No. 270
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2526C	Temperature (°F)	277	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.2	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3023	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /SUPPRESSION POOL AREA AMBIENT TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
				X	X		

Walkdown: Environment: HARSH System: 27 P&ID: M125/A4

Loc Dwg: M660/D4 Elec Scheme: E124/6 VDR ID: E51-N025C

Remarks:

Equip ID: N070-02-024

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2526D	Temperature (°F)	277	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.2	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3023	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /SUPPRESSION POOL AREA AMBIENT TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
				X	X		

Walkdown: Environment: HARSH System: 27 P&ID: M125/A2

Loc Dwg: M646/B2 Elec Scheme: E124/6 VDR ID: E51-N025D

Remarks:

N070-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: N070-02-031

Sheet No. 271
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEMS	Operating Time	1 HOUR	
Plant I.D. Number: TE-2453	Temperature (°F)	300	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	0.1	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3023	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: RCIC ROOM AMBIENT TEMPERATURE	Radiation (Rad)	2.1 E03	
Accuracy: Spec: Demo:	Aging	LATER	
Location: RCIC ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
					X		

Walkdown: Environment: HARSH System: 27 P&ID: M124/C7

Loc Dwg: M661/B5 Elec Scheme: E124/7 VDR ID: E51-N011
Remarks:

Equip ID:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System:	Operating Time		
Plant I.D. Number:	Temperature (°F)		
Component:	Pressure (PSIG)		
Manufacturer:	Relative Humidity (%)		
Model Number:	Chemical Spray		
Purchase Order Number:	Seismic		
Function/Service:	Radiation (Rad)		
Accuracy: Spec: Demo:	Aging		
Location:	Submergence		
Floor Elevation:			
Flood Level Elevation: Above Flood Level: Yes: No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM

Walkdown: Environment: System: P&ID:

Loc Dwg: Elec Scheme: VDR ID:
Remarks:

N070-04
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 272
Revision 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: TEMPERATURE ELEMENT Manufacturer: NECI Model Number: N145C3224	Operating Time	1 HOUR		7 DAYS	001		REF. (A)	TYPE TEST	NONE
	Temperature (°F)	214		250	001		REF. (A)	TYPE TEST	NONE
	Pressure (PSIG)	2.1		0.25	001		REF. (A)	TYPE TEST/ ANALYSIS	GEN NOTE 12
	Relative Humidity (%)	100		100	001		REF. (B)	TYPE TEST	NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	1.0 E06		2.0 E08	001		REF. (A)	TYPE TEST	NONE
	Aging	LATER		---	---		---	---	SEE NOTE (1)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. ENVIRONMENTAL QUALIFICATION SUMMARY REPORT QSR-110-A-01 B. IE PO 35662 WITH GE APPENDIX A-1 TABLE A-9	1. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

N070-04
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: N070-04-001

Sheet No. 273
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2742A	Temperature (°F)	214	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	2.1	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3224	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /RWCU EQUIPMENT ROOM HIGH AMBIENT TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: RWCU PUMP ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: 786'3" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
						X	

Walkdown: Environment: HARSH System: 27 P&ID: M127/A8

Loc Dwg: M657/E4 Elec Scheme: E124/7 VDR ID: G31-N016A
Remarks:

Equip ID: N070-04-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2742B	Temperature (°F)	214	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	2.1	
Manufacturer: NECI	Relative Humidity (%).	100	
Model Number: N145C3224	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /RWCU EQUIPMENT ROOM HIGH AMBIENT TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: RWCU PUMP ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: 786'3" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
						X	

Walkdown: Environment: HARSH System: 27 P&ID: M124/A8

Loc Dwg: M657/E3 Elec Scheme: E124/7 VDR ID: G31-N016B
Remarks:

N070-04
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: N070-04-003

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Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2742C	Temperature (°F)	214	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	2.1	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3224	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /RWCU EQUIPMENT ROOM HIGH AMBIENT TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: RWCU HEAT EXCH ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: 786'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
						X	

Walkdown: Environment: HARSH System: 27 P&ID: M127/A8

Loc Dwg: M657/E3 Elec Scheme: E124/7 VDR ID: G31-N016C
Remarks:

Equip ID: N070-04-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2742D	Temperature (°F)	214	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	2.1	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3224	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /RWCU EQUIPMENT ROOM HIGH AMBIENT TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: RWCU HEAT EXCH ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: 786'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
						X	

Walkdown: Environment: HARSH System: 27 P&ID: M127/A8

Loc Dwg: M657/E4 Elec Scheme: E124/7 VDR ID: G31-N016D
Remarks:

N070-04
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: N070-04-005

Sheet No. 275
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2742E	Temperature (°F)	214	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	2.1	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3224	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /RWCU EQUIPMENT ROOM HIGH AMBIENT TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: RWCU HEAT EXCH ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: 786'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
						X	

Walkdown: Environment: HARSH System: 27 P&ID: M127/A8

Loc Dwg: E657/E6 Elec Scheme: E124/7 VDR ID: G31-N016E
Remarks:

Equip ID: N070-04-006

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2742F	Temperature (°F)	214	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	2.1	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3224	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /RWCU EQUIPMENT ROOM HIGH AMBIENT TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: RWCU HEAT EXCH ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: 786'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
						X	

Walkdown: Environment: HARSH System: 27 P&ID: M127/A8

Loc Dwg: M657/F5 Elec Scheme: E124/7 VDR ID: G31-N016F
Remarks:

N070-04
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: N070-04-007

Sheet No. 276
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2743B	Temperature (°F)	214	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	2.1	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3224	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /RWCU ROOM AIR VENT INLET HIGH TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: RWCU PUMP ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: 786'3" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
						X	

Walkdown: Environment: HARSH System: 27 P&ID: M127/A8

Loc Dwg: M657/E3 Elec Scheme: E124/6 VDR ID: G31-N022B
Remarks:

Equip ID: N070-04-008

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2743C	Temperature (°F)	214	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	2.1	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3224	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /RWCU ROOM AIR VENT INLET HIGH TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: RWCU PUMP ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: 786'3" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
						X	

Walkdown: Environment: HARSH System: 27 P&ID: M127/A8

Loc Dwg: M657/E4 Elec Scheme: E124/6 VDR ID: G31-N022C
Remarks:

N070-04
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: N070-04-009

Sheet No. 277
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2743D	Temperature (°F)	214	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	2.1	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3224	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /RWCU ROOM AIR VENT INLET HIGH TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: RWCU HEAT EXCH ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: 786'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
						X	

Walkdown: Environment: HARSH System: 27 P&ID: M127/A8

Loc Dwg: M657/F6 Elec Scheme: E124/6 VDR ID: G31-N022D
Remarks:

Equip ID: N070-04-010

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2743E	Temperature (°F)	214	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	2.1	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3224	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /RWCU ROOM AIR VENT INLET HIGH TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: RWCU HEAT EXCH ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: 786'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
						X	

Walkdown: Environment: HARSH System: 27 P&ID: M127/A8

Loc Dwg: M657/F6 Elec Scheme: E124/6 VDR ID: G31-N022E
Remarks:

NO70-04
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: NO70-04-011

Sheet No. 278
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2743F	Temperature (°F)	214	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	2.1	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3224	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /RWCU ROOM AIR VENT INLET HIGH TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: RWCU HEAT EXCH ROOM			
Floor Elevation: 786'0"			
Flood Level Elevation: 786'7" Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
						X	

Walkdown: Environment: HARSH System: 27 P&ID: M127/A8

Loc Dwg: M657/E5 Elec Scheme: E124/6 VDR ID: G31-NO22F
Remarks:

Equip ID: NO70-04-012

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2744A	Temperature (°F)	214	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	2.1	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3224	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /RWCU ROOM AIR VENT OUTLET HIGH TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: RWCU PUMP ROOM			
Floor Elevation: 786'0"			
Flood Level Elevation: 786'3" Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
						X	

Walkdown: Environment: HARSH System: 27 P&ID: M127/A8

Loc Dwg: M657/F4 Elec Scheme: E124/6 VDR ID: G31-NO23A
Remarks:

N070-04
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: N070-04-013

Sheet No. 279
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2744B	Temperature (°F)	214	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	2.1	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3224	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /RWCU ROOM AIR VENT OUTLET HIGH TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: RWCU PUMP ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: 786'3" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
						X	

Walkdown: Environment: HARSH System: 27 P&ID: M127/A8

Loc Dwg: M657/F4 Elec Scheme: E124/6 VDR ID: G31-N023B
Remarks:

Equip ID: N070-04-014

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2744C	Temperature (°F)	214	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	2.1	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3224	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /RWCU ROOM AIR VENT OUTLET HIGH TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: RWCU PUMP ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: 786'3" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
						X	

Walkdown: Environment: HARSH System: 27 P&ID: M127/A8

Loc Dwg: M657/E4 Elec Scheme: E124/6 VDR ID: G31-N023C
Remarks:

N070-04
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: N070-04-015

Sheet No. 280
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: N070-04-016

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2744D	Temperature (°F)	214	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	2.1	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3224	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /RWCU ROOM AIR VENT OUTLET HIGH TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: RWCU HEAT EXCH ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: 786'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
						X	

Walkdown: Environment: HARSH System: 27 P&ID: M127/A8

Loc Dwg: M657/E4 Elec Scheme: E124/6 VDR ID: G31-N023D
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2744E	Temperature (°F)	214	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	2.1	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3224	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /RWCU ROOM AIR VENT OUTLET HIGH TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: RWCU HEAT EXCH ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: 786'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
						X	

Walkdown: Environment: HARSH System: 27 P&ID: M127/A8

Loc Dwg: M657/E4 Elec Scheme: E124/6 VDR ID: G31-N023E
Remarks:

N070-04
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: N070-04-017

Sheet No. 281
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2744F	Temperature (°F)	214	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	2.1	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3224	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /RWCU ROOM AIR VENT OUTLET HIGH TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: RWCU HEAT EXCH ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: 786'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
						X	

Walkdown: Environment: HARSH System: 27 P&ID: M127/A8

Loc Dwg: M657/F5 Elec Scheme: E124/6 VDR ID: G31-N023F
Remarks:

Equip ID: N070-04-018

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-2743A	Temperature (°F)	214	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	2.1	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3224	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /RWCU ROOM AIR VENT INLET HIGH TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: 1.5% Demo: 1.5%	Aging	LATER	
Location: RWCU PUMP ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: 786'3" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
						X	

Walkdown: Environment: HARSH System: 27 P&ID: M127/A8

Loc Dwg: M657/E4 Elec Scheme: E124/6 VDR ID: G31-N022A
Remarks:

N070-05
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 282
Revision 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: TEMPERATURE ELEMENT Manufacturer: NECI Model Number: N145C3023	Operating Time	1 HOUR		NONE	001		---	---	GEN NOTE 1
	Temperature (°F)	300		NONE	001		---	---	GEN NOTE 1
	Pressure (PSIG)	1.8		NONE	001		---	---	GEN NOTE 1
	Relative Humidity (%)	100		NONE	001		---	---	GEN NOTE 1
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	1.0 E06		NONE	001		---	---	GEN NOTE 1
	Aging	LATER		---	---		---	---	SEE NOTE (1)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
	1. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

N070-05
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: N070-05-001

Sheet No. 283
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEMS	Operating Time	1 HOUR	
Plant I.D. Number: TE-4447	Temperature (°F)	300	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.8	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3023	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service:	Radiation (Rad)	1.0 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
		X	X	X	X		

Walkdown: Environment: HARSH System: 36 P&ID: M114/G3

Loc Dwg: E328/E3 Elec Scheme: E124/7 VDR ID: B21-N014
Remarks:

Equip ID: N070-05-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEMS	Operating Time	1 HOUR	
Plant I.D. Number: TE-4451A	Temperature (°F)	300	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.8	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3023	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service:	Radiation (Rad)	1.0 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
		X	X	X	X		

Walkdown: Environment: HARSH System: 36 P&ID: M114/G2

Loc Dwg: E328/D3 Elec Scheme: E124/6 VDR ID: B21-N016A
Remarks:

N070-05
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: N070-05-003

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Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEMS	Operating Time	1 HOUR	
Plant I.D. Number: TE-4451B	Temperature (°F)	300	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.8	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3023	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service:	Radiation (Rad)	1.0 E06	
Accuracy: Spec: Demo:	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
		X	X	X	X		

Walkdown: Environment: HARSH System: 36 P&ID: M114/G2

Loc Dwg: E328/F4 Elec Scheme: E124/6 VDR ID: B21-N016B

Remarks:

Equip ID: N070-05-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEMS	Operating Time	1 HOUR	
Plant I.D. Number: TE-2265	Temperature (°F)	300	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.5	
Manufacturer: NECI	Relative Humidity (%)	100	
Model Number: N145C3023	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service:	Radiation (Rad)	2.1 E03	
Accuracy: Spec: Demo:	Aging	LATER	
Location: HPCI ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 731'9"			
Flood Level Elevation: 717'9" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
				X			

Walkdown: Environment: HARSH System: 36 P&ID: M122/A2

Loc Dwg: M660/C3 Elec Scheme: E124/7 VDR ID: E41-N024

Remarks:

N070-06
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 285
Revision
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: TEMPERATURE ELEMENT Manufacturer: NECI 1 Model Number: 110-5009-00345	Operating Time	30 DAYS		NONE	001		---	---	GEN NOTE 1
	Temperature (°F)	SEE GEN NOTE 6		NONE	001		---	---	GEN NOTE 1
	Pressure (PSIG)	SEE GEN NOTE 6		NONE	001		---	---	GEN NOTE 1
	Relative Humidity (%)	100		NONE	001		---	---	GEN NOTE 1
	Chemical Spray	DEMIN WATER		NONE	001		---	---	
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	4.3 E07		NONE	001		---	---	GEN NOTE 1
	Aging	LATER		---	---		---	---	SEE NOTE (1)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
	1. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

N070-06
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: N070-06-001

Sheet No. 286
Revision:
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: TE-4400	Temperature (°F)	SEE GENERAL NOTE NO. 6	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	SEE GENERAL NOTE NO. 6	
Manufacturer: NECI 1	Relative Humidity (%)	100	
Model Number: 110-5009-00345	Chemical Spray	DEMIN WATER	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: MAIN STM LINE A REL TEMP	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 761'2"			
Flood Level Elevation: 744'0" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M114/E4

Loc Dwg: E330/C4 Elec Scheme: E121/2 VDR ID: B21-N004A
Remarks:

Equip ID: N070-06-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: TE-4401	Temperature (°F)	SEE GENERAL NOTE NO. 6	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	SEE GENERAL NOTE NO. 6	
Manufacturer: NECI 1	Relative Humidity (%)	100	
Model Number: 110-5009-00345	Chemical Spray	DEMIN WATER	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: MAIN STM LINE A REL TEMP	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 761'2"			
Flood Level Elevation: 744'0" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M114/E4

Loc Dwg: E330/C3 Elec Scheme: E121/2 VDR ID: B21-N004B
Remarks:

N070-06
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: N070-06-003

Sheet No. 287
Revision:
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAY	
Plant I.D. Number: TE-4402	Temperature (°F)	SEE GEN NOTE 6	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	SEE GEN NOTE 6	
Manufacturer: NECI 1	Relative Humidity (%)	100	
Model Number: 110-5009-00345	Chemical Spray	DEMIN WATER	
Purchase Order Number: APED	Seismic	LATER	
Function/Service:	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 773'-9"			
Flood Level Elevation: 744'0" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M114/E6

Loc Dwg: E330/C4 Elec Scheme: E121/2 VDR ID: B21-N004C
Remarks:

Equip ID: N070-06-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAY	
Plant I.D. Number: TE-4403	Temperature (°F)	SEE GEN NOTE 6	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	SEE GEN NOTE 6	
Manufacturer: NECI 1	Relative Humidity (%)	100	
Model Number: 110-5009-00345	Chemical Spray	DEMIN WATER	
Purchase Order Number: APED	Seismic	LATER	
Function/Service:	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 773'-9"			
Flood Level Elevation: 744'0" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M114/E6

Loc Dwg: E330/C4 Elec Scheme: E121/2 VDR ID: B21-N003A
Remarks:

N070-06
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: N070-06-005

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: TE-4404	Temperature (°F)	SEE GEN NOTE 6	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	SEE GEN NOTE 6	
Manufacturer: NECI 1	Relative Humidity (%)	100	
Model Number: 110-5009-00345	Chemical Spray	DEMIN WATER	
Purchase Order Number: APED	Seismic	LATER	
Function/Service:	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 773'-9"			
Flood Level Elevation: 744'0" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M114/D5

Loc Dwg: E330/F4 Elec Scheme: E121/2 VDR ID: B21-N003B
Remarks:

Equip ID: N070-06-006

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: TE-4405	Temperature (°F)	SEE GEN NOTE 6	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	SEE GEN NOTE 6	
Manufacturer: NECI 1	Relative Humidity (%)	100	
Model Number: 110-5009-00345	Chemical Spray	DEMIN WATER	
Purchase Order Number: APED	Seismic	LATER	
Function/Service:	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 773'-9"			
Flood Level Elevation: 744'0" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M114/D4

Loc Dwg: E330/F4 Elec Scheme: E121/2 VDR ID: B21-N004D
Remarks:

N070-06
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: N070-06-007

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: TE-4406	Temperature (°F)	SEE GEN NOTE 6	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	SEE GEN NOTE 6	
Manufacturer: NECI 1	Relative Humidity (%)	100	
Model Number: 110-5009-00345	Chemical Spray	DEMIN WATER	
Purchase Order Number: APED	Seismic	LATER	
Function/Service:	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 773'-9"			
Flood Level Elevation: 744'0" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M114/E6

Loc Dwg: E330/F3 Elec Scheme: E121/2 VDR ID: B21-N004E

Remarks:

Equip ID: N070-06-008

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	30 DAYS	
Plant I.D. Number: TE-4407	Temperature (°F)	SEE GEN NOTE 6	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	SEE GEN NOTE 6	
Manufacturer: NECI 1	Relative Humidity (%)	100	
Model Number: 110-5009-00345	Chemical Spray	DEMIN WATER	
Purchase Order Number: APED	Seismic	LATER	
Function/Service:	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 773'-9"			
Flood Level Elevation: 744'0" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 36 P&ID: M114/E6

Loc Dwg: E330/E3 Elec Scheme: E121/2 VDR ID: B21-N004F

Remarks:

0004-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 290
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Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: 600V POWER AND CONTROL CABLES Manufacturer: OKONITE Model Number: NA	Operating Time	30 DAYS		126 DAYS	001		REF. (A)	TYPE TEST	NONE
	Temperature (°F)	SEE GEN NOTE 6		345	001		REF. (A)	TYPE TEST	NONE
	Pressure (PSIG)	SEE GEN NOTE 6		112	001		REF. (A)	TYPE TEST	NONE
	Relative Humidity (%)	100		100	001		REF. (A)	TYPE TEST	NONE
	Chemical Spray	NOT APPLICABLE		SEE NOTE (1)	001		REF. (A)	TYPE TEST	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	1.6 E08		2.0 E08	001		REF. (A)	TYPE TEST	NONE
	Aging	LATER		---	---		---	---	SEE NOTE (2)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. OKONITE REPORT NO.NQRN-1 AND OKONITE LETTER J.S. LASKY TO J.L. HURLEY DATED 6-4-80	1. SPRAY SOLUTIONS OF H3BO3 AND NA2S2O3, AND NA OH IN TAP WATER USED IN TEST EXCEEDS REQUIREMENT OF DEMINERALIZED WATER SPRAY 2. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: 0004-01-001

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: ANCILLARY COMPONENTS	Operating Time	30 DAYS	RAD DOSE IS FROM SGTS
Plant I.D. Number: 600V CABLE	Temperature (°F)	SEE GEN NOTE 6	
Component: 600V POWER AND CONTROL CABLES	Pressure (PSIG)	SEE GEN NOTE 6	
Manufacturer: OKONITE	Relative Humidity (%)	100	
Model Number: NA	Chemical Spray	DEMIN WATER	
Purchase Order Number: E-019	Seismic	LATER	
Function/Service: SUPPORT/SUPPLY POWER AND CONTROL TO EQUIPMENT	Radiation (Rad)	1.6 E08	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: VARIOUS	Submergence	NOT APPLICABLE	
Floor Elevation: VARIOUS			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 32 P&ID: NA

Loc Dwg: NA Elec Scheme: NA VDR ID:

Remarks:

Equip ID:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System:	Operating Time		
Plant I.D. Number:	Temperature (°F)		
Component:	Pressure (PSIG)		
Manufacturer:	Relative Humidity (%)		
Model Number:	Chemical Spray		
Purchase Order Number:	Seismic		
Function/Service:	Radiation (Rad)		
Accuracy: Spec: Demo:	Aging		
Location:	Submergence		
Floor Elevation:			
Flood Level Elevation: Above Flood Level: Yes: No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM

Walkdown: Environment: System: P&ID:

Loc Dwg: Elec Scheme: VDR ID:

Remarks:

0004-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

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Revision 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: 600V SHIELDED CABLES Manufacturer: OKONITE Model Number: 1/C#14,4/C#14,7/C#14	Operating Time	30 DAYS		126 DAYS	001		REF. (A)	TYPE TEST	NONE
	Temperature (°F)	SEE GEN NOTE 6		345	001		REF. (A)	TYPE TEST	NONE
	Pressure (PSIG)	SEE GEN NOTE 6		112	001		REF. (A)	TYPE TEST	NONE
	Relative Humidity (%)	100		100	001		REF. (A)	TYPE TEST	NONE
	Chemical Spray	DEMIN WATER		SEE NOTE (1)	001		REF. (A)	TYPE TEST	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	1.6 E08		2.0 E08	001		REF. (A)	TYPE TEST	NONE
	Aging	LATER		---	---		---	---	SEE NOTE (2)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. OKONITE REPORT NO. NQRN-1 WITH OKONITE LETTER J.S. LASKY TO J.L. HURLEY DATED 6-4-80	1. SPRAY SOLUTIONS OF H3BO3 AND NA2S2O3 AND NAOH IN TAP WATER USED IN TEST EXCEEDS REQUIREMENT OF DEMINERALIZED WATER SPRAY 2. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

0004-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: 0004-02-001

Sheet No. 293
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: ANCILLARY COMPONENTS	Operating Time	30 DAYS	RAD DOSE IS FROM SGTS
Plant I.D. Number: 600V CABLE	Temperature (°F)	SEE GEN NOTE 6	
Component: 600V SHIELDED CABLES	Pressure (PSIG)	SEE GEN NOTE 6	
Manufacturer: OKONITE	Relative Humidity (%)	100	
Model Number: 1/C#14, 4/C#14, 7/C#14	Chemical Spray	DEMIN WATER	
Purchase Order Number: E-019A	Seismic	LATER	
Function/Service: SUPPORT/SUPPLY INSTRUMENT SIGNAL TO EQUIPMENT	Radiation (Rad)	1.6 E08	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: VARIOUS	Submergence	NOT APPLICABLE	
Floor Elevation: VARIOUS			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 32 P&ID: NA

Loc Dwg: NA Elec Scheme: NA VDR ID:

Remarks:

Equip ID:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System:	Operating Time		
Plant I.D. Number:	Temperature (°F)		
Component:	Pressure (PSIG)		
Manufacturer:	Relative Humidity (%)		
Model Number:	Chemical Spray		
Purchase Order Number:	Seismic		
Function/Service:	Radiation (Rad)		
Accuracy: Spec: Demo:	Aging		
Location:	Submergence		
Floor Elevation:			
Flood Level Elevation: Above Flood Level: Yes: No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM

Walkdown: Environment: System: P&ID:

Loc Dwg: Elec Scheme: VDR ID:

Remarks:

P129-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

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EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: TEMPERATURE SWITCH Manufacturer: PENN Model Number: A-19ABB-6	Operating Time	30 DAYS		SEE GEN NOTE 4	001		---	---	NONE
	Temperature (°F)	104		SEE GEN NOTE 7	001		---	---	NONE
	Pressure (PSIG)	0		SEE GEN NOTE 7	001		---	---	NONE
	Relative Humidity (%)	100		SEE GEN NOTE 7	001		---	---	NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	1.6 E08		NONE	001		---	---	SEE NOTE (1)
	Aging	LATER		---	---		---	---	SEE NOTE (2)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
	1. SEE ACTION ITEM NO 25 2. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: P129-02-001

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: STANDBY GAS TREATMENT SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: TS-5808A	Temperature (°F)	104	
Component: TEMPERATURE SWITCH	Pressure (PSIG)	0	
Manufacturer: PENN	Relative Humidity (%)	100	
Model Number: A-19ABB-6	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-81	Seismic	LATER	
Function/Service:	Radiation (Rad)	1.6 E08	
Accuracy: Spec: Demo:	Aging	LATER	
Location: SGT ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 10 P&ID: M158/G5

Loc Dwg: E315/G5 Elec Scheme: E113/13 VDR ID:
Remarks:

Equip ID: P129-02-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: STANDBY GAS TREATMENT SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: TS-5808B	Temperature (°F)	104	
Component: TEMPERATURE SWITCH	Pressure (PSIG)	0	
Manufacturer: PENN	Relative Humidity (%)	100	
Model Number: A-19ABB-6	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-81	Seismic	LATER	
Function/Service:	Radiation (Rad)	1.6 E08	
Accuracy: Spec: Demo:	Aging	LATER	
Location: SGT ROOM	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 10 P&ID: M158/C5

Loc Dwg: E315/F4 Elec Scheme: E113/13 VDR ID:
Remarks:

P381-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

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EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: PRESSURE SWITCH Manufacturer: PRESSURE CONTROLS Model Number: 219B4562	Operating Time	30 DAYS		30 DAYS	001		REF. (A)	TYPE TEST/ANA	NONE
	Temperature (°F)	SEE GEN NOTE 6		340	001		REF. (A)	TYPE TEST	NONE
	Pressure (PSIG)	SEE GEN NOTE 6		65	001		REF. (A)	TYPE TEST	NONE
	Relative Humidity (%)	100		100	001		REF. (A)	TYPE TEST	NONE
	Chemical Spray	DEMIN WATER		SEE NOTE (1)	001		REF. (A)	TYPE TEST	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	4.3 E07		5.0 E07	001		REF. (A)	TYPE TEST	NONE
	Aging	LATER		---	---		---	---	SEE NOTE (2)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. WYLE LABORATORIES TEST REPORT NO. 58572 DATED NOV 12, 1980	1. ACCIDENT CONDITIONS WYLE LAB TEST REPORT SECTION 3.6.1 STATES THIS EQUIPMENT SPECIMEN WAS SUBJECTED TO DIRECT SPRAY IMPINGEMENT. LOCA TEST SETUP INCLUDED STEAM, PRESSURE AND HOT WATER SPRAY. DURATION 0 SEC, 5 MIN, 3 HRS, 6 HRS, 1 DAY, 5 DAYS

P381-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
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EQUIPMENT QUALIFICATION REPORT

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DOCUMENTATION REFERENCES:	NOTES:
	TEMP. (F) 340 340 340 320 250 200 PRESSURE (PSIG) 65 65 45 45 25 20 RELATIVE HUMIDITY 100% 100% 100% 100% 100% 100% 2. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30,1982.

P381-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
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Equip ID: P381-01-001

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EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: PS-4400A	Temperature (°F)	SEE GENERAL NOTE 6	
Component: PRESSURE SWITCH	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: PRESSURE CONTROLS	Relative Humidity (%)	100	
Model Number: 219B4562	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-767	Seismic	LATER	
Function/Service: POST ACCIDENT PRESSURE INDICATION	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 35 P&ID: M114/

Loc Dwg: M331/ Elec Scheme: E121/2B VDR ID:
Remarks:

Equip ID: P381-01-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: PS-4400B	Temperature (°F)	SEE GENERAL NOTE 6	
Component: PRESSURE SWITCH	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: PRESSURE CONTROLS	Relative Humidity (%)	100	
Model Number: 219B4562	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-767	Seismic	LATER	
Function/Service: POST ACCIDENT PRESSURE INDICATION	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 35 P&ID: M114/

Loc Dwg: M331/ Elec Scheme: E121/2B VDR ID:
Remarks:

P381-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: P381-01-003

Sheet No. 299
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: PS-4400C	Temperature (°F)	SEE GENERAL NOTE 6	
Component: PRESSURE SWITCH	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: PRESSURE CONTROLS	Relative Humidity (%)	100	
Model Number: 219B4562	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-767	Seismic	LATER	
Function/Service: POST ACCIDENT PRESSURE INDICATION	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 35 P&ID: M114/

Loc Dwg: M331/ Elec Scheme: E121/2B VDR ID:
Remarks:

Equip ID: P381-01-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: PS-4401A	Temperature (°F)	SEE GENERAL NOTE 6	
Component: PRESSURE SWITCH	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: PRESSURE CONTROLS	Relative Humidity (%)	100	
Model Number: 219B4562	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-767	Seismic	LATER	
Function/Service: POST ACCIDENT PRESSURE INDICATION	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 35 P&ID: M114/

Loc Dwg: M331/ Elec Scheme: E121/2B VDR ID:
Remarks:

P381-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: P381-01-005

Sheet No. 300
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: PS-4401B	Temperature (°F)	SEE GENERAL NOTE 6	
Component: PRESSURE SWITCH	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: PRESSURE CONTROLS	Relative Humidity (%)	100	
Model Number: 219B4562	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-767	Seismic	LATER	
Function/Service: POST ACCIDENT PRESSURE INDICATION	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 35 P&ID: M114/

Loc Dwg: M331/ Elec Scheme: E121/2B VDR ID:
Remarks:

Equip ID: P381-01-006

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: PS-4401C	Temperature (°F)	SEE GENERAL NOTE 6	
Component: PRESSURE SWITCH	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: PRESSURE CONTROLS	Relative Humidity (%)	100	
Model Number: 219B4562	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-767	Seismic	LATER	
Function/Service: POST ACCIDENT PRESSURE INDICATION	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 35 P&ID: M114/

Loc Dwg: M331/ Elec Scheme: E121/2B VDR ID:
Remarks:

P381-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: P381-01-007

Sheet No. 301
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: PS-4402A	Temperature (°F)	SEE GENERAL NOTE 6	
Component: PRESSURE SWITCH	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: PRESSURE CONTROLS	Relative Humidity (%)	100	
Model Number: 219B4562	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-767	Seismic	LATER	
Function/Service: POST ACCIDENT PRESSURE INDICATION	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 35 P&ID: M114/

Loc Dwg: M331/ Elec Scheme: E121/2B VDR ID:

Remarks:

Equip ID: P381-01-008

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: PS-4402B	Temperature (°F)	SEE GENERAL NOTE 6	
Component: PRESSURE SWITCH	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: PRESSURE CONTROLS	Relative Humidity (%)	100	
Model Number: 219B4562	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-767	Seismic	LATER	
Function/Service: POST ACCIDENT PRESSURE INDICATION	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 35 P&ID: M114/

Loc Dwg: M331/ Elec Scheme: E121/2B VDR ID:

Remarks:

P381-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: P381-01-009

Sheet No. 302
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: PS-4402C	Temperature (°F)	SEE GENERAL NOTE 6	
Component: PRESSURE SWITCH	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: PRESSURE CONTROLS	Relative Humidity (%)	100	
Model Number: 219B4562	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-767	Seismic	LATER	
Function/Service: POST ACCIDENT PRESSURE INDICATION	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 35 P&ID: M114/

Loc Dwg: M331/ Elec Scheme: E121/2B VDR ID:
Remarks:

Equip ID: P381-01-010

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: PS-4403A	Temperature (°F)	SEE GENERAL NOTE 6	
Component: PRESSURE SWITCH	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: PRESSURE CONTROLS	Relative Humidity (%)	100	
Model Number: 219B4562	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-767	Seismic	LATER	
Function/Service: POST ACCIDENT PRESSURE INDICATION	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 35 P&ID: M114/

Loc Dwg: M331/ Elec Scheme: E121/2B VDR ID:
Remarks:

P381-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: P381-01-011

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Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: PS-4403B	Temperature (°F)	SEE GENERAL NOTE 6	
Component: PRESSURE SWITCH	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: PRESSURE CONTROLS	Relative Humidity (%)	100	
Model Number: 219B4562	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-767	Seismic	LATER	
Function/Service: POST ACCIDENT PRESSURE INDICATION	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 35 P&ID: M114/

Loc Dwg: M331/ Elec Scheme: E121/2B VDR ID:
Remarks:

Equip ID: P381-01-012

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: PS-4403C	Temperature (°F)	SEE GENERAL NOTE 6	
Component: PRESSURE SWITCH	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: PRESSURE CONTROLS	Relative Humidity (%)	100	
Model Number: 219B4562	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-767	Seismic	LATER	
Function/Service: POST ACCIDENT PRESSURE INDICATION	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 35 P&ID: M114/

Loc Dwg: M331/ Elec Scheme: E121/2B VDR ID:
Remarks:

P381-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: P381-01-013

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Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: PS-4404A	Temperature (°F)	SEE GENERAL NOTE 6	
Component: PRESSURE SWITCH	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: PRESSURE CONTROLS	Relative Humidity (%)	100	
Model Number: 219B4562	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-767	Seismic	LATER	
Function/Service: POST ACCIDENT PRESSURE INDICATION	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 35 P&ID: M114/

Loc Dwg: M331/ Elec Scheme: E121/2B VDR ID:
Remarks:

Equip ID: P381-01-014

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: PS-4404B	Temperature (°F)	SEE GENERAL NOTE 6	
Component: PRESSURE SWITCH	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: PRESSURE CONTROLS	Relative Humidity (%)	100	
Model Number: 219B4562	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-767	Seismic	LATER	
Function/Service: POST ACCIDENT PRESSURE INDICATION	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 35 P&ID: M114/

Loc Dwg: M331/ Elec Scheme: E121/2B VDR ID:
Remarks:

P381-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: P381-01-015

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Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: PS-4404C	Temperature (°F)	SEE GENERAL NOTE 6	
Component: PRESSURE SWITCH	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: PRESSURE CONTROLS	Relative Humidity (%)	100	
Model Number: 219B4562	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-767	Seismic	LATER	
Function/Service: POST ACCIDENT PRESSURE INDICATION	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 35 P&ID: M114/

Loc Dwg: M331/ Elec Scheme: E121/2B VDR ID:
Remarks:

Equip ID: P381-01-016

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: PS-4405A	Temperature (°F)	SEE GENERAL NOTE 6	
Component: PRESSURE SWITCH	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: PRESSURE CONTROLS	Relative Humidity (%)	100	
Model Number: 219B4562	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-767	Seismic	LATER	
Function/Service: POST ACCIDENT PRESSURE INDICATION	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 35 P&ID: M114/

Loc Dwg: M331/ Elec Scheme: E121/2B VDR ID:
Remarks:

P381-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: P381-01-017

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Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: PS-4405B	Temperature (°F)	SEE GENERAL NOTE 6	
Component: PRESSURE SWITCH	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: PRESSURE CONTROLS	Relative Humidity (%)	100	
Model Number: 219B4562	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-767	Seismic	LATER	
Function/Service: POST ACCIDENT PRESSURE INDICATION	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 35 P&ID: M114/

Loc Dwg: M331/ Elec Scheme: E121/2B VDR ID:
Remarks:

Equip ID: P381-01-018

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: PS-4405C	Temperature (°F)	SEE GENERAL NOTE 6	
Component: PRESSURE SWITCH	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: PRESSURE CONTROLS	Relative Humidity (%)	100	
Model Number: 219B4562	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-767	Seismic	LATER	
Function/Service: POST ACCIDENT PRESSURE INDICATION	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 35 P&ID: M114/

Loc Dwg: M331/ Elec Scheme: E121/2B VDR ID:
Remarks:

P381-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: P381-01-019

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Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: PS-4406A	Temperature (°F)	SEE GENERAL NOTE 6	
Component: PRESSURE SWITCH	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: PRESSURE CONTROLS	Relative Humidity (%)	100	
Model Number: 219B4562	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-767	Seismic	LATER	
Function/Service: POST ACCIDENT PRESSURE INDICATION	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 35 P&ID: M114/

Loc Dwg: M331/ Elec Scheme: E121/2B VDR ID:
Remarks:

Equip ID: P381-01-020

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: PS-4406B	Temperature (°F)	SEE GENERAL NOTE 6	
Component: PRESSURE SWITCH	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: PRESSURE CONTROLS	Relative Humidity (%)	100	
Model Number: 219B4562	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-767	Seismic	LATER	
Function/Service: POST ACCIDENT PRESSURE INDICATION	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 35 P&ID: M114/

Loc Dwg: M331/ Elec Scheme: E121/2B VDR ID:
Remarks:

P381-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: P381-01-021

Sheet No. 308
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: PS-4406C	Temperature (°F)	SEE GENERAL NOTE 6	
Component: PRESSURE SWITCH	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: PRESSURE CONTROLS	Relative Humidity (%)	100	
Model Number: 219B4562	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-767	Seismic	LATER	
Function/Service: POST ACCIDENT PRESSURE INDICATION	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 35 P&ID: M114/

Loc Dwg: M331/ Elec Scheme: E121/2B VDR ID:
Remarks:

Equip ID: P381-01-022

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: PS-4407A	Temperature (°F)	SEE GENERAL NOTE 6	
Component: PRESSURE SWITCH	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: PRESSURE CONTROLS	Relative Humidity (%)	100	
Model Number: 219B4562	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-767	Seismic	LATER	
Function/Service: POST ACCIDENT PRESSURE INDICATION	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 35 P&ID: M114/

Loc Dwg: M331/ Elec Scheme: E121/2B VDR ID:
Remarks:

P381-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: P381-01-023

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: PS-4407B	Temperature (°F)	SEE GENERAL NOTE 6	
Component: PRESSURE SWITCH	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: PRESSURE CONTROLS	Relative Humidity (%)	100	
Model Number: 219B4562	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-767	Seismic	LATER	
Function/Service: POST ACCIDENT PRESSURE INDICATION	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 35 P&ID: M114/

Loc Dwg: M331/ Elec Scheme: E121/2B VDR ID:
Remarks:

Equip ID: P381-01-024

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: PS-4407C	Temperature (°F)	SEE GENERAL NOTE 6	
Component: PRESSURE SWITCH	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: PRESSURE CONTROLS	Relative Humidity (%)	100	
Model Number: 219B4562	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-767	Seismic	LATER	
Function/Service: POST ACCIDENT PRESSURE INDICATION	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 35 P&ID: M114/

Loc Dwg: M331/ Elec Scheme: E121/2B VDR ID:
Remarks:

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Facility: DUANE ARNOLD
Unit 1
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EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: SPECIAL COAXIAL CABLE Manufacturer: RAYCHEM Model Number: N/A	Operating Time	30 DAYS		30 DAYS	001		REF. (A)	TYPE TEST	NONE
	Temperature (°F)	SEE GEN NOTE 6		351	001		REF. (A)	TYPE TEST	NONE
	Pressure (PSIG)	SEE GEN NOTE 6		70	001		REF. (A)	TYPE TEST	NONE
	Relative Humidity (%)	100		100	001		REF. (A)	TYPE TEST	NONE
	Chemical Spray	DEMIN WATER		SEE NOTE (1)	001		REF. (A)	TYPE TEST	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	4.3 E07		2.0 E08	001		REF. (A)	TYPE TEST	NONE
	Aging	LATER		---	---		---	---	SEE NOTE (2)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. THE FRANKLIN INSTITUTE RESEARCH LABORATORIES TECHNICAL REPORT NO. F-C4033-1 DATED JANUARY 1975	1. SPRAY SOLUTION OF H3BO3 AND NA2S2O3 AND NAOH IN TAP WATER USED IN TEST EXCEEDS REQUIREMENT OF DEMINERALIZED WATER SPRAY. 2. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

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Facility: DUANE ARNOLD
Unit: 1
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: ANCILLARY COMPONENTS	Operating Time	30 DAYS	NOT USED IN SGTS ROOM
Plant I.D. Number: SPECIAL COAXIAL CABLE	Temperature (°F)	SEE GEN NOTE 6	
Component: SPECIAL COAXIAL CABLE	Pressure (PSIG)	SEE GEN NOTE 6	
Manufacturer: RAYCHEM	Relative Humidity (%)	100	
Model Number: N/A	Chemical Spray	DEMIN WATER	
Purchase Order Number: E-023A	Seismic	LATER	
Function/Service: SUPPORT/SUPPLIES INSTRUMENTATION SIGNALS	Radiation (Rad)	4.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: VARIOUS	Submergence	NOT APPLICABLE	
Floor Elevation: VARIOUS			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 32 P&ID: NA

Loc Dwg: NA Elec Scheme: NA VDR ID:

Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System:	Operating Time		
Plant I.D. Number:	Temperature (°F)		
Component:	Pressure (PSIG)		
Manufacturer:	Relative Humidity (%)		
Model Number:	Chemical Spray		
Purchase Order Number:	Seismic		
Function/Service:	Radiation (Rad)		
Accuracy: Spec: Demo:	Aging		
Location:	Submergence		
Floor Elevation:			
Flood Level Elevation: Above Flood Level: Yes: No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM

Walkdown: Environment: System: P&ID:

Loc Dwg: Elec Scheme: VDR ID:

Remarks:

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

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EQUIPMENT QUALIFICATION REPORT
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EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: SPLICING KITS Manufacturer: RAYCHEM Model Number: WCSF-N	Operating Time	30 DAYS		30 DAYS	001		REF. (A)	TYPE TEST	NONE
	Temperature (°F)	SEE GEN NOTE 6		357	001		REF. (A)	TYPE TEST	NONE
	Pressure (PSIG)	SEE GEN NOTE 6		70	001		REF. (A)	TYPE TEST	NONE
	Relative Humidity (%)	100		100	001		REF. (A)	TYPE TEST	NONE
	Chemical Spray	DEMIN WATER		SEE NOTE (1)	001		REF. (A)	TYPE TEST	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	4.3 E07		2.0 E08	001		REF. (A)	TYPE TEST	NONE
	Aging	LATER		---	---		---	---	SEE NOTE (2)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. THE FRANKLIN INSTITUTE RESEARCH LABORATORIES TECHNICAL REPORT NO F-C4033-3 DATED JANUARY, 1975	1. SPRAY SOLUTION OF H3BO3 AND N2S2O3 AND NAOH IN TAP WATER USED IN. TEST EXCEEDS REQUIREMENT OF DEMINERALIZED WATER SPRAY 2. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

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Facility: DUANE ARNOLD
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: ANCILLARY COMPONENTS	Operating Time	30 DAYS	NOT USED IN SGTS ROOM.
Plant I.D. Number: SPLICING KITS	Temperature (°F)	SEE GEN NOTE 6	
Component: SPLICING KITS	Pressure (PSIG)	SEE GEN NOTE 6	
Manufacturer: RAYCHEM	Relative Humidity (%)	100	
Model Number: WCSF-N	Chemical Spray	DEMIN WATER	
Purchase Order Number: E-054	Seismic	LATER	
Function/Service: SUPPORT/CABLE CONNECTIONS	Radiation (Rad)	4.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: VARIOUS	Submergence	NOT APPLICABLE	
Floor Elevation: VARIOUS			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 32 P&ID: NA

Loc Dwg: NA Elec Scheme: NA VDR ID:

Remarks:

Equip ID:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System:	Operating Time		
Plant I.D. Number:	Temperature (°F)		
Component:	Pressure (PSIG)		
Manufacturer:	Relative Humidity (%)		
Model Number:	Chemical Spray		
Purchase Order Number:	Seismic		
Function/Service:	Radiation (Rad)		
Accuracy: Spec: Demo:	Aging		
Location:	Submergence		
Floor Elevation:			
Flood Level Elevation: Above Flood Level: Yes: No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM

Walkdown: Environment: System: P&ID:

Loc Dwg: Elec Scheme: VDR ID:

Remarks:

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EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: TEMPERATURE ELEMENT Manufacturer: ROSEMOUNT Model Number: 104MA23ABBB	Operating Time	1 HOUR		1 HOUR	001		REF. (A)	ANALYSIS	GEN NOTE 12
	Temperature (°F)	300		300	001		REF. (A)	ANALYSIS	GEN NOTE 12
	Pressure (PSIG)	1.8		1.8	001		REF. (A)	ANALYSIS	GEN NOTE 12
	Relative Humidity (%)	100		100	001		REF. (A)	ANALYSIS	GEN NOTE 12
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	1.0 E06		4.0 E06	001		REF. (A)	ANALYSIS	GEN NOTE 12
	Aging	LATER		---	---		---	---	SEE NOTE (1)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. LETTER FROM DON WHALEN OF ROSEMOUNT, INC TO MR. J.L. HURLY OF BECHTEL DATED JULY 11, 1980	1. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

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Facility: DUANE ARNOLD
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-4443A	Temperature (°F)	300	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.8	
Manufacturer: ROSEMOUNT	Relative Humidity (%)	100	
Model Number: 104MA23ABBB	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-170	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM TUNNEL HIGH TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: NONE Demo: 6 F	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
		X	X	X	X		

Walkdown: Environment: HARSH System: 27 P&ID: M114/H2

Loc Dwg: E328/D3 Elec Scheme: E122/9 VDR ID:
Remarks:

Equip ID: R369-01-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-4443B	Temperature (°F)	300	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.8	
Manufacturer: ROSEMOUNT	Relative Humidity (%)	100	
Model Number: 104MA23ABBB	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-170	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM TUNNEL HIGH TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: NDNE Demo: 6 F	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
		X	X	X	X		

Walkdown: Environment: HARSH System: 27 P&ID: M114/H2

Loc Dwg: E328/D3 Elec Scheme: E122/9 VDR ID:
Remarks:

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-4443C	Temperature (°F)	300	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.8	
Manufacturer: ROSEMOUNT	Relative Humidity (%)	100	
Model Number: 104MA23ABBB	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-170	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM TUNNEL HIGH TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: NONE Demo: 6 F	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
		X	X	X	X		

Walkdown: Environment: HARSH System: 27 P&ID: M114/H1

Loc Dwg: E328/D4 Elec Scheme: E122/9 VDR ID:
Remarks:

Equip ID: R369-01-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-4443D	Temperature (°F)	300	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.8	
Manufacturer: ROSEMOUNT	Relative Humidity (%)	100	
Model Number: 104MA23ABBB	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-170	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM TUNNEL HIGH TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: NONE Demo: 6 F	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
		X	X	X	X		

Walkdown: Environment: HARSH System: 27 P&ID: M114/H1

Loc Dwg: E328/D4 Elec Scheme: E122/9 VDR ID:
Remarks:

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Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
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Equip ID: R369-01-006

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-4444A	Temperature (°F)	300	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.8	
Manufacturer: ROSEMOUNT	Relative Humidity (%)	100	
Model Number: 104MA23ABBB	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-170	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM TUNNEL HIGH TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: NONE Demo: 6 F	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
		X	X	X	X		

Walkdown: Environment: HARSH System: 27 P&ID: M114/H1

Loc Dwg: E328/C2 Elec Scheme: E122/9 VDR ID:
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-4444B	Temperature (°F)	300	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.8	
Manufacturer: ROSEMOUNT	Relative Humidity (%)	100	
Model Number: 104MA23ABBB	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-170	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM TUNNEL HIGH TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: NONE Demo: 6 F	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
		X	X	X	X		

Walkdown: Environment: HARSH System: 27 P&ID: M114/H1

Loc Dwg: E328/C3 Elec Scheme: E122/9 VDR ID:
Remarks:

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EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-4444C	Temperature (°F)	300	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.8	
Manufacturer: ROSEMOUNT	Relative Humidity (%)	100	
Model Number: 104MA23ABBB	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-170	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM TUNNEL HIGH TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: NONE Demo: 6 F	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
		X	X	X	X		

Walkdown: Environment: HARSH System: 27 P&ID: M114/H2

Loc Dwg: E328/C3 Elec Scheme: E122/9 VDR ID:
Remarks:

Equip ID: R369-01-008

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-4444D	Temperature (°F)	300	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.8	
Manufacturer: ROSEMOUNT	Relative Humidity (%)	100	
Model Number: 104MA23ABBB	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-170	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM TUNNEL HIGH TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: NONE Demo: 6 F	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
		X	X	X	X		

Walkdown: Environment: HARSH System: 27 P&ID: M114/H2

Loc Dwg: E328/C4 Elec Scheme: E122/9 VDR ID:
Remarks:

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: R369-01-010

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-4445A	Temperature (°F)	300	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.8	
Manufacturer: ROSEMOUNT	Relative Humidity (%)	100	
Model Number: 104MA23ABBB	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-170	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM TUNNEL HIGH TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: NONE Demo: 6 F	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
		X	X	X	X		

Walkdown: Environment: HARSH System: 27 P&ID: M114/H1

Loc Dwg: E328/E2 Elec Scheme: E122/9 VDR ID:
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-4445B	Temperature (°F)	300	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.8	
Manufacturer: ROSEMOUNT	Relative Humidity (%)	100	
Model Number: 104MA23ABBB	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-170	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM TUNNEL HIGH TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: NONE Demo: 6 F	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
		X	X	X	X		

Walkdown: Environment: HARSH System: 27 P&ID: M114/H1

Loc Dwg: E328/E3 Elec Scheme: E122/9 VDR ID:
Remarks:

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EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-4445C	Temperature (°F)	300	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.8	
Manufacturer: ROSEMOUNT	Relative Humidity (%)	100	
Model Number: 104MA23ABBB	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-170	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM TUNNEL HIGH TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: NONE Demo: 6 F	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
		X	X	X	X		

Walkdown: Environment: HARSH System: 27 P&ID: M114/H2

Loc Dwg: E328/E3 Elec Scheme: E122/9 VDR ID:
Remarks:

Equip ID: R369-01-012

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-4445D	Temperature (°F)	300	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.8	
Manufacturer: ROSEMOUNT	Relative Humidity (%)	100	
Model Number: 104MA23ABBB	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-170	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM TUNNEL HIGH TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: NONE Demo: 6 F	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
		X	X	X	X		

Walkdown: Environment: HARSH System: 27 P&ID: M114/H2

Loc Dwg: E328/E4 Elec Scheme: E122/9 VDR ID:
Remarks:

R369-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: R369-01-013

Sheet No. 321
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: R369-01-014

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-4446A	Temperature (°F)	300	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.8	
Manufacturer: ROSEMOUNT	Relative Humidity (%)	100	
Model Number: 104MA23ABBB	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-170	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM TUNNEL HIGH TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: NONE Demo: 6 F	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
		X	X	X	X		

Walkdown: Environment: HARSH System: 27 P&ID: M114/H1

Loc Dwg: E328/E2 Elec Scheme: E122/9 VDR ID:
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-4446B	Temperature (°F)	300	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.8	
Manufacturer: ROSEMOUNT	Relative Humidity (%)	100	
Model Number: 104MA23ABBB	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-170	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM TUNNEL HIGH TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: NONE Demo: 6 F	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
		X	X	X	X		

Walkdown: Environment: HARSH System: 27 P&ID: M114/H1

Loc Dwg: E328/E3 Elec Scheme: E122/9 VDR ID:
Remarks:

R369-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: R369-01-015

Sheet No. 322
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-4446C	Temperature (°F)	300	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.8	
Manufacturer: ROSEMOUNT	Relative Humidity (%)	100	
Model Number: 104MA23ABBB	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-170	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM TUNNEL HIGH TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: NONE Demo: 6 F	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
		X	X	X	X		

Walkdown: Environment: HARSH System: 27 P&ID: M114/H2

Loc Dwg: E328/E3 Elec Scheme: E122/9 VDR ID:
Remarks:

Equip ID: R369-01-016

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-4446D	Temperature (°F)	300	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.8	
Manufacturer: ROSEMOUNT	Relative Humidity (%)	100	
Model Number: 104MA23ABBB	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-170	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /MAIN STEAM TUNNEL HIGH TEMPERATURE	Radiation (Rad)	1.0 E06	
Accuracy: Spec: NONE Demo: 6 F	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
		X	X	X	X		

Walkdown: Environment: HARSH System: 27 P&ID: M114/H2

Loc Dwg: E328/E4 Elec Scheme: E122/9 VDR ID:
Remarks:

R369-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: R369-01-017

Sheet No. 323
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-4477A	Temperature (°F)	300	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.8	
Manufacturer: ROSEMOUNT	Relative Humidity (%)	100	
Model Number: 104MA23ABBB	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-170	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /HIGH TEMPERATURE NEAR THE TURBINE STOP VALVES	Radiation (Rad)	1.0 E06	
Accuracy: Spec: NONE Demo: 6 F	Aging	LATER	
Location: TURBINE BLDG.	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
		X	X				

Walkdown: Environment: HARSH System: 27 P&ID: M103/E6

Loc Dwg: E309/D8 Elec Scheme: E122/9 VDR ID:
Remarks:

Equip ID: R369-01-018

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-4477B	Temperature (°F)	300	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.8	
Manufacturer: ROSEMOUNT	Relative Humidity (%)	100	
Model Number: 104MA23ABBB	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-170	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /HIGH TEMPERATURE NEAR THE STEAM TUNNEL	Radiation (Rad)	1.0 E06	
Accuracy: Spec: NONE Demo: 6 F	Aging	LATER	
Location: TURBINE BLDG.	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
		X	X				

Walkdown: Environment: HARSH System: 27 P&ID: M103/F8

Loc Dwg: E308/D7 Elec Scheme: E122/9 VDR ID:
Remarks:

R369-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: R369-01-019

Sheet No. 324
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-4478A	Temperature (°F)	300	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.8	
Manufacturer: ROSEMOUNT	Relative Humidity (%)	100	
Model Number: 104MA23ABBB	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-170	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /HIGH TEMPERATURE NEAR THE TURBINE STOP VALVES	Radiation (Rad)	1.0 E06	
Accuracy: Spec: NONE Demo: 6 F	Aging	LATER	
Location: TURBINE BLDG.	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
		X	X				

Walkdown: Environment: HARSH System: 27 P&ID: M103/F7

Loc Dwg: E309/D8 Elec Scheme: E122/9 VDR ID:
Remarks:

Equip ID: R369-01-020

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-4478B	Temperature (°F)	300	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.8	
Manufacturer: ROSEMOUNT	Relative Humidity (%)	100	
Model Number: 104MA23ABBB	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-170	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /HIGH TEMPERATURE NEAR THE STEAM TUNNEL	Radiation (Rad)	1.0 E06	
Accuracy: Spec: NONE Demo: 6 F	Aging	LATER	
Location: TURBINE BLDG.	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
		X	X				

Walkdown: Environment: HARSH System: 27 P&ID: M103/F8

Loc Dwg: E308/C7 Elec Scheme: E122/9 VDR ID:
Remarks:

R369-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: R369-01-021

Sheet No. 325
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: R369-01-022

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM Plant I.D. Number: TE-4479A Component: TEMPERATURE ELEMENT Manufacturer: ROSEMOUNT Model Number: 104MA23ABBB Purchase Order Number: M-170 Function/Service: CONTAINMENT ISOLATION /HIGH TEMPERATURE NEAR THE TURBINE STOP VALVES Accuracy: Spec: NONE Demo: 6 F Location: TURBINE BLDG. Floor Elevation: 757'6"	Operating Time	1 HOUR	
	Temperature (°F)	300	
	Pressure (PSIG)	1.8	
	Relative Humidity (%)	100	
	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
	Seismic	LATER	
	Radiation (Rad)	1.0 E06	
	Aging	LATER	
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
		X	X				

Walkdown: Environment: HARSH System: 27 P&ID: M103/E6

Loc Dwg: E309/E8 Elec Scheme: E122/9 VDR ID:
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM Plant I.D. Number: TE-4479B Component: TEMPERATURE ELEMENT Manufacturer: ROSEMOUNT Model Number: 104MA23ABBB Purchase Order Number: M-170 Function/Service: CONTAINMENT ISOLATION /HIGH TEMPERATURE NEAR THE STEAM TUNNEL Accuracy: Spec: NONE Demo: 6 F Location: TURBINE BLDG. Floor Elevation: 757'6"	Operating Time	1 HOUR	
	Temperature (°F)	300	
	Pressure (PSIG)	1.8	
	Relative Humidity (%)	100	
	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
	Seismic	LATER	
	Radiation (Rad)	1.0 E06	
	Aging	LATER	
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
		X	X				

Walkdown: Environment: HARSH System: 27 P&ID: M103/G8

Loc Dwg: E308/D7 Elec Scheme: E122/9 VDR ID:
Remarks:

R369-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: R369-01-023

Sheet No. 326
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: R369-01-024

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-4480A	Temperature (°F)	300	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.8	
Manufacturer: ROSEMOUNT	Relative Humidity (%)	100	
Model Number: 104MA23ABBB	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-170	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /HIGH TEMPERATURE NEAR THE TURBINE STOP VALVES	Radiation (Rad)	1.0 E06	
Accuracy: Spec: NONE Demo: 6 F	Aging	LATER	
Location: TURBINE BLDG.	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
		X	X				

Walkdown: Environment: HARSH System: 27 P&ID: M103/G8

Loc Dwg: E308/D7 Elec Scheme: E122/9 VDR ID:
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: LEAK DETECTION SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: TE-4480B	Temperature (°F)	300	
Component: TEMPERATURE ELEMENT	Pressure (PSIG)	1.8	
Manufacturer: ROSEMOUNT	Relative Humidity (%)	100	
Model Number: 104MA23ABBB	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-170	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /HIGH TEMPERATURE NEAR THE STEAM TUNNEL	Radiation (Rad)	1.0 E06	
Accuracy: Spec: NONE Demo: 6 F	Aging	LATER	
Location: TURBINE BLDG.	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
		X	X				

Walkdown: Environment: HARSH System: 27 P&ID: M103/F8

Loc Dwg: E308/D7 Elec Scheme: E122/9 VDR ID:
Remarks:

S188-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 327
Revision 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: MOTOR-OPERATED BLOWER Manufacturer: SIEMENS Model Number: 2CH6 041-U	Operating Time	30 DAYS		SEE GEN NOTE 4	001		---	---	NONE
	Temperature (°F)	104		SEE GEN NOTE 7	001		---	---	NONE
	Pressure (PSIG)	0		SEE GEN NOTE 7	001		---	---	NONE
	Relative Humidity (%)	100		SEE GEN NOTE 7	001		---	---	NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	1.1 E07		NONE	001		---	---	SEE NOTE (1)
	Aging	LATER		---	---		---	---	SEE NOTE (2)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
	1. SEE ACTION ITEM NO. 12 2. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

S188-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: S188-01-001

Sheet No. 328
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: MAIN STEAM LINE ISOL VALVE LEAKAGE CONT.	Operating Time	30 DAYS	
Plant I.D. Number: 1K-25A	Temperature (°F)	104	
Component: MOTOR-OPERATED BLOWER	Pressure (PSIG)	0	
Manufacturer: SIEMENS	Relative Humidity (%)	100	
Model Number: 2CH6 041-U	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: PREVENT RELEASE OF RADIOACTIVE MATERIAL/ MAIN STEAM LINE LEAKAGE EXHAUST BLOWER	Radiation (Rad)	1.1 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: A CRD RR			
Floor Elevation: 771'10"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 05 P&ID: M184/C5

Loc Dwg: M644/B6 Elec Scheme: E122/37 VDR ID: B21-C918

Remarks:

Equip ID: S188-01-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: MAIN STEAM LINE ISOL VALVE LEAKAGE CONT.	Operating Time	30 DAYS	
Plant I.D. Number: 1K-25B	Temperature (°F)	104	
Component: MOTOR-OPERATED BLOWER	Pressure (PSIG)	0	
Manufacturer: SIEMENS	Relative Humidity (%)	100	
Model Number: 2CH6 041-U	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: PREVENT RELEASE OF RADIOACTIVE MATERIAL/ MAIN STEAM LINE LEAKAGE EXHAUST BLOWER	Radiation (Rad)	1.1 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: A CRD RR			
Floor Elevation: 771'10"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 05 P&ID: M184/C5

Loc Dwg: M644/C6 Elec Scheme: E122/37 VDR ID: B21-C918

Remarks:

S223-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 329
Revision 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: FLOW TRANSMITTER Manufacturer: S.K. INSTRUMENT Model Number: 20-9651-8550	Operating Time	30 DAYS		SEE GEN NOTE 4	001		---	---	NONE
	Temperature (°F)	130		SEE GEN NOTE 7	001		---	---	NONE
	Pressure (PSIG)	0		SEE GEN NOTE 7	001		---	---	NONE
	Relative Humidity (%)	100		SEE GEN NOTE 7	001		---	---	NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	1.5 E07		NONE	001		---	---	SEE NOTE (1)
	Aging	LATER		---	---		---	---	SEE NOTE (2)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
	1. SEE ACTION ITEM NO. 10 2. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982.

S223-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: S223-01-001

Sheet No. 330
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: MAIN STEAM LINE ISOL VALVE LEAKAGE CONT.	Operating Time	30 DAYS	
Plant I.D. Number: FM-8408A	Temperature (°F)	130	
Component: FLOW TRANSMITTER	Pressure (PSIG)	0	
Manufacturer: S.K. INSTRUMENT	Relative Humidity (%)	100	
Model Number: 20-9651-8550	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: PREVENT RELEASE OF RADIOACTIVE MATERIAL/ MAIN STEAM LINE "A" LEAKAGE FLOW	Radiation (Rad)	1.5 E07	
Accuracy: Spec: Demo: 10%	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 05 P&ID: M184/F4

Loc Dwg: E328/B5 Elec Scheme: E122/37 VDR ID: B21-N923A
Remarks:

Equip ID: S223-01-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: MAIN STEAM LINE ISOL VALVE LEAKAGE CONT.	Operating Time	30 DAYS	
Plant I.D. Number: FM-8408B	Temperature (°F)	130	
Component: FLOW TRANSMITTER	Pressure (PSIG)	0	
Manufacturer: S.K. INSTRUMENT	Relative Humidity (%)	100	
Model Number: 20-9651-8550	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: PREVENT RELEASE OF RADIOACTIVE MATERIAL/ MAIN STEAM LINE "B" LEAKAGE FLOW	Radiation (Rad)	1.5 E07	
Accuracy: Spec: Demo: 10%	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 05 P&ID: M184/C6

Loc Dwg: E328/B5 Elec Scheme: E122/37 VDR ID: B21-N923B
Remarks:

S223-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: S223-01-003

Sheet No. 331
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: MAIN STEAM LINE ISOL VALVE LEAKAGE CONT.	Operating Time	30 DAYS	
Plant I.D. Number: FM-8408C	Temperature (°F)	130	
Component: FLOW TRANSMITTER	Pressure (PSIG)	0	
Manufacturer: S.K. INSTRUMENT	Relative Humidity (%)	100	
Model Number: 20-9651-8550	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: PREVENT RELEASE OF RADIOACTIVE MATERIAL/ MAIN STEAM LINE "C" LEAKAGE FLOW	Radiation (Rad)	1.5 E07	
Accuracy: Spec: Demo: 10%	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 05 P&ID: M184/C3

Loc Dwg: E328/B5 Elec Scheme: E122/37 VDR ID: B21-N923C
Remarks:

Equip ID: S223-01-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: MAIN STEAM LINE ISOL VALVE LEAKAGE CONT.	Operating Time	30 DAYS	
Plant I.D. Number: FM-8408D	Temperature (°F)	130	
Component: FLOW TRANSMITTER	Pressure (PSIG)	0	
Manufacturer: S.K. INSTRUMENT	Relative Humidity (%)	100	
Model Number: 20-9651-8550	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: PREVENT RELEASE OF RADIOACTIVE MATERIAL/ MAIN STEAM LINE "D" LEAKAGE FLOW	Radiation (Rad)	1.5 E07	
Accuracy: Spec: Demo: 10%	Aging	LATER	
Location: STEAM TUNNEL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: 757'7" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 05 P&ID: M184/F8

Loc Dwg: E328/B5 Elec Scheme: E122/37 VDR ID: B21-N923D
Remarks:

S382-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 332
Revision 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: PRESSURE SWITCH Manufacturer: STATIC-O-RING Model Number: 12N-AA5	Operating Time	30 DAYS		SEE GEN NOTE 4	001		---	---	NONE
	Temperature (°F)	140		212 GEN NOTE 7	001		REF. (A)	TYPE TEST	NONE
	Pressure (PSIG)	0		0.25 GEN NOTE 7	001		REF. (A)	TYPE TEST	NONE
	Relative Humidity (%)	100		100 GEN NOTE 7	001		REF. (A)	TYPE TEST	NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	5.9 E06		5.9 E06	001		REF. (B)	---	NONE
	Aging	LATER		---	---		---	---	SEE NOTE (1)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. QSR-032-A-01 B. IOWA ELECTRIC PURCHASE ORDER NO. 54013 WITH EDS IOWA ELECTRIC PURCHASE ORDER NO.54013 WITH EDS NUCLEAR DATED 12-4-81 NUCLEAR DATED 12-4-81	1. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

S382-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: S382-02-001

Sheet No. 333
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: AUTOMATIC DEPRESS-URIZATION SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: PS-1917B	Temperature (°F)	104	
Component: PRESSURE SWITCH	Pressure (PSIG)	0	
Manufacturer: STATIC-O-RING	Relative Humidity (%)	100	
Model Number: 12N-AA5	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CORE COOLING/ RHR PUMP 1P-229B DISCHARGE PERMISSIVE TO ADS	Radiation (Rad)	5.9 E06	
Accuracy: Spec: 1% Demo: 0.5%	Aging	LATER	
Location: NW CRNR RM/1C-129B			
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 07 P&ID: M119/B6

Loc Dwg: E316/E7 Elec Scheme: E121/56A VDR ID: E11-NO16B
Remarks:

Equip ID: S382-02-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: AUTOMATIC DEPRESS-URIZATION SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: PS-1925B	Temperature (°F)	104	
Component: PRESSURE SWITCH	Pressure (PSIG)	0	
Manufacturer: STATIC-O-RING	Relative Humidity (%)	100	
Model Number: 12N-AA5	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CORE COOLING/ RHR PUMP 1P-229D DISCHARGE PERMISSIVE TO ADS	Radiation (Rad)	5.9 E06	
Accuracy: Spec: 1% Demo: 0.5%	Aging	LATER	
Location: NW CRNR RM/1C-129B			
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 07 P&ID: M119/B7

Loc Dwg: E316/E7 Elec Scheme: E121/56A VDR ID: E11-NO16D
Remarks:

S382-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: S382-02-003

Sheet No. 334
Revision: 0
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: AUTOMATIC DEPRESSURIZATION SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: PS-2023B	Temperature (°F)	140	
Component: PRESSURE SWITCH	Pressure (PSIG)	0	
Manufacturer: STATIC-O-RING	Relative Humidity (%)	100	
Model Number: 12N-AA5	Chemical Spray	NOT APP OUTSIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CORE COOLING/ RHR PUMP 1P-229A DISCHARGE PERMISSIVE TO ADS	Radiation (Rad)	5.9 E06	
Accuracy: Spec: 1% Demo: 0.5%	Aging	LATER	
Location: SE CRNR RM/1C-129A			
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 07 P&ID: M120/B4

Loc Dwg: E317/E3 Elec Scheme: E121/56 VDR ID: E11-N016A
Remarks:

Equip ID:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System:	Operating Time		
Plant I.D. Number:	Temperature (°F)		
Component:	Pressure (PSIG)		
Manufacturer:	Relative Humidity (%)		
Model Number:	Chemical Spray		
Purchase Order Number:	Seismic		
Function/Service:	Radiation (Rad)		
Accuracy: Spec: Demo:	Aging		
Location:			
Floor Elevation:			
Flood Level Elevation: Above Flood Level: Yes: No:	Submergence		

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM

Walkdown: Environment: System: P&ID:

Loc Dwg: Elec Scheme: VDR ID:
Remarks:

S382-03
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

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Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: PRESSURE SWITCH Manufacturer: STATIC-O-RING Model Number: 5N-AA3	Operating Time	30 DAYS		SEE GEN NOTE 4	001		---	---	NONE
	Temperature (°F)	140		155 SEE GEN NOTE 7	001		REF. (A)	TYPE TEST	NONE
	Pressure (PSIG)	0		0 SEE GEN NOTE 7	001		REF. (A)	TYPE TEST	NONE
	Relative Humidity (%)	100		95 SEE GEN NOTE 7	001		REF. (A)	TYPE TEST	SEE NOTE (1)
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	5.9 E06		5.9 E06	001		REF. (B)	---	NONE
	Aging	LATER		---	---		---	---	SEE NOTE (2)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. BWR EQUIPMENT QUALIFICATION SUMMARY REPORT NO. 032-A-02 COMPILED BY WYLE LABS DATED OCTOBER 1, 1980. B . IOWA ELECTRIC PURCHASE ORDER NO. 54013 WITH EDS NUCLEAR DATED 12-4-81	1. EQUIPMENT IS CONSIDERED QUALIFIED FOR HUMIDITY BECAUSE ACCIDENTS FOR WHICH THE EQUIPMENT IS ESSENTIAL DO NOT RESULT IN A CHANGE IN HUMIDITY BEYOND THE NORMAL CONDITIONS 2. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

S382-03
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: S382-03-001

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Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: AUTOMATIC DEPRESS-URIZATION SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: PS-1917A	Temperature (°F)	104	
Component: PRESSURE SWITCH	Pressure (PSIG)	0	
Manufacturer: STATIC-O-RING	Relative Humidity (%)	100	
Model Number: 5N-AA3	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CORE COOLING/ RHR PUMP 1P-229B DISCHARGE PERMISSIVE TO ADS	Radiation (Rad)	5.9 E06	
Accuracy: Spec: 2% Demo: 0.5%	Aging	LATER	
Location: NW CRNR RM/1C-129B			
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 07 P&ID: M119/B6

Loc Dwg: E316/E7 Elec Scheme: E121/56 VDR ID: E11-N020B
Remarks:

Equip ID: S382-03-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: AUTOMATIC DEPRESS-URIZATION SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: PS-1925A	Temperature (°F)	104	
Component: PRESSURE SWITCH	Pressure (PSIG)	0	
Manufacturer: STATIC-O-RING	Relative Humidity (%)	100	
Model Number: 5N-AA3	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CORE COOLING/ RHR PUMP 1P-229D DISCHARGE PERMISSIVE TO ADS	Radiation (Rad)	5.9 E06	
Accuracy: Spec: 2% Demo: 0.5%	Aging	LATER	
Location: NW CRNR RM/1C-129B			
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 07 P&ID: M119/B7

Loc Dwg: E316/E7 Elec Scheme: E121/56 VDR ID: E11-N020D
Remarks:

S382-03
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: S382-03-003

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Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: AUTOMATIC DEPRESS-URIZATION SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: PS-2023A	Temperature (°F)	140	
Component: PRESSURE SWITCH	Pressure (PSIG)	0	
Manufacturer: STATIC-O-RING	Relative Humidity (%)	100	
Model Number: 5N-AA3	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CORE COOLING/ RHR PUMP 1P-229A DISCHARGE PERMISSIVE TO ADS	Radiation (Rad)	5.9 E06	
Accuracy: Spec: 2% Demo: 0.5%	Aging	LATER	
Location: SE CRNR RM/1C-129A	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 07 P&ID: M120/B4

Loc Dwg: E316/E7 Elec Scheme: E121/56 VDR ID: E11-N020A

Remarks:

Equip ID: S382-03-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: AUTOMATIC DEPRESS-URIZATION SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: PS-2024A	Temperature (°F)	140	
Component: PRESSURE SWITCH	Pressure (PSIG)	0	
Manufacturer: STATIC-O-RING	Relative Humidity (%)	100	
Model Number: 5N-AA3	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CORE COOLING/ RHR PUMP 1P-229C DISCHARGE PERMISSIVE TO ADS	Radiation (Rad)	5.9 E06	
Accuracy: Spec: 2% Demo: 0.5%	Aging	LATER	
Location: SE CRNR RM/1C-129A	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 07 P&ID: M120/B2

Loc Dwg: E316/E7 Elec Scheme: E121/56 VDR ID: E11-N020C

Remarks:

S382-03
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: S382-03-005

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: AUTOMATIC DEPRESSURIZATION SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: PS-2024B	Temperature (°F)	140	
Component: PRESSURE SWITCH	Pressure (PSIG)	0	
Manufacturer: STATIC-O-RING	Relative Humidity (%)	100	
Model Number: 5N-AA3	Chemical Spray	NOT APP OUTSIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CORE COOLING/RHR PUMP 1P-229C DISCHARGE PERMISSIVE TO ADS	Radiation (Rad)	5.9 E06	
Accuracy: Spec: 1% Demo: 0.5%	Aging	LATER	
Location: SE CRNR RM/1C-129A	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 07 P&ID: M120/B2

Loc Dwg: E316/E7 Elec Scheme: E121/56 VDR ID: E11-N016C
Remarks:

Equip ID: S382-03-006

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: AUTOMATIC DEPRESSURIZATION SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: PS-2107A	Temperature (°F)	140	
Component: PRESSURE SWITCH	Pressure (PSIG)	0	
Manufacturer: STATIC-O-RING	Relative Humidity (%)	100	
Model Number: 5N-AA3	Chemical Spray	NOT APP OUTSIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CORE COOLING/CORE SPRAY PUMP IP211A DISCHARGE PERMISSIVE TO ADS	Radiation (Rad)	5.9 E06	
Accuracy: Spec: 2% Demo: 0.5%	Aging	LATER	
Location: SE CRNR RM/1C-123	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 07 P&ID: M121/E3

Loc Dwg: E317/D3 Elec Scheme: E121/9 VDR ID: E11-N008A
Remarks:

S382-03
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: S382-03-007

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: AUTOMATIC DEPRESSURIZATION SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: PS-2107B	Temperature (°F)	140	
Component: PRESSURE SWITCH	Pressure (PSIG)	0	
Manufacturer: STATIC-O-RING	Relative Humidity (%)	100	
Model Number: 5N-AA3	Chemical Spray	NOT APP OUTSIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CORE COOLING/CORE SPRAY PUMP IP211A DISCHARGE PERMISSIVE TO ADS	Radiation (Rad)	5.9 E06	
Accuracy: Spec: 2% Demo: 0.5%	Aging	LATER	
Location: SE CRNR RM/1C-123			
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 07 P&ID: M121/D3

Loc Dwg: E317/D3 Elec Scheme: E121/9 VDR ID: E11-N009A
Remarks:

Equip ID: S382-03-008

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: AUTOMATIC DEPRESSURIZATION SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: PS-2127A	Temperature (°F)	140	
Component: PRESSURE SWITCH	Pressure (PSIG)	0	
Manufacturer: STATIC-O-RING	Relative Humidity (%)	100	
Model Number: 5N-AA3	Chemical Spray	NOT APP OUTSIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CORE COOLING/ CORE SPRAY PUMP 1P-211B DISCHARGE PERMISSIVE TO ADS	Radiation (Rad)	5.9 E06	
Accuracy: Spec: 2% Demo: 0.5%	Aging	LATER	
Location: NW CRNR RM/1C-124			
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 07 P&ID: M121/C5

Loc Dwg: E316/E7 Elec Scheme: E121/10 VDR ID: E21-N008B
Remarks:

S382-03
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: S382-03-009

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: AUTOMATIC DEPRESSURIZATION SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: PS-2127B	Temperature (°F)	140	
Component: PRESSURE SWITCH	Pressure (PSIG)	0	
Manufacturer: STATIC-O-RING	Relative Humidity (%)	100	
Model Number: 5N-AA3	Chemical Spray	NOT APP OUTSIDE DRYWELL	
Purchase Order Number: APED	Seismic	LATER	
Function/Service: CORE COOLING/ CORE SPRAY PUMP 1P-211B DISCHARGE PERMISSIVE TO ADS	Radiation (Rad)	5.9 E06	
Accuracy: Spec: 2% Demo: 0.5%	Aging	LATER	
Location: NW CRNR RM/1C-124	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 07 P&ID: M121/C5

Loc Dwg: E316/E7 Elec Scheme: E121/10 VDR ID: E21-N009B
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System:	Operating Time		
Plant I.D. Number:	Temperature (°F)		
Component:	Pressure (PSIG)		
Manufacturer:	Relative Humidity (%)		
Model Number:	Chemical Spray		
Purchase Order Number:	Seismic		
Function/Service:	Radiation (Rad)		
Accuracy: Spec: Demo:	Aging		
Location:	Submergence		
Floor Elevation:			
Flood Level Elevation: Above Flood Level: Yes: No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM

Walkdown: Environment: System: P&ID:

Loc Dwg: Elec Scheme: VDR ID:
Remarks:

T020-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
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EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: SOLENOID VALVE Manufacturer: TARGET ROCK Model Number: 72V AND 81K	Operating Time	30 DAYS		33 DAYS - GEN NOTE 4	001		REF. (A)	TYPE TEST/ ANAL	NONE
	Temperature (°F)	140		350 GEN NOTE 7	001		REF. (A)	TYPE TEST/ ANAL	NONE
	Pressure (PSIG)	0		SEE GEN NOTE 7	001		REF. (A)	TYPE TEST/ ANAL	NONE
	Relative Humidity (%)	100		SEE GEN NOTE 7	001		REF. (A)	TYPE TEST/ ANAL	NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	1.3 E07		2.3 E08	001		REF. (A)	TYPE TEST	NONE
	Aging	LATER		---	---		---	---	SEE NOTE (1)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. 8/29/80, CN7529 8/26/80 AND TWX 9/14/81; AND BECHTEL LTR 5/23/80 SUMMARIZE TEST RESULTS- TR2375 REV B 7/24/80 LTR.CN7944 12/9/80 TARGET ROCKVALVE COMPANY TEST REPORTS FOR SUBJECT SOLENOID VALVE TR2302 REVC 4/28/80, LTR CN7944 12/9/80; PLUS TRCO LTRS.CN7548	1. AN AGING PROGRAM WILL BE ESTABLISHED BY JUNE 30, 1982.

T020-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: T020-01-001

Sheet No. 342
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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: SV-8772B	Temperature (°F)	140	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V AND 81K	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR-932A	Seismic	LATER	
Function/Service: TORUS SAMPLE ISOLATION VALVE	Radiation (Rad)	1.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 35 P&ID: M187/E1

Loc Dwg: E316/D8 Elec Scheme: E112/19 VDR ID: 81K002
Remarks:

Equip ID: T020-01-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: SV-8772A	Temperature (°F)	140	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V AND 81K	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR-932A	Seismic	LATER	
Function/Service: TORUS SAMPLE ISOLATION VALVE	Radiation (Rad)	1.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 35 P&ID: M187/E1

Loc Dwg: E316/G4 Elec Scheme: E112/19 VDR ID: 81K002
Remarks:

T020-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: T020-01-003

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Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: T020-01-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-1972	Temperature (°F)	104	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V AND 81K	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-141C	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /RHR HEAT EXCHANGER DISCHARGE SAMPLE LINE ISOLATION	Radiation (Rad)	9.6 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: NW CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M119/D3

Loc Dwg: E316/E7 Elec Scheme: E122/13 VDR ID: 72V001

Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-1973	Temperature (°F)	104	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V AND 81K	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-141C	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /RHR HEAT EXCHANGER DISCHARGE SAMPLE LINE ISOLATION	Radiation (Rad)	9.6 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: NW CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M119/D2

Loc Dwg: E316/E7 Elec Scheme: E122/13 VDR ID: 72V001

Remarks:

T020-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: T020-01-005

Sheet No. 344
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: T020-01-006

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-2051	Temperature (°F)	140	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V AND 81K	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-141C	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /RHR HEAT EXCHANGER DISCHARGE SAMPLE LINE ISOLATION	Radiation (Rad)	9.6 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: SE CRNR RM			
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M120/D7

Loc Dwg: E317/E3 Elec Scheme: E121/13 VDR ID: 72V001
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SYSTEM	Operating Time	1 HOUR	
Plant I.D. Number: SV-2052	Temperature (°F)	140	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V AND 81K	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-141C	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /RHR HEAT EXCHANGER DISCHARGE SAMPLE LINE ISOLATION	Radiation (Rad)	9.6 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: SE CRNR RM			
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 09 P&ID: M120/D7

Loc Dwg: E317/E3 Elec Scheme: E122/13 VDR ID: 72V001
Remarks:

T020-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: T020-01-008

Sheet No. 345
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: RESIDUAL HEAT REMOVAL SERVICE WATER SYSTEM	Operating Time	30 DAYS	
Plant I.D. Number: SV-1942	Temperature (°F)	140	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V AND 81K	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M141C	Seismic	LATER	
Function/Service: SUPPORT / RHR SERVICE WATER SUPPLY TO RHR SYSTEM VENT LINE ISOLATION	Radiation (Rad)	5.9 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: SE CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 731'4"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 13 P&ID: M113/F8

Loc Dwg: M266/E3 Elec Scheme: E121/46 VDR ID: 72V002
Remarks:

Equip ID: T020-01-009

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-8101A	Temperature (°F)	90	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V AND 81K	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-123	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /INBOARD ISOLATION OF CONTAINMENT ATMOSPHERE MONITORING	Radiation (Rad)	4.7 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RB-S	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M181/F5

Loc Dwg: E319/E6 Elec Scheme: E122/29 VDR ID: 72V003
Remarks:

T020-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: T020-01-010

Sheet No. 346
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-8101B	Temperature (°F)	104	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V AND 81K	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-123	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /INBOARD ISOLATION OF CONTAINMENT ATMOSPHERE MONITORING	Radiation (Rad)	4.7 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RB-N			
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M181/F4

Loc Dwg: E318/E4 Elec Scheme: E122/29 VDR ID: 72V003
Remarks:

Equip ID: T020-01-011

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-8102A	Temperature (°F)	90	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V AND 81K	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-123	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /OUTBOARD ISOLATION OF CONTAINMENT ATMOSPHERE MONITORING	Radiation (Rad)	4.7 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RB-S			
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M181/G5

Loc Dwg: E319/E6 Elec Scheme: E122/29 VDR ID: 72V003
Remarks:

T020-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: T020-01-012

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Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-8102B	Temperature (°F)	104	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V AND 81K	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-123	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /OUTBOARD ISOLATION OF CONTAINMENT ATMOSPHERE MONITORING	Radiation (Rad)	4.7 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RB-N			
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M181/G4

Loc Dwg: E318/E4 Elec Scheme: E122/29 VDR ID: 72V003
Remarks:

Equip ID: T020-01-013

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-8103A	Temperature (°F)	90	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V AND 81K	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-123	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /INBOARD ISOLATION OF CONTAINMENT ATMOSPHERE MONITORING	Radiation (Rad)	4.7 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RB-S			
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M181/F5

Loc Dwg: E319/E6 Elec Scheme: E122/29 VDR ID: 72V003
Remarks:

T020-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: T020-01-014

Sheet No. 348
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: T020-01-015

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-8103B	Temperature (°F)	90	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V AND 81K	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-123	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /INBOARD ISOLATION OF CONTAINMENT ATMOSPHERE MONITORING	Radiation (Rad)	4.7 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RB-N			
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M181/F4

Loc Dwg: E318/E4 Elec Scheme: E122/29 VDR ID: 72V003

Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-8104A	Temperature (°F)	90	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V AND 81K	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-123	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION / OUTBOARD ISOLATION OF CONTAINMENT ATMOSPHERE MONITORING	Radiation (Rad)	4.7 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RB-S			
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M181/F5

Loc Dwg: E319/E6 Elec Scheme: E122/29 VDR ID: 72V003

Remarks:

T020-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: T020-01-016

Sheet No. 349
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-8104B	Temperature (°F)	90	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V AND 81K	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-123	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /OUTBOARD ISOLATION OF CONTAINMENT ATMOSPHERE MONITORING	Radiation (Rad)	4.7 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RB-N			
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M181/F4

Loc Dwg: E318/F4 Elec Scheme: E122/29 VDR ID: 72V003
Remarks:

Equip ID: T020-01-017

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-8105A	Temperature (°F)	90	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V AND 81K	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-123	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /INBOARD ISOLATION OF CONTAINMENT ATMOSPHERE MONITORING	Radiation (Rad)	4.7 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RB-S			
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M181/E5

Loc Dwg: E319/E6 Elec Scheme: E122/29 VDR ID: 72V003
Remarks:

T020-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: T020-01-018

Sheet No. 350
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-8105B	Temperature (°F)	90	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V AND 81K	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-123	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /INBOARD ISOLATION OF CONTAINMENT ATMOSPHERE MONITORING	Radiation (Rad)	4.7 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RB-N			
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M181/E4

Loc Dwg: E318/E5 Elec Scheme: E122/29 VDR ID: 72V003
Remarks:

Equip ID: T020-01-019

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-8106A	Temperature (°F)	90	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V AND 81K	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-123	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /OUTBOARD ISOLATION OF CONTAINMENT ATMOSPHERE MONITORING	Radiation (Rad)	4.7 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RB-S			
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M181/E5

Loc Dwg: E319/E6 Elec Scheme: E122/29 VDR ID: 72V003
Remarks:

T020-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: T020-01-020

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Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: T020-01-021

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-8106B	Temperature (°F)	90	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V AND 81K	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-123	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /OUTBOARD ISOLATION OF CONTAINMENT ATMOSPHERE MONITORING	Radiation (Rad)	4.7 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RB-N	Submergence	NOT APPLICABLE	
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M181/E4

Loc Dwg: E318/E5 Elec Scheme: E122/29 VDR ID: 72V003
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-8107A	Temperature (°F)	140	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V AND 81K	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-123	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /INBOARD ISOLATION OF CONTAINMENT ATMOSPHERE MONITORING	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M181/D5

Loc Dwg: E316/D3 Elec Scheme: E122/29 VDR ID: 72V003
Remarks:

T020-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: T020-01-022

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Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-8107B	Temperature (°F)	140	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V AND 81K	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-123	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /INBOARD ISOLATION OF CONTAINMENT ATMOSPHERE MONITORING	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M181/D4

Loc Dwg: E317/F7 Elec Scheme: E122/29 VDR ID: 72V003
Remarks:

Equip ID: T020-01-023

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-8108A	Temperature (°F)	140	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V AND 81K	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-123	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /OUTBOARD ISOLATION OF CONTAINMENT ATMOSPHERE MONITORING	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M181/E5

Loc Dwg: E316/D3 Elec Scheme: E122/29 VDR ID: 72V003
Remarks:

T020-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: T020-01-024

Sheet No. 353
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
DATA SHEET

Equip ID: T020-01-025

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL Plant I.D. Number: SV-8108B Component: SOLENOID VALVE Manufacturer: TARGET ROCK Model Number: 72V AND 81K Purchase Order Number: M-123 Function/Service: CONTAINMENT ISOLATION /OUTBOARD ISOLATION OF CONTAINMENT ATMOSPHERE MONITORING Accuracy: Spec: NA Demo: NA Location: TORUS ROOM SOUTH Floor Elevation: 716'9"	Operating Time	30 DAYS	
	Temperature (°F)	140	
	Pressure (PSIG)	0	
	Relative Humidity (%)	100	
	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
	Seismic	LATER	
	Radiation (Rad)	1.3 E07	
	Aging	LATER	
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M181/E4
Loc Dwg: E317/F7 Elec Scheme: E122/29 VDR ID: 72V003
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL Plant I.D. Number: SV-8109A Component: SOLENOID VALVE Manufacturer: TARGET ROCK Model Number: 72V AND 81K Purchase Order Number: M-123 Function/Service: CONTAINMENT ISOLATION /INBOARD ISOLATION OF CONTAINMENT ATMOSPHERE MONITORING Accuracy: Spec: NA Demo: NA Location: TORUS ROOM SOUTH Floor Elevation: 716'9"	Operating Time	30 DAYS	
	Temperature (°F)	140	
	Pressure (PSIG)	0	
	Relative Humidity (%)	100	
	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
	Seismic	LATER	
	Radiation (Rad)	1.3 E07	
	Aging	LATER	
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M181/D5
Loc Dwg: E317/E4 Elec Scheme: E122/29 VDR ID: 72V003
Remarks:

T020-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: T020-01-026

Sheet No. 354
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-8109B	Temperature (°F)	140	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V AND 81K	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-123	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /INBOARD ISOLATION OF CONTAINMENT ATMOSPHERE MONITORING	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M181/D4

Loc Dwg: E316/E6 Elec Scheme: E122/29 VDR ID: 72V003
Remarks:

Equip ID: T020-01-028

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-8110A	Temperature (°F)	140	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V AND 81K	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-123	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /OUTBOARD ISOLATION OF CONTAINMENT ATMOSPHERE MONITORING	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M181/D5

Loc Dwg: E317/E4 Elec Scheme: E122/29 VDR ID: 72V003
Remarks:

T020-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: T020-01-029

Sheet No. 355
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-8110B	Temperature (°F)	140	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V AND 81K	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-123	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /OUTBOARD ISOLATION OF CONTAINMENT ATMOSPHERE MONITORING	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM NORTH			
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M181/D4

Loc Dwg: E316/E6 Elec Scheme: E122/29 VDR ID: 72V003
Remarks:

Equip ID: T020-01-030

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-4331A	Temperature (°F)	90	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V AND 81K	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-141C	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /CONTAINMENT SPRAY HEADER NITROGEN ISOLATION	Radiation (Rad)	5.6 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RHR VALVE ROOM			
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M143/C2

Loc Dwg: E319/G6 Elec Scheme: E122/34 VDR ID: 72V004
Remarks:

T020-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: T020-01-031

Sheet No. 356
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: T020-01-032

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-4331B	Temperature (°F)	90	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V AND 81K	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-141C	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /CONTAINMENT SPRAY HEADER NITROGEN ISOLATION	Radiation (Rad)	5.6 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RHR VALVE ROOM			
Floor Elevation: 757'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M143/C2

Loc Dwg: E319/G6 Elec Scheme: E122/34 VDR ID: 72V004
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-4332A	Temperature (°F)	90	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V AND 81K	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-141C	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /CONTAINMENT SPRAY HEADER NITROGEN ISOLATION	Radiation (Rad)	4.7 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RB-S			
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M143/C2

Loc Dwg: E321/F6 Elec Scheme: E122/33 VDR ID: 72V004
Remarks:

T020-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: T020-01-033

Sheet No. 357
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: T020-01-034

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-4332B	Temperature (°F)	90	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V AND 81K	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-141C	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /CONTAINMENT SPRAY HEADER NITROGEN ISOLATION	Radiation (Rad)	4.7 E05	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: RB-S	Submergence	NOT APPLICABLE	
Floor Elevation: 786'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M143/C2

Loc Dwg: E321/F6 Elec Scheme: E122/33 VDR ID: 72V004
Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-4333A	Temperature (°F)	140	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V AND 81K	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-141C	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /TORUS SPRAY HEADER NITROGEN ISOLATION	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M143/C2

Loc Dwg: E317/F6 Elec Scheme: E122/34 VDR ID: 72V004
Remarks:

T020-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: T020-01-035

Sheet No. 358
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: T020-01-036

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-4333B	Temperature (°F)	140	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V AND 81K	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-141C	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /TORUS SPRAY HEADER NITROGEN ISOLATION	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M143/C2

Loc Dwg: E317/E6 Elec Scheme: E122/34 VDR ID: 72V004

Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-4334A	Temperature (°F)	140	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V AND 81K	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-141C	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /TORUS SPRAY HEADER NITROGEN ISOLATION	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M143/C2

Loc Dwg: E316/D6 Elec Scheme: E122/33 VDR ID: 72V004

Remarks:

T020-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: T020-01-037

Sheet No. 359
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: CONTAINMENT ATMOSPHERE CONTROL	Operating Time	30 DAYS	
Plant I.D. Number: SV-4334B	Temperature (°F)	140	
Component: SOLENOID VALVE	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V AND 81K	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-141C	Seismic	LATER	
Function/Service: CONTAINMENT ISOLATION /TORUS SPRAY HEADER NITROGEN ISOLATION	Radiation (Rad)	1.3 E07	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 29 P&ID: M143/C2

Loc Dwg: E316/D6 Elec Scheme: E122/33 VDR ID: 72V004

Remarks:

Equip ID:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System:	Operating Time		
Plant I.D. Number:	Temperature (°F)		
Component:	Pressure (PSIG)		
Manufacturer:	Relative Humidity (%)		
Model Number:	Chemical Spray		
Purchase Order Number:	Seismic		
Function/Service:	Radiation (Rad)		
Accuracy: Spec: Demo:	Aging		
Location:	Submergence		
Floor Elevation:			
Flood Level Elevation: Above Flood Level: Yes: No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM

Walkdown: Environment: System: P&ID:

Loc Dwg: Elec Scheme: VDR ID:

Remarks:

T020-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 360
Revision 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: SOLENOID VALVE INTEGR Manufacturer: TARGET ROCK Model Number: 72V001 (ZS)	Operating Time	1 HOUR		33 DAYS GEN NOTE 4	001		REF. (A)	TYPE TEST/ ANAL	NONE
	Temperature (°F)	140		350 GEN NOTE 7	001		REF. (A)	TYPE TEST/ ANAL	NONE
	Pressure (PSIG)	0		SEE GEN NOTE 7	001		REF. (A)	TYPE TEST/ ANAL	NONE
	Relative Humidity (%)	100		SEE GEN NOTE 7	001		REF. (A)	TYPE TEST/ ANAL	NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	9.6 E05		2.3 E08	001		REF. (A)	TYPE TEST/ ANAL	NONE
	Aging	LATER		---	---		---	---	SEE NOTE (1)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. TARGET ROCK COMPANY TEST REPORTS FOR SUBJECT LIMIT SWITCHES SUMMARIZE TEST RESULTS- TR2375 REV B 7/24/80 LTR.CN7944 12/9/80 SUMMARIZE TEST RESULTS- TR2375 REV B 7/24/80 LTR.CN7944 12/9/80 TR2302 REVC(4/28/80) LTR. CN7944 12/9/80; + TRCO LTRS.CN7548 TR2302 REVC(4/28/80) LTR. CN7944 12/9/80; + TRCO LTRS.CN7548 8/29/80, & CN7529	1. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

T020-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket: 50-331

EQUIPMENT QUALIFICATION REPORT

Sheet No. 361
Revision: 0
Date: 01/11/82

DOCUMENTATION REFERENCES:	NOTES:
8/26/80 + TRCO TWX 9/14/81- AND BECHTEL LTR. 8/29/80, & CN7529 8/26/80 + TRCO TWX 9/14/81- AND BECHTEL LTR. 5/23/80. 5/23/80.	

T020-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: T020-02-001

Sheet No. 362
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	1 HOUR	
Plant I.D. Number: ZS-1972	Temperature (°F)	104	
Component: SOLENOID VALVE INTEGR	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V001 (ZS)	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-141C	Seismic	LATER	
Function/Service: LIMIT SWITCH/ VALVE POSITION	Radiation (Rad)	9.6 E05	
Accuracy: Spec: Demo:	Aging	LATER	
Location: NW CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 36 P&ID: M119/D3

Loc Dwg: E316/E8 Elec Scheme: E122/13 VDR ID:
Remarks:

Equip ID: T020-02-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	1 HOUR	
Plant I.D. Number: ZS-1973	Temperature (°F)	104	
Component: SOLENOID VALVE INTEGR	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V001 (ZS)	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-141C	Seismic	LATER	
Function/Service: LIMIT SWITCH/ VALVE POSITION	Radiation (Rad)	9.6 E05	
Accuracy: Spec: Demo:	Aging	LATER	
Location: NW CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 36 P&ID: M119/D2

Loc Dwg: E316/E8 Elec Scheme: E122/13 VDR ID:
Remarks:

T020-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: T020-02-003

Sheet No. 363
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	1 HOUR	
Plant I.D. Number: ZS-2051	Temperature (°F)	140	
Component: SOLENOID VALVE INTEGR	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V001 (ZS)	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-141C	Seismic	LATER	
Function/Service: LIMIT SWITCH/ VALVE POSITION	Radiation (Rad)	9.6 E05	
Accuracy: Spec: Demo:	Aging	LATER	
Location: SE CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 36 P&ID: M120/D7

Loc Dwg: E317/D3 Elec Scheme: E122/13 VDR ID:
Remarks:

Equip ID: T020-02-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: SAFETY DISPLAY INSTRUMENTATION	Operating Time	1 HOUR	
Plant I.D. Number: ZS-2052	Temperature (°F)	140	
Component: SOLENOID VALVE INTEGR	Pressure (PSIG)	0	
Manufacturer: TARGET ROCK	Relative Humidity (%)	100	
Model Number: 72V001 (ZS)	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-141C	Seismic	LATER	
Function/Service: LIMIT SWITCH/ VALVE POSITION	Radiation (Rad)	9.6 E05	
Accuracy: Spec: Demo:	Aging	LATER	
Location: SE CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 36 P&ID: M120/D8

Loc Dwg: E317/D3 Elec Scheme: E122/13 VDR ID:
Remarks:

V115-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 364
Revision 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: RADIATION ELEMENT Manufacturer: VICTOREEN Model Number: 877-1	Operating Time	30 DAYS		30 DAYS	002		REF. (A)	TYPE TEST	NONE
	Temperature (°F)	SEE GEN NOTE 6		357	002		REF. (A)	TYPE TEST	NONE
	Pressure (PSIG)	SEE GEN NOTE 6		133	002		REF. (A)	TYPE TEST	NONE
	Relative Humidity (%)	100		100	002		REF. (A)	TYPE TEST	NONE
	Chemical Spray	DEMIN WATER		SEE NOTE (1)	002		REF. (A)	TYPE TEST	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	4.3 E07		2.2 E08	002		REF. (A)	TYPE TEST	NONE
	Aging	LATER		---	---		---	---	SEE NOTE (2)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A. LETTER TO J.D. FIRESTONE (GE) FROM K.E.STAFFORD (VICTOREEN), DATED APRIL 7, 1981, STATED THAT DETECTOR 877-1 MEETS IEEE 323- 1974 AND PASSED VICTOREEN QUALIFICATION TEST PLAN 907351.	1. SPRAY MAKEUP WAS 0.28M H3BO3 IN WATER WITH SUFFICIENT NAOH TO ADJUST PH TO 10.0 AT 77F. THIS IS A MORE SEVERE SPRAY THAN DEMINERALIZED WATER. 2. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982.

V115-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: V115-01-002

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: RE-9184A	Temperature (°F)	SEE GENERAL NOTE 6	
Component: RADIATION ELEMENT	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: VICTOREEN	Relative Humidity (%)	100	
Model Number: 877-1	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-909	Seismic	LATER	
Function/Service: POST ACCIDENT RADIATION MONITORING	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 35 P&ID: M148/B5

Loc Dwg: E329/E5 Elec Scheme: E63 VDR ID:
Remarks:

Equip ID: V115-01-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: RE-9184B	Temperature (°F)	SEE GENERAL NOTE 6	
Component: RADIATION ELEMENT	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: VICTOREEN	Relative Humidity (%)	100	
Model Number: 877-1	Chemical Spray	DEMIN WATER SPRAY	
Purchase Order Number: DCR-909	Seismic	LATER	
Function/Service: POST ACCIDENT RADIATION MONITORING	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: DRYWELL	Submergence	NOT APPLICABLE	
Floor Elevation: 757'4"			
Flood Level Elevation: 744' Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 35 P&ID: M148/B4

Loc Dwg: E329/C4 Elec Scheme: E63 VDR ID:
Remarks:

V115-01
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: V115-01-006

Sheet No. 366
Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT DATA SHEET

Equip ID: V115-01-008

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: RE-9185A	Temperature (°F)	140	
Component: RADIATION ELEMENT	Pressure (PSIG)	0	
Manufacturer: VICTOREEN	Relative Humidity (%)	100	
Model Number: 877-1	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR-909	Seismic	LATER	
Function/Service: POST ACCIDENT RADIATION MONITORING	Radiation (Rad)	1.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: TORUS ROOM NORTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 35 P&ID: M148/C5

Loc Dwg: E316/F6 Elec Scheme: E63 VDR ID:

Remarks:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	
Plant I.D. Number: RE-9185B	Temperature (°F)	140	
Component: RADIATION ELEMENT	Pressure (PSIG)	1.2	
Manufacturer: VICTOREEN	Relative Humidity (%)	100	
Model Number: 877-1	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: DCR-909	Seismic	LATER	
Function/Service: POST ACCIDENT RADIATION MONITORING	Radiation (Rad)	1.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: TORUS ROOM SOUTH	Submergence	NOT APPLICABLE	
Floor Elevation: 716'9"			
Flood Level Elevation: 717'1" Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 35 P&ID: M148/C4

Loc Dwg: E317/G2 Elec Scheme: E63 VDR ID:

Remarks:

V115-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 367
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Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: CABLE Manufacturer: VICTOREEN Model Number: 878-1-9	Operating Time	30 DAYS		30 DAYS	001		REF A,B	TYPE TEST	NONE
	Temperature (°F)	SEE GEN NOTE 6		359	001		REF A,B	TYPE TEST	NONE
	Pressure (PSIG)	SEE GEN NOTE 6		133	001		REF A,B	TYPE TEST	NONE
	Relative Humidity (%)	100		100	001		REF A,B	TYPE TEST	NONE
	Chemical Spray	DEMIN WATER		DIL H3BO3	001		REF A,B	TYPE TEST	
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	4.3 E07		2.0 E08	001		REF A,B	TYPE TEST	NONE
	Aging	LATER		---	---		---	---	SEE NOTE (1)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
A . DATED FEBRUARY 17, 1981, STATED THAT CABLE MEETS REQUIREMENTS OF REPORT B913 OF BOSTON INSULATED WIRE & CABLE CO. B . AND DWG 910077 DETAIL METHOD OF CABLE TERMINATIONS IN-CONTAINMENT THAT HAVE PASSED LOCA TESTING.	1. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982.

V115-02
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: V115-02-001

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EQUIPMENT QUALIFICATION REPORT DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: NUREG 0578 MODIFICATIONS	Operating Time	30 DAYS	NOT USED IN SGTS ROOM
Plant I.D. Number: INSTRUMENT CABLE	Temperature (°F)	SEE GENERAL NOTE 6	
Component: CABLE	Pressure (PSIG)	SEE GENERAL NOTE 6	
Manufacturer: VICTOREEN	Relative Humidity (%)	100	
Model Number: 878-1-9	Chemical Spray	DEMIN WATER	
Purchase Order Number: DCR-909	Seismic	LATER	
Function/Service: POST ACCIDENT RADIATION MONITORING	Radiation (Rad)	4.3 E07	
Accuracy: Spec: Demo:	Aging	LATER	
Location: VARIOUS	Submergence	NOT APPLICABLE	
Floor Elevation: VARIOUS			
Flood Level Elevation: Above Flood Level: Yes: No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X						

Walkdown: Environment: HARSH System: 35 P&ID:
Loc Dwg: Elec Scheme: VDR ID:
Remarks:

Equip ID:

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System:	Operating Time		
Plant I.D. Number:	Temperature (°F)		
Component:	Pressure (PSIG)		
Manufacturer:	Relative Humidity (%)		
Model Number:	Chemical Spray		
Purchase Order Number:	Seismic		
Function/Service:	Radiation (Rad)		
Accuracy: Spec: Demo:	Aging		
Location:	Submergence		
Floor Elevation:			
Flood Level Elevation: Above Flood Level: Yes: No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM

Walkdown: Environment: System: P&ID:
Loc Dwg: Elec Scheme: VDR ID:
Remarks:

W120-05
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit 1
Docket No: 50-331

Sheet No: 369
Revision 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
EVALUATION SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT				DOCUMENTATION REFERENCES			QUALIFICATION METHOD(S)	OUTSTANDING ITEMS
	Parameter	Required		Qualification	Reqd.		Qual.		
Component: FAN MOTOR Manufacturer: WESTINGHOUSE Model Number: 7302	Operating Time	30 DAYS		SEE GEN NOTE 4	001		---	---	NONE
	Temperature (°F)	140		SEE GEN NOTE 7	001		---	---	NONE
	Pressure (PSIG)	0		SEE GEN NOTE 7	001		---	---	NONE
	Relative Humidity (%)	100		SEE GEN NOTE 7	001		---	---	NONE
	Chemical Spray	NOT APPLICABLE		---	---		---	---	NONE
	Seismic	LATER		---	---		---	---	---
	Radiation (Rad)	8.1 E06		NONE	003		---	---	SEE NOTE (1)
	Aging	LATER		---	---		---	---	SEE NOTE (2)
	Submergence	NOT APPLICABLE		---	---		---	---	NONE

DOCUMENTATION REFERENCES	NOTES
	1. SEE ACTION ITEM NO 14 AND 15 2. AGING PROGRAM TO BE ESTABLISHED BY JUNE 30, 1982

W120-05
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: W120-05-001

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EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: ENGINEERED SAFEGUARDS ROOMS H AND V	Operating Time	30 DAYS	
Plant I.D. Number: 1V-AC-11	Temperature (°F)	104	
Component: FAN MOTOR	Pressure (PSIG)	0	
Manufacturer: WESTINGHOUSE	Relative Humidity (%)	100	
Model Number: 7302	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-095	Seismic	LATER	
Function/Service: SUPPORT/RHR AND CORE SPRAY PUMP ROOM COOLING	Radiation (Rad)	5.9 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: NW CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 747'6"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 18 P&ID: M171/A6

Loc Dwg: M646/E7 Elec Scheme: E113/147 VDR ID:
Remarks:

Equip ID: W120-05-002

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: ENGINEERED SAFEGUARDS ROOMS H AND V	Operating Time	30 DAYS	
Plant I.D. Number: 1V-AC-12	Temperature (°F)	140	
Component: FAN MOTOR	Pressure (PSIG)	0	
Manufacturer: WESTINGHOUSE	Relative Humidity (%)	100	
Model Number: 7302	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
Purchase Order Number: M-095	Seismic	LATER	
Function/Service: SUPPORT/RHR AND CORE SPRAY PUMP ROOM COOLING	Radiation (Rad)	5.9 E06	
Accuracy: Spec: NA Demo: NA	Aging	LATER	
Location: SE CRNR RM	Submergence	NOT APPLICABLE	
Floor Elevation: 747'0"			
Flood Level Elevation: NOT APP Above Flood Level: Yes: X No:			

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 18 P&ID:

Loc Dwg: M660/E3 Elec Scheme: VDR ID:
Remarks:

W120-05
Owner: IOWA ELECTRIC
Facility: DUANE ARNOLD
Unit: 1
Docket No: 50-331
Equip ID: W120-05-003

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Revision: 0
Date: 01/11/82

EQUIPMENT QUALIFICATION REPORT
DATA SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: ENGINEERED SAFEGUARDS ROOMS H AND V Plant I.D. Number: 1V-AC-14A Component: FAN MOTOR Manufacturer: WESTINGHOUSE Model Number: 7302 Purchase Order Number: M-095 Function/Service: SUPPORT/COOLS HPCI ROOM Accuracy: Spec: NA Demo: NA Location: HPCI ROOM Floor Elevation: 747'0"	Operating Time	30 DAYS	MOTOR NOT REQUIRED TO FUNCTION FOLLOWING HPCI-LB IN HPCI ROOM.
	Temperature (°F)	140	
	Pressure (PSIG)	0	
	Relative Humidity (%)	100	
	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
	Seismic	LATER	
	Radiation (Rad)	8.1 E06	
	Aging	LATER	
Flood Level Elevation: 717'9" Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 18 P&ID: M171/G3

Loc Dwg: M660/C3 Elec Scheme: E113/42 VDR ID:
Remarks:

Equip ID: W120-05-004

EQUIPMENT DESCRIPTION	ENVIRONMENT		
	Parameter	Required	Remarks
System: ENGINEERED SAFEGUARDS ROOMS H AND V Plant I.D. Number: 1V-AC-14B Component: FAN MOTOR Manufacturer: WESTINGHOUSE Model Number: 7302 Purchase Order Number: M-095 Function/Service: SUPPORT/COOLS HPCI ROOM Accuracy: Spec: NA Demo: NA Location: HPCI ROOM Floor Elevation: 747'0"	Operating Time	30 DAYS	MOTOR NOT REQUIRED TO FUNCTION FOLLOWING HPCI-LB IN HPCI ROOM.
	Temperature (°F)	140	
	Pressure (PSIG)	0	
	Relative Humidity (%)	100	
	Chemical Spray	NOT APP OUT-SIDE DRYWELL	
	Seismic	LATER	
	Radiation (Rad)	8.1 E06	
	Aging	LATER	
Flood Level Elevation: 717'9" Above Flood Level: Yes: X No:	Submergence	NOT APPLICABLE	

Accidents:	LOCA	MSLB	FWLB	HPCI	RCIC	RWCU	SCRM
	X	X	X	X	X	X	

Walkdown: Environment: HARSH System: 18 P&ID: M171/F3

Loc Dwg: M660/C3 Elec Scheme: E113/42 VDR ID:
Remarks: